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Comparison of word recognition and story retelling under the conditions of contextualized versus decontextualized reading events in at-risk poor readers

Badon, Linda Cain, Ph.D.

The Louisiana State University and Agricultural and Mechanical Col., 1993

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DEDICATION

**COMPARISON OF WORD RECOGNITION AND STORY RETELLING
UNDER THE CONDITIONS OF CONTEXTUALIZED VERSUS
DECONTEXTUALIZED READING EVENTS IN AT-RISK POOR READERS**

To Robin and Jennifer,
the sweethearts of my life,
may your lives be filled with
love and happiness and you
set your goals not by my
accomplishments but by the ones
you want to be. I hope you will
become a doctor and
and to Ronald, my love, who
has always encouraged me to
pursue my dreams.

A Dissertation

**Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy**

in

The Department of Communication Sciences and Disorders

by
Linda C. Badon
B.A., University of Southwestern Louisiana, 1973
M.S., University of Southwestern Louisiana, 1980
August 1993

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may your lives be filled with
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set your goals not by my
accomplishments, but by what
you want to be in life,

and to Ronnell, my love, who
has always encouraged me to
reach for the stars.

L.C.B

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ABSTRACT

This study investigated the relative effects of two instructional approaches on reading recognition and comprehension of passages read by low-SES first grade children. It was hypothesized that use of a contextualized instructional approach (i.e., Communicative Reading Strategies) (CRS) which facilitated written language processing (i.e., vocabulary acquisition, grammatical understanding, narrative structure, and passage comprehension) within the context of oral reading would result in better internalization of a written story than would decontextualized activities (i.e., Directed Reading) (DR) targeting the same behaviors immediately preceding or following the reading of a story. The efficacy of the two treatments was measured by 1) fluency and accuracy of story rereading, and 2) complexity and accuracy of story retellings elicited immediately following the instructional sessions.

An alternating treatment design (ATD) was employed in the single-subject study. The subjects included Four female subjects, one Anglo-American, one American-Hispanic, and two African-Americans. Their ages ranged from 6;3 to 6;11 years. Many of the measures failed to yield significant differences between the two instructional approaches. The seven significant differences and the trends in the data all favored the CRS treatment. These findings suggested that under the CRS condition 1) fewer miscues occurred, 2) with

fewer miscues, the rate of the rereading increased, 3) more story grammar components were included in the story retellings, 4) story retellings consisted of more episodes, 5) the length of the story retellings was longer, 6) story retellings consisted of fewer maze behaviors, and 7) more interepisodic relations were included in the story retellings.

Not all of the variables measured were discriminating. Three of the four subjects performed equally as well under both treatment conditions on the number of phrasing errors observed during the rereading, the percentage of complete episodes included in the story retellings, and the episodic integrity of their story retellings. However, Subject One did produce fewer phrasing errors during the rereading, a greater percentage of complete episodes included in the story retellings, and a higher level of episodic integrity in her story retelling under the CRS condition. The results are discussed relative to future research and instructional implications for low-SES poor readers.

INTRODUCTION

There is a "literacy crisis" in the United States which is evident in statistics: (a) approximately 90% of children who are poor or disabled readers and who fail to gain functional literacy in school have oral language problems, especially at the abstract level of language use required in the classroom (Gibbs & Cooper, 1989; Ripich & Griffith, 1988; Ripich & Spinelli, 1985); b) a disproportionate number of these children are from low-income and minority homes with backgrounds that are ethnically and linguistically different from the dominant culture of the school (Gee, 1989); and (c) partly as a result, one-third of the nation's adults are functionally illiterate or only marginally literate (Gee, 1986; Gumperz, 1986; Konzol, 1985). Cole (1987) reported that 1.8 million children have reading deficits attributed to language and learning disabilities, and an even larger number are at-risk for academic achievement because of language differences. Therefore, oral language differences need to be considered as an important and integral part of a culturally different child's program when reading achievement is low. This study is designed to examine the effects of two methods of reading intervention that differ in the instructional language styles employed.

Oral language differences have been identified in the narrative style used by children from different cultural,

ethnic, and socioeconomic groups. A positive relationship has been shown between children's use of narrative features valued by the mainstream society and literacy achievement. This narrative language style is characterized by topic centered, explicitly worded text expressed using formal grammatical structures. The meaning is derived primarily from the words, unsupported by cues present in the environment, representing a very literate language style (Westby, 1985). In contrast, many minority cultures have been identified as primary users of an oral language style, or language that is characterized by topic associated, nonspecifically worded text expressed in incomplete sentences or phrases. The meaning is contextualized to objects or events present within the situation, representing a language style nearer the oral end of the oral-to-literate language continuum (Tannen, 1982; Westby, 1985).

While differences in the language style between children of different cultural, ethnic, and socioeconomic groups are recognized, many of the pedagogical methods used to provide instruction in reading employ language styles that are characteristic of the literate end of the language continuum. These instructional methods decontextualize the information to be learned by teaching specific aspects of language (e.g., vocabulary) in isolation (e.g., on worksheets) outside of a context of meaningful use (e.g., prior to reading a story.) This results in a situation to where the learning of a

complex language process (i.e., reading) is presented using a decontextualized and unfamiliar language style (i.e., literate), or two dimensions of difficulty. Employing an instructional method that instead provides contextualized instruction using a more familiar oral language style would reduce the complexity along one dimension and thus may serve to enhance achievement for at-risk children. This study was designed to test this hypothesis by comparing the relative effects of providing contextualized instruction in reading using a method termed Communicative Reading Strategies (Norris, 1989, 1991; Norris & Hoffman, 1993) to a more decontextualized approach (i.e., directed reading).

Cultural Language Differences

Literacy learning occurs as a gradual process in which children increasingly become more aware of the conventions of print, the structure of expository and narrative text, and the purposes of written language. Through literacy experiences beginning in early childhood, the formal and decontextualized style of literate language is gradually internalized by the developing child (Clay, 1985; Teale & Sulzby, 1985.) However, children from various cultural and socioeconomic groups have different experiences with print and literate language use during the preschool years, some with a greater focus on oral language styles. For many of these children the transition from oral language use to

literacy is a problem, requiring a lengthy apprenticeship of both formal and informal instruction (Cook-Gumperz, 1977; Scollon & Scollon, 1982).

Many children from the "culture of poverty" develop, from the earliest ages, different communicative strategies that are not consistent with those valued in the classroom and that place them academically at-risk (Cook-Gumperz & Gumperz, 1981; Edwards, 1976; Gee, 1989; Heath, 1982, 1983; Hill & Varenne, 1981; Michaels, 1981; Michaels & Collins, 1984; Michaels & Cook-Gumperz, 1979; Reed, 1981). These strategies are characterized by different approaches to problem solving, social interaction, and conceptualizing a situation or task. Researchers have noted the significance of these strategies in understanding how different groups of people make sense of experience (Gee, 1989; Goody, 1977; Hall, Cole, Reder, & Dowley, 1977; Labov, 1970, 1972a; Ong, 1982; Scollon & Scollon, 1979, 1981, 1984, Scribner, 1979). The oral language style used by low socioeconomic children not only affects how they communicate an idea, but also what is communicated (Tannen, 1982a, 1982b; Westby, 1985).

Semiotic Framework

The style of language used in a situation is related to the level of abstraction and complexity of reference established along the oral-to-literate continuum. Peirce (1850-1890) provided a framework for examining the level of

abstraction of reference in his theory of semiotics. His theory explored the practical consequences of the use of signs, referred to as pragmaticism. According to Peirce, sign usage allows for the organization of experience internally and the sharing of experiences within the external environment. It is through the use of sign that learning occurs and becomes refined, gradually increasing in complexity and abstraction. The most basic level of reference, or sign, is the icon, or an image of the actual object or event referenced. The icon represents the mind's reconstruction of the external event, with little displacement between the sensory input and the perception. A higher level of reference is established at the level of the index, or a contextualized response to the object or event. This may consist of a gesture or even a word, where the sign and the referent are both present and the meaning is dependent on the context for interpretation. Thus, a level of displacement exists between the perception of the object or event (e.g., a cup) and the reference to it (e.g., point = "I want the cup" or "There is a cup" or "The cup is red").

Peirce describes the highest level of reference as that of the symbol, where an arbitrary and dynamic relationship exists between the sign and its referent. This level allows for complete displacement from a context. Thus, the word "cup" creates the perception of a cup in the mind of the interpretant, even if no cup is present in the environment.

Relationships of meaning can be established by combining symbols in conventional patterns, so that "The broken cup is red" connotes a slightly different meaning from "The red cup is broken." Symbols themselves can be combined to create what Peirce terms pure symbols, so that "toy" + "turn" creates the new symbol "share"; "share" + "rights" creates "fair"; "fair" + law" forms "justice", and so forth. The level of displacement and decontextualization is maximum in that there is no object or event in the physical environment to correspond to an abstract symbol such as "justice." This type of maximum displacement of symbols from a concrete referent, and complexity in the relationships established between symbols through conventions such as word order and narrative structure is characteristic of the literate style of language use.

Development of a Semiotic System

In a semiotic model, oral and written language increase in refinement as signs are used to organize experience internally and to share experiences externally within the social environment. Arwood (1983) applied Peirce's theory of pragmatism to children's acquisition and development of a semiotic system. According to Arwood, all knowledge is meaningful, or semantic, and is organized according to both social and cognitive processes. Learning is therefore viewed as synergistic, involving a dynamic and inseparable

interaction between social, cognitive, and linguistic abilities (Arwood, 1983; Bloom & Lahey, 1978; Bruner, 1978; Vygotsky, 1962). The neurological integrity of the child determines the rate and complexity at which information from the external environment can be internally constructed to form concepts and conventional systems for organizing them relationally. Critical to this process is the ability create symbols for concepts and structures as they are organized.

The state of semantic organization of a child's system is reflected in the level of sign usage. Sign usage increases as a result of greater semantic organization. As the child progresses to each successive level of sign usage, symbols begin to represent elements of a mentally constructed world. The child becomes less and less bound to the concrete referents found in the physical world, and is more able to combine symbols with other symbols to form new semantic relationships. Therefore the child is gradually freed or displaced in time and space from direct reference to real world entities. Developmentally, this change is marked by three qualitatively different phases.

Phase One: Prelanguage

The first, or prelanguage phase is characterized by unspecified reference to perceptually present stimuli. The level of sign is that of an index, including gazing, orientating toward, pointing, vocalizing, or other verbal and

nonverbal signs. Words are used as an index rather than a symbol, in that they are produced in response to the physically present referent and do not have flexibility of meaning, resulting in a one-to-one correspondence existing between a word and its referent (Bloom & Lahey, 1978). Words are not used to displace thought from the immediate temporal and spatial context, and word order is not used to establish relationships of time, causality, intentionality, adversity, conditionality or other logical relations. The lack of specificity of sign usage at the level of the index results in meaning exchanged through the interpretation imposed by the hearer who depends on available contextual cues. Peirce states that the presence of smoke is an index that suggests the interpretation that a fire exists; likewise, the word "cup" uttered when one drops to the floor and breaks suggests that the child is referring to the state of the cup. This level of language usage represents the most contextualized pole of the oral-to-literate language continuum.

During this prelanguage phase prerequisites for adultlike speech acts are acquired through semantic development that occurs through interactions between the child as a speaker and the caretaker who provides meaningful interpretations and consequences. Through these socially mediated experiences, more perceptions are added to the system that become semantically organized and differentiated for the purpose of affecting the behaviors of others (Arwood,

1983). This increased organization and intentionality creates both the means for and need to establish more specific reference of meaning. As children approach two years of age, the ability to verbally express semantic relationships between objects and their actions, agents, and states increases. These changes mark the transition from the prelanguage to the language level of development.

Phase Two: Language

The language phase is characterized by the child's acquisition of the basic language structures (i.e., phonology, morphology, syntax, and structural semantics). These are the products of the underlying semantic processes, and are the result of and the means for establishing complex relationships of meaning between referents. The relationships represent a mental reordering of the original perception, so that a dog seen barking inside the house is symbolically combined with a cat seen outside in the yard to create "The dog is barking at the cat." The reordering places them within the same temporal-spatial frame through the interpretation of a cause for the dog's bark (Blank, Rose, & Berlin, 1978). The ability to mentally reorder experience also allows for temporal displacement, such as "The dog barked after it saw the cat." Thus, in both time and space, language at the level of the symbol displaces the child's thought from the immediate perception or context. Language

begins to function as a "suitcase", enabling an experience to be recreated in a temporal and spatial context removed from the actual location and time of the original event. However, while displaced and symbolic, the words remain very closely associated with the child's mental representation of the original event or referent.

The semiotic model suggests that symbolic language is instrumental to the process of reordering perception. The symbol establishes a relationship of meaning that is different from the original referent. For example, in the sentence "Find one that is not red", the word "not" is central to the meaning and suggests blue, yellow, or any color except the one named. A child who is unable to attend to linguistic symbols will respond to the perception and find a red object (Blank, et al., 1978). Word order also becomes an important means of modulating meaning, so that "The phone is ringing" affirms what "Is the phone ringing" asks. This ability to transform meaning through symbol manipulation leads to further displacement of thought from reality, or the linguistic phase of development (Arwood, 1983).

Phase Three: Linguistic System

The transition to the Linguistic Phase is one characterized by the development and manipulation of pure symbols, or concepts that are formed entirely out of symbols. This ability enables the child to acquire knowledge that is

not directly available to perception and includes most academic knowledge. Rather than merely noting the color of a plant, for example, linguistic symbols allow for the formation of concepts of photosynthesis and life cycles.

The accumulation of concepts that can act to develop other concepts results in the rapid acquisition of new symbols and new ways of evaluating experience (Arwood, 1983). This process is referred to as semanticity, and is accelerated during the linguistic phase. The child no longer uses bits of perceptual information for new learning, but rather conceptual information. This development of what Peirce calls "pure symbols" allows for interpretation and evaluation of the representation, rather than the originally perceived referents. Language is used for maximal displacement in time and space, creating relationships that have reference only through analogy to real objects and events (i.e., "My dog is a pig!" or "Your Mom really blew up, didn't she?") through the use of mental combination and recombination of symbols, and the mental organization and reorganization of semantic relationships.

At approximately five to seven years of age, children begin to function at the linguistic level of sign usage. Their language is characterized by temporal (i.e., when, then, after), spatial (i.e., here, there, outside), and causal (i.e., because, so) terms, as well as metaphors, analogies, and idioms (Arwood, 1983). It is at this level of

language development that children are able to examine and study words as entities in and of themselves, without reference to any concrete object. The child is able to metalinguistically consider the form of the word independently of its meaning or function, analyzing its component phonemes, graphemes, and morphemes, as well as the syntactical structure of sentences and the semantic relationships within and among sentences (Hernandez, 1989).

Narrative Discourse

When semanticity is at its maximum, a child can learn any task that requires the manipulation of symbols to stand for other ideas or signs (Arwood, 19983). The number of relationships that can be coordinated and the complexity of the relationships that can be simultaneously maintained increases rapidly and continues to expand throughout childhood and refines even in adulthood. One way in which this is manifested is the ability to structure discourse into more complete and cohesive texts. According to Britton (1982) discourse can take a form that serves to transact by giving instructions or information, or to express by communicating feelings or personal knowledge, or to influence the beliefs or attitudes of others through the poetic mode, including narration. Children in the prelanguage stage of development do tell stories, but these are generally unanalyzed recountings of an event as they remembered it.

The structure of these stories often consist of an ordered sequence, or a temporal listing of events, or a reactive sequence with direct causes stated (Applebee, 1978).

At the linguistic level, the actual events of an experience are rearranged and modified to give purpose to the story. Events, whether real or imagined, are symbolically transformed to make a point, alter a hearer's attitudes, or communicate a belief or perspective (Britton, 1982). The real meaning of narratives at this level is not derived from recognizing the events, but rather from recognition of the significance of the events. The narrative provides a specific form for reflecting on experience and imposing meaning on an event. It represents a complex linguistic task, requiring the speaker to represent all actions, objects, and events in words, to order these words into the correct relationships of meaning within sentences (i.e., microstructure), and to organize the sentences into coherent texts united through temporal, spatial, causal, intentional, and other relational links (i.e., macrostructure). The macrostructure functions as a superstructure to convey the overall theme or plot of the story, while the microstructure serves to organize elements into propositions. The conventions for organizing elements of microstructure and macrostructure are culturally and linguistically determined and are important for deriving the meaning and purpose of the story (Britton, 1982).

The macrostructure used to express most Western stories has been described according to elements of story grammar by Stein and Glenn (1979). In this scheme a complete narrative contains common elements, including a setting that specifies characters and location, an initiating event that marks a change from the ordinary existence established in the setting, the subsequent goal or plan to solve the problem caused by the initiating event, the attempts to reach the goal, the consequences of those attempts, and the resolution which often implies or explicitly states the moral or greater significance of the story. Thus, a complete story requires the maintenance of an extended topic in which relationships of time, causality, intentionality, and purpose are coordinated and expressed within a conventional discourse structure.

Development of Narrative Competence

Most critical to the development of narrative competence is the fact that the narrative is "a natural mode of thought" (Bruner, 1985) and indeed "a primary act of the mind" (Meek, 1982). Generally, we live by the stories we tell ourselves. We dream, remember, anticipate, hope, despair, love, hate, believe, doubt, plan, construct, criticize, gossip, and learn in narrative. Linguistic competence allows us to perceive the world as consisting of actions and events ordered relationally, and we invent beginnings and endings for these

events. We selectively attend to the ongoing flow of events and interpret causes, motives, feelings, and consequences. Narrative thought is, therefore, essential if children are to function adequately in the world and appropriately interpret what they see and read.

Stories with complete narrative structure are told by children between the ages of five and seven years. At this age children are able to tell goal directed stories in the appropriate sequenced detail. The development of goal directed storytelling emerges progressively during the language phase of development. Increasing complexity is seen during the preschool years, so that stories maintain an ordered temporal sequence at two years of age, causality is frequently included by three years, and intentionality or planning is present in the majority of stories told by five-year-olds (Applebee, 1978). Inclusion of an overall objective or moral that unifies and gives purpose to the text is present in the complete narrative structures that mark the transition to linguistic functioning in children (Arwood, 1983; Stein & Glenn, 1979).

If children are unable to manipulate symbols at the linguistic level, they are not able to tell stories with the expected level of detail and purpose (Arwood, 1983). It is not surprising that language organizational problems are more likely to be revealed during narrative production than any other discourse type or context of language use (MacLachlan

& Chapman, 1988). The narrative represents an especially difficult level of language for children with language impairments (MacLachlan & Chapman). Story grammar analysis has been found to be particularly sensitive to the types of organizational difficulties evident in the narratives of LD children who use structures more characteristic of those told by children in the language phase, or an oral communicative style (Johnston, 1982; Liles, 1987; Merritt & Liles, 1989; Roth & Spekman, 1986; Weaver & Dickinson, 1979). Their narratives have repeatedly been found to be poorly organized and lacking in episodic structure (i.e., initiating event, internal response, attempt, and direct consequence).

Children who are not able to manipulate symbols linguistically also will be unable to sequence the symbols on a page that represent someone else's story into a meaningful task called reading. The ability to produce conventional narratives is highly correlated with the ability to read (Norris & Bruning, 1989; Roth & Spekman, 1986; Weaver & Dickinson, 1979). The text that a child is expected to read and comprehend is often structured according to conventional story grammar. But narrative also represents a mode of thought that is logical, organized, and reflective of the ability to use pure symbols. An inability to organize experience according to narrative structure suggests a less decontextualized level of development along the oral-to-literate language continuum.

Cultural Differences in Narrative Style

Many children, especially low SES children or learning disabled children, experience difficulty when confronted with the increasing decontextualization of literate language and the use of language for thinking, reasoning, and planning. Narratives provide a means for making the transition from the functions of oral language to the functions of literate language (Westby, 1985). Through narratives children learn not only to deal with decontextualized language but also how their culture perceives the world.

Differences have been found in the manner in which various cultures use language and the way in which they structure interactions with their children. Low socioeconomic groups use language in a manner that encourages an oral language style and use that is not necessarily rewarded within the school (Westby, 1985). Schachter (1979) investigated the communication styles of mothers interacting with their toddlers and found that total verbal productivity is related to maternal educational level and not to race. For example, Black educated mothers were found to talk even more to their children than did comparably educated white mothers. Similarly, investigations of the early verbal environment have shown no difference between the black mothers and white mothers who are poor and uneducated (Schachter, 1979; Wachs, Uzgiris, & Hunt, 1971). Educated mothers use a responsive communication style (Schachter,

1979), characterized by talking with their children, while disadvantaged mothers use a directed communication style, characterized by talking to their children (Heath, 1982, 1983; Schachter, 1979; Wachs et al., 1971).

Children from different socioeconomic and ethnic groups arrive at school with different experiences (e.g., being told stories, being read to, receiving help in constructing descriptions of past events, being asked tutorial questions) which serve as preparatory sets for literacy. The academic problems experienced by low SES children have been hypothesized to be related, in part, to these different experiences. The academic problems are not the result of a disorder, but rather to a lack of opportunities for the sociocognitive processes to refine language sufficiently for maximal displacement of symbols from their referents to occur. Without experiences using language to create the "then and there" it remains bound to the "here and now."

The transition from the contextualized use of language characteristic of language phase of development, to the decontextualized or literate style of the linguistic phase occurs partially in response to the qualitative changes in cognitive functioning described by Piaget (1952). These qualitative changes have been shown to correspond with periods of rapid neurological growth and change (Parkins, 1990). But semantic complexity and sign usage also are integrally related to social development, or the ability to

share knowledge via symbols within social situations external to the child.

Functions of Narrative Language and Thought

Vygotsky (1978) suggested that language acquisition appears highly reliant on the degree of social mediation provided to the developing child by his/her caretakers (Bruner, 1983; Nelson, 1985). Narrative abilities are facilitated by adults through modeling, prompts and other assists when recounting experiences, and exposure to quality narratives (Snow, 1983; Ninio, 1983; Westby, 1985.) Bruner (1983) referred to this type of social mediation as providing a scaffold, or as much support as the child needs at a moment of communication to be successful. As the child is able to produce the communication more independently, the scaffolding or assistance provided by the adult decreases. In this manner, children are immersed in using language at a level more complex than their own independent abilities could support. The scaffolding enables the child to function at what Vygotsky (1978) terms the upper end of the child's Zone of Proximal Development, or the range of task or conceptual complexity in which information can be presented and learning can occur for a child.

The cultural conventions of narrative production are learned through these socially mediated interactions. Through the production of meaningful narratives in the

context of purposeful language use, the ability to coordinate all aspects of language to influence the beliefs, behaviors, and attitudes of others is acquired (Halliday, 1985; Wells, 1985). The social context provides the means for the language system to refine and to become increasingly internalized. The child becomes increasingly capable of propositionalizing information or interpreting information in relationship to other concepts as the ability to manipulate symbols internally increases. This internal manipulation permits for several propositions to be organized temporally, logically, causally, and conditionally in relationship to each other. Language itself becomes the tool for representing (internally) and communicating (externally) meaningful knowledge at a highly displaced level (Arwood, 1983; Hernandez, 1989).

Children from cultures where the conventions of a literate style of language are not used are at a disadvantage when they enter school. They do not show facility at manipulating symbols in the decontextualized manner valued by the school and thus are less likely to respond appropriately to classroom instruction or to identify with the narratives encountered in written text. They enter school at-risk for academic achievement.

Approaches to Reading for At-Risk Children

Educators have long been aware of the academic problems encountered by low-SES and other at-risk populations. Attempts have been made to meet the educational needs of these children. Little research exists showing the short term or long term efficacy of any approach or comparisons between approaches. Generally, two perspective have been reflected in reading instructional approaches. The first perspective views reading as the acquisition of increasingly more complex skills or products along a developmental continuum. Specific skills are targeted for learning, and teaching strategies are used that provide for the practice of the skill outside of a context of use until a specified level of mastery is achieved. The alternative perspective views the acquisition of skills as the outcome of learning, but not the process by which it occurs (Goodman, 1986; Smith, 1991). The process involves interactions between the reader, the text, and a facilitator who functions to help the child acquire oral and written language within a context of meaningful use. These two perspectives are reflected in the "traditional directed reading approach" versus an approach termed "Communicative Reading Strategies."

Traditional Directed Reading Approach

For more than 100 years, public schools in the United States have operated on the theory that children learn by

mastering discrete parts of complex material before grasping the entire subject (Gursky, 1991). This philosophy is translated into "directed reading" practices. In directed reading approaches, a carefully sequenced reading curriculum is designed to introduce increasingly more specific aspects of phonics (letters, combination of letters, sounds, and rules), tightly controlled vocabulary, and short, graded reading passages, followed by numerous skill exercises, each with only one correct answer.

Within the curriculum, teachers and textbooks transmit information to students, who spend most of their time as recipients and responders. Learning is broken down into small discrete parts that can be taught. The drills and exercises that reinforce skills and knowledge are decontextualized, occurring outside of a meaningful or purposeful reading experience. The drills and exercises are not comprised of words or concepts directly related to the graded reading passages, but rather represent abstract generalizations or rules. Emphasis is on mastery of the targeted skills rather than on problem solving and creative thinking. Skills are tested, practiced and retested regularly to make sure they have been learned in accord with the prescribed scope and sequence of the curriculum (Gursky, 1991).

This type of instruction is highly decontextualized, where skills are isolated from a meaningful context of use

and aspects of language are taught without the support of the whole language system working in integration. Decontextualized instruction thus requires the child to use symbols to create and manipulate other symbols. Words, rather than being used to establish reference to objects must themselves be treated as objects. This level of decontextualization maximizes the complexity of the instructional task. This complexity, compounded with limited experiences with storybook reading make the process of learning to read difficult in both understanding the goal and the nature of the instruction.

Communicative Reading Strategies

Communicative Reading Strategies represents an approach to oral and written language learning based on the philosophy that learning is a process best facilitated when it is contextualized. Learning the conventions of written language, as well as new vocabulary, complex syntactic structures, metaphors, inference making, and other language skills are achieved within meaningful and purposeful reading events. This approach is consistent with the view of language learning as a synergistic process of semiotic development (Arwood, 1983), or with reading models that favor top-down processing influences (Goodman, 1986; Smith, 1985).

The contextualized approach provides instruction nearer the oral end of the oral-to-literate language continuum. All

information shared refers to pictures or ideas immediately considered in the text. Language is not taught through displaced symbols, such as definitions or rules, but rather through the meaningful consequences of a word's use within a context. Grammar is not evaluated for its form, but rather for the relationships of meaning expressed in that story. Reading is not taught to children, but rather engaged in with children through the use of oral mediation, or scaffolding strategies.

The goal within Communicative Reading Strategies (CRS) is not to teach skills, but rather to engage the child in active, successful learning by providing as much social mediation as the child requires to process information meaningfully as a text is interactively read. Integrated sociocognitive learning is engaged as the child is helped to respond to unknown or difficult information, so the child remains an active constructor of knowledge rather than the learner of skills. This learning process requires contextualized information that can be thought about, reorganized, and refined on the basis of meaning.

Many children with low achievement in reading lack the subtleties of language (Craig, 1983; Cross, 1984; Heath, 1983; MacDonald, 1982; Norris, 1989; Ripich & Spinelli, 1985). Contextualized approaches enable them to make discoveries about how language works to communicate meaning. In addition to word recognition, children learn how to

process all aspects of connected discourse including cohesion across sentences and paragraphs, maintenance of an extended topic, shifts in speaker-listener roles, orderly presentation of ideas that communicate motives, feelings, plans, consequences and reactions. In addition to descriptive events, text provides the forum for understanding the linguistic strategies for coordinating action through relative changes in time and place (Halliday, & Hasan, 1976; Norris, 1989; Ripich & Griffith, 1980; Stein & Glenn, 1979; van Dijk & Kintsch, 1983). Thus, rather than teaching reading as a decontextualized process, reading is used to facilitate the development of decontextualized language.

Environmental Factors That Influence Development

SINCE THE 1950's we have been increasingly aware of

Summary

Children who are at-risk for academic achievement because of a low socioeconomic status encounter a complex challenge upon entering school. The oral language style that many children have internalized is different from the literate style expected in the classroom. Their mode of storytelling is not consistent with that encountered in reading books, creating a discontinuity between their expectations about the text and the author's presuppositions about the knowledge possessed by the reader (Bruce, 1981). The narrative thought that children use to plan, predict, remember, anticipate, construct, and learn differs from the style needed to conform to classroom rules or tasks. The

child's use of symbols is more contextualized than many of the instructional procedures require. It is critical that these oral language differences be addressed in the context of reading instruction if the literacy crisis currently experienced in American schools is to be reversed.

REVIEW OF RELATED LITERATURE

There are predictable patterns of child-rearing practices that have been shown to be associated with school achievement (Anastasiow, Hanes & Hanes, 1982; Moore, 1971). According to Martin (1975), verbal stimulation, moderate warmth and emotional support, responsiveness, low use of physical punishment, and a push toward achievement have all been shown to have a positive effect on language learning and school performance. A child's inherent abilities to learn can either be enhanced or diminished by the environment in which the child is immersed.

Environmental Factors That Influence Development

Since the 1950's we have become increasingly aware of the multitude of environmental factors that strongly influence intellectual development. The stimulation, support, role models, and interactions provided by adults all interact to affect learning.

Intellectual Stimulation and Emotional Support

Several studies have examined environmental factors that facilitate language development. Beginning in 1954, Werner and her colleagues longitudinally followed the course of more than 3,000 children on Kauai Island. During the first decade, they documented the development of 1,000 of these

children and followed 698 into their adolescent stage of life for the purpose of studying the impact of environmental factors in development.

The children were from Kauai, an Hawaiian Island that had a mix of different ethnic backgrounds including Japanese, Filipino, part or full Hawaiian, Portuguese, Puerto Rican, Chinese, Korean, and a small group of Anglo-Caucasians. Most of the parents were American-born, with the exception of the Filipino population who migrated to Kauai during the 1940s. The socioeconomic (SES) status of these children were of middle and low SES.

Five independent assessments of these children and their families were made across the developmental span including before birth and at 1, 2, 10, and 18 years of age. A wide range of physiological, social and psychological variables were assessed (Anastasiow, Hanes, & Hanes, 1982).

The results of the study indicated that before age two, variables such as parental language styles, stimulation, concern for and emotional involvement with the child, and the parents' attitude toward achievement had made a significant impact on the child's development (Anastasiow et al., 1982; Werner, Bierman, & French, 1971).

The children were divided into four groups at age ten. Group one consisted of all the children who had been born without difficulties and had favorable rating in environmental stimulation and emotional support. These

children had normal IQs (101-128) at age 10 and were not experiencing achievement problems in school (Anastasiow et al., 1982).

Group two consisted of children who had suffered complications, but were reared in homes rated favorably in support and stimulation. In this group, the IQs also were normal (96-125) at age 10, and the majority of the children functioned well in school (Anastasiow et al., 1982).

The third group of children had been born normal with no birth complications, but reared in homes rated low in both stimulation and support. Their IQs ranged from 70 to 123 at age 10, with more than half below 85. All the children in this group were experiencing achievement problems with the exception of one child. Two-thirds of the children's test performances indicated a serious language disability.

Group four consisted of children who had suffered trauma at birth and were reared in homes rated unfavorably. These children had IQs ranging from 30 to 117 at age 10. Four-fifths had serious learning problems, and one-half were considered mentally retarded (Anastasiow et al., 1982).

It was concluded from the Kauai study that healthy and unhealthy infants thrive in homes that provide emotional support and intellectual stimulation (Anastasiow et al., 1982). Social class alone could not explain the differences in IQ or scores on developmental assessments among the various ethnic groups. The language model used in the home

and the amount of educational stimulation were strongly related to IQ and achievement.

Similar findings were concluded by Nelson (1973) who studied a group of mothers and their infants during the first two years of the infants' lives. Infants who learned language quickly had mothers who were responsive to them, displayed warmth, used high verbalizations, and encouraged their children to attempt new developmental tasks.

Educational Level of the Adults

Vygotsky (1978) and Luria (1976) showed that the educational level of the adults living in the home of the child markedly influenced the acquisition of logical thinking, moral reasoning, perceptual illusions, and depth of knowledge of self. Vygotsky and Luria suggested that words contain the encapsulation of man's knowledge. The results of a study conducted by Cole and associates (Cole, Brown, Jones, & Smith, 1971) concluded similar findings on the effects of education. A National Collaboration Study of 55,000 women and their children indicated that the best predictor of a child's IQ at four was the number of years of the mother's education (Anastasiow et al., 1982; Broman, Nicholas, & Kennedy, 1975).

Socioeconomic Status and Language Development

Children who perform most poorly academically and intellectually in school tend to come disproportionately from families of lower socioeconomic status (Knobloch & Pasamanick, 1953; Ramey, Stedman, Borders-Patterson, & Mengel, 1978; Robert et al., 1989), and their language skills have been implicated in these academic difficulties (Bereiter & Englemann, 1966; Blank, 1982; Cazden John, & Hymes, 1973; Feagans, 1982; Robert et al., 1989; Tough, 1977; Wells, 1985). The studies have argued that socioeconomically disadvantaged children are not deficient in language ability when compared to more advantaged children, but rather, that they use language differently (Cazden et al., 1973; Miller, 1982).

Children from different socioeconomic backgrounds enter school with different types of preparations for literacy. Children from middle-class homes, regardless of ethnicity, do better in school than children of lower socioeconomic backgrounds (Anastasiow et al., 1982).

Oral Mediation and Language Development

Schachter (1979) compared black middle class mothers with black lower SES mothers living in New York City. She observed differences in the manner in which the mothers verbally interacted with their children. Black mothers of low SES class tended to be less verbal, used shorter

sentences, and responded to their children nonverbally with smiles or "Hmhm's" (Anastasiow et al., 1982). These mothers spent more time teaching rote information such as counting, and less time actively engaging the child in problem solving. The black mothers of the middle SES class were more verbally interactive with their children than their Caucasian counterparts of middle SES class.

Nino (1983) investigated the effect of maternal education and socioeconomic status (SES) on book-reading interactions. It was concluded that infants whose mothers had little education were already at some disadvantage in comparison to infants whose mothers had higher levels of schooling. Low-SES mothers appeared adequate as teachers of vocabulary for their 19 month old infants' current level of development, but their teaching style was not future-oriented, not sensitive to changes in the infants' needs, and therefore less facilitative to their child's rapid progression to more complex levels of language use.

Literacy and Language Relationship

The connection between language development and school success has received considerable attention. Researchers have studied the effect of language learning and later academic success by considering the experiences of children who were identified as having language disabilities during the preschool years.

Upon entering school, normally developing children are sophisticated conversationalists (McTear, 1985; Wells 1985). They have mastered the basic rules of grammar, have acquired a diverse vocabulary, are capable of maintaining a topic of conversation over several conversational turns and elaborating on it, and can make appropriate topic shifts (Brinton & Fujiki, 1984; McTear, 1985; Terrell, 1985; Wanska & Bedrosian, 1985).

However, not all children are skilled language users at school entry. Language-disordered children have difficulty forming verbal abstractions and performing the logical operations required to interpret the complex relationships expressed in language. They experience difficulty formulating and producing spoken language, and these difficulties are reflected in poor academic progress and social failure (Maxwell & Wallach, 1984; Merritt & Liles, 1987). The research suggests children with a history of preschool language difficulties continue to have trouble with subtle linguistic and academic tasks through high school (Aram & Nation, 1980; Hall & Tomblin, 1978; Maxwell & Wallach, 1984; Strominger & Bashir, 1977).

Language Disabilities During the Preschool Years

Strominger and Bashir (1977) investigated whether children identified as having a language disability in early childhood experience reading, spelling, and writing problems

in later school years. They followed each child for nine years. During a nine year follow-up the clinical records of forty children who had been seen in their clinic at age five with a diagnosis of "delayed language" (i.e., vocabulary, and syntactic problems and/or unintelligible speech were re-examined for academic achievement. The forty children were seen again between ages 9-11 (Maxwell & Wallach, 1984)

Strominger and Bashir (1977) reported no child was found without residual deficits. The results revealed that two children were reported to be on or above grade level on tests of oral reading, reading comprehension, and written language. However, these two subjects continued to experience problems with sound sequencing and spelling, as well as mild picture naming problems.

Aram and Nation (1980) studied 63 children who had been identified as language disordered during their preschool years. They conducted a follow-up study beginning 5 years following the initial diagnosis, asking similar questions as those raised by Strominger and Bashir. They also explored whether the subsequent academic performance could be predicted on the basis of the nature and severity of a child's preschool language disorder. The children in the study ranged from 4;7 to 10;4 years old, with a mean of 7;11 at the time of the follow-up. The children's mean age was 32 months at the time of the initial evaluation.

The results indicated problems persisted in 80% of the original group, although the outcome was not the same for all children. Half of the children demonstrated obvious speech and language problems well into the school years, while the other half did not demonstrate overt language problems, but were reported to have "other learning problems" (Anastasiow et al., 1982). Members of the latter group were not in regular classrooms and were showing below expected achievement in reading and math.

Aram and Nation (1980) warned that extreme caution should be exercised when attempting to predict subsequent classroom placement in the primary grades from preschool levels of language abilities or delays. They found that a severity rating scale, completed by the clinician during the initial preschool intake period, correlated significantly with subsequent classroom placement (Maxwell & Wallach, 1984). They concluded that early problems with comprehension, as well as auditory perception, placed children at high risk for academic achievement (Aram & Nation, 1980; Maxwell & Wallach, 1984). the classroom than those used by children from middle class environments. While functional for most conversational interactions, these communicative strategies may fail to provide sufficient refinement for more literate language uses.

These studies suggest that language is integrally related to school achievement, and that preschool oral language problems later manifest themselves as school-age written language problems. While some children manifest language-related-learning problems because of inherent language learning disabilities, other children present similar learning problems because of cultural language differences.

Oral - Literate Development of Language

Children from lower socio-cultural groups in the United States develop communicative strategies that put them educationally at risk (Cook-Gumperz & Gumperz, 1981; Edwards, 1976; Gee, 1985; Heath, 1982, 1983; Hill & Varenne, 1981; Michaels, 1981; Michaels & Collins, 1984; Michaels & Cook-Gumperz, 1979; Reed, 1981; Robert et al., 1989). These communicative strategies are less similar to those used in the classroom than those used by children from middle class environments. While functional for most conversational interactions, these communicative may fail to provide sufficient refinement for more literate language uses.

Westby (1985) identified differences in language use and acquisition within and across cultures that exist along a continuum from oral to literate discourse. These cultural differences are manifested in terms of (1) function, or why people talk, (2) topic, or what people talk about, and (3)

structure, or how people talk about the topics. Table 1 summarizes the differences between oral and literate language.

While language along the oral end of the continuum functions to regulate social interaction, at the literate end the primary function is to regulate thought and create abstract concepts. The types of oral discourse is familiar and refers to the "here and now", while in literate discourse the topic focuses on the unexperienced and unfamiliar. The structure of oral language is informal, uses high use of incomplete phrases and nonspecific vocabulary, while formal grammatical sentences and clear reference is characteristic of literate language.

A cultural discontinuity exists when a child's oral language style is different from the mainstream literate language style of the school setting. This difference places increased language demands on the child. It is insufficient in the classroom for the child to use language only to meet individual needs and to be able to communicate with others. In school, language also is used to regulate thinking, to plan, reflect, evaluate, and to acquire knowledge about things that are not directly experienced (Norris, 1989).

Heath (1983) studied the relationship of literacy to the cultural context of three identifiable communities in the Piedmont Carolinas in the United States. The communities were Roadville, a white working-class community that had been

Table 1
Description of Oral-Literate Language Differences in
Function, Topic, and Structure

Oral Message	Literate Message
Function:	
Uses to regulate social and interactions	Uses to regulate thinking planning
Used to request and command	Used to reflect upon and seek information
Used to communicate	Used to learn or teach
Interact with a few people	Pedagogic function-to large groups
Share understanding of the concrete and practical	Build abstract theory of reality
Topic:	
Everyday objects and situations objects	Abstract or unfamiliar situations
Usually the here and now	Usually the there and then
Topic-associative organization	Topic-centered organization
Meaning is in the context	Meaning comes from inferences and conclusions drawn from the text
Structure:	
Familiar words	Unfamiliar words
Repetitive syntax and ideas	Concise syntax and ideas
Many pronouns, slang, and jargon	Specific vocabulary
Cohesion based on intonation	Cohesion based on formal linguistic markers (because, so, therefore, and so forth)

part of mill life for four generations; Trackton, a working-class black community whose older generation had been brought up on the land but that had expanded to include mill life and other light industry; and communities consisting of mainstream, middle-class, urban-oriented blacks and whites.

Heath examined the ways the different social groups "take" knowledge from the environment, with particular concern for how "types of literacy events" (e.g., environmental use of reading and writing) are involved in this taking (Gee, 1989). Heath interpreted these literacy events in relation to the larger sociocultural patterns that they may exemplify or reflect, such as pattern of care-giving roles, uses of space and time, and age and sex segregation. (Gee, 1989).

According to Gee (1989), Heath's characterization of Trackton, Roadville, and mainstreamers did not result in a binary (oral/literate) contrast, but rather a set of features that cross-classifies the three groups in various ways. Each group shared various features with the other groups but differed from them in other ways: For example, the mainstream group and Trackton both valued imagination and fictionalization, while Roadville did not; Roadville and Trackton both shared a disregard for decontextualization not shared by mainstreamers. Both mainstreamers and Roadville, but not Trackton, believed parents have a tutoring role in language and literacy acquisition as exemplified by reading

to their children and asking questions that required labels. However, Roadville shared with Trackton, but not the mainstreamers, an experiential, nonanalytic view of learning, or belief that children learn by doing and watching, and not by having the process broken down into its smallest parts.

These various differences in language socialization and the social environment were related to differences experienced by the children in school. In general, children in both Roadville and Trackton were unsuccessful in school, regardless of the fact that both communities placed a high value on success in school. In contrast, the instructional, decontextualized style of language used by middle class parents resulted in children who were more successful in school.

In a longitudinal study of British children from middle and lower class families, Wells (1981, 1985) and Wells and Wells (1983) reported no differences in the rate of language development and in language use until 5 years of age. Once children entered school, where the demands for language performance differed from those of the home, clear class-related differences in language performance were found (Robert et al., 1989).

Norris and Bruning (1989) documented that children identified as poor achievers at the beginning stages of reading instruction were less sophisticated in the use of decontextualized language than those who were high achievers.

Poor achievers were observed to have more difficulty in the use of language as a tool for unifying and structuring text cohesively.

Difference Versus Deficit Theory

Initially a language deficit model (Bernstein, 1971) was used to explain the differences in the language of socioeconomically disadvantaged children. Further research has suggested that the language used by lower SES children is not deficient, and that school related problems are more related to different experiences with language at home (Farran, 1982; Heath, 1983; Miller, 1982; Tough, 1977). An examination the uses of language in lower SES families revealed comparatively less use language for purposes valued by the school, such as reading to children and engaging in literacy related activities (Heath 1983; Wells, 1985; Wells & Wells, 1983). However, the differences between disadvantaged and advantaged children cannot be explained by the simple access to literacy materials (Snow, 1983). During bookreading activities middle-class families use conversation to integrate personal experiences with the events in the stories, representing "shared histories" between the mother and child, and to practice literate and decontextualized features of oral discourse. These early experiences in reflecting on information found in text contributes to later success in the

abstract use of language and the development of reading in school (Snow, 1983).

Language Development and Classroom Demands

The importance of language skills to academic success has been noted by several researchers (Blank, Rose, & Berlin, 1978; Roberts et al., 1989; Tough, 1977; Wells, 1975). The classroom setting is a ubiquitous language environment, and almost all interactions among teacher and students during the school day depend on language (Bloom & Knott, 1985; Mehan, 1979; Roberts et al, 1989; Sinclair & Coulthard, 1975).

Decontextualized Language

The classroom environment is characterized by the use of decontextualized language and unfamiliar people. Language is used in a manner that communicates information displaced from direct participation and/or experience (Goodman & Goodman, 1979; Norris, 1989; Westby, 1985). The concepts of time, place, participants, and events that are relevant to a particular topic are established through the use of language. The speaker must be able to take the perspective of the listener, be less repetitive, more specific, more reflective of experiences, more topic-centered, and must coordinate the relationships between events along such dimensions as time, space, and causality (Norris, 1989). The language itself must construct the experience adequately for the listener, so

that the listener can comprehend the event without having actually shared the experience (Bruce, 1981; Jorm, 1983; Norris, 1989; Spekman, 1983; Westby, 1985). The listener also must be able to reconstruct the unshared event from the language alone.

Language Style and Academic Success

Children whose language is restricted to an oral style of language experience difficulty acquiring literacy. They do not adequately understand the language used by the teacher, nor that which they encounter in their classroom textbooks. They also experience difficulty interpreting or expressing ideas at the level of language proficiency required for academic success (Norris, 1989; Westby, 1985).

The acquisition of literacy is related to the language style children or adults use in narrative productions (Collins & Michaels, 1980; Michaels, 1981; Scollon & Scollon, 1980; Westby, 1985). Individuals from oral cultures in which narratives are jointly constructed have difficulty acquiring literacy because of their inability to take the spectator role required in reading and writing texts (Britton, 1976; Westby, 1985). Children who tell topic-associative stories, which is characteristic of the oral style of language, perform less well in reading and writing than children who tell topic-centered stories, which is characteristic of decontextualized style of language (Westby, 1985).

Narrative Development

Research on narrative development in normally developing or disordered populations is extensive. However, research on children's narratives rarely has addressed the variability of communicative styles encountered within and across speech communities (Gutierrez-Clellen & Quinn, 1993). In one study, the variability in communicative styles was demonstrated in the different narrative strategies used by Greek and American children in their retellings of the plot of a film (Tannen, 1980, 1984). The American students tried to be as detailed as possible in their narration. In contrast, the Greek students tended to "interpret" the story, guessing at the intentions of the characters, judging their actions, and omitting unnecessary details (Gutierrez-Clellen & Quinn, 1993).

Scollon and Scollon's study (cited in Gutierrez-Clellen & Quinn, 1993) found that both bilingual English/Athabascan and monolingual Athabascan children intentionally left out information in their story retellings and emphasized narrative events that were salient in their lives. The Athabascan children's stories were brief summarizations of events, contrasting with the detailed narratives expected in American schools. Rather than adhering to the original story text, children applied their own sense of the narrative structure and omitted narrative details they perceived as redundant.

These studies demonstrate that well-formed narratives may vary in the type and amount of information included in retellings. These differences are related to how speakers interpret the contexts of narratives. Story retelling may resemble a memory test for some groups, characteristic of a style that is valued in American schools. For other groups, well formed stories resemble condensed abstracts, based on a shared sense of negotiated authorship (Gutierrez-Clellen & Guinn, 1993).

Story Grammar Development

Narratives are primarily evaluated by analytical frameworks, such as story grammars. These analytical frames suggest that the structure of stories is universal and that the same approach may be applied to assess any narrative produced by any speaker in any context, regardless of narrative differences among various cultural/ ethnic/ linguistic groups (Gutierrez-Clellen & Guinn, 1993). When this assumption is used to guide analyses, differences tend to be viewed as anomalous or symptomatic of narrative difficulties or deficits (Hedberg & Stoel-Gammon, 1986; Johnston, 1982; Page & Stewart, 1985).

Stein and Glenn (1979) proposed a grammar to capture the narrative structure that identifies elements universal to western stories and specifies a formal set of rules underlying the construction of any story. This system

consists of rules that identify stable patterns of causally and temporally related information most often found in stories. Theorists including Mandler & Johnson (1977), Rumelhart (1975, 1979), and Stein & Glenn (1979), have posited that story grammar is guided by a cognitive organization, referred to as story schema (Merritt & Liles, 1989). The following six story component are included in the story grammar: a) setting, b) initiating event, c) internal response, d) attempts, e) consequence, and f) reaction.

Reports in the literature indicate that by 5 or 6 years of age children already demonstrate knowledge of most or all components of narrative structure, but that the amount of information recalled from the stories increases with age (Mandler & Johnson, 1977; Roth & Spekman, 1986; Stein & Glenn, 1979). Results of the studies suggest that all parts of a story (i.e., all story grammar components) are not recalled equally well. The major setting statements, initiating events, and direct consequences were the story categories most likely to be recalled (Mandler & Johnson, 1977; Stein & Glenn, 1979).

Heath (1983) described differences in the narrative strategies used by European-American and African American speakers. The stories of African American working-class speakers contained fewer formulaic openings and less chronicity than those of European-American working-class narrators. The stories of the African Americans moved from

event to event, with the inclusion of many judgmental statements about the characters and their ongoing behaviors, with no formulaic closing. In contrast, the stories of European American included factual information, ending with a moral statement, a proverb, or a quotation from the Bible (Gutierrez-Clellen & Guinn, 1993).

Episodic Development

While much information has been learned about narrative development and structure, an understanding of the variability within groups and crosslinguistic variation is just beginning to emerge (Gutierrez-Clellen & Heinrichs-Ramos, 1993). For instance, little is known about episodic development in low SES minority children. Roth and Spekman (1986) described the episode as the basic building block of stories. The episode is composed of propositions or individual ideas that are hierarchically arranged in accord with story structure. Similar to individual story grammar components, the episode has been shown to have psychological validity (Roth & Spekman, 1986). All story grammar components may be represented in an episode, but minimally a complete episode must contain some mention of the purpose of the behavior (i.e., Initiating Event or Response that precipitates the protagonist's actions), the goal-directed behavior (i.e., Initiating Event or Response that precipitates the protagonist's actions), the goal-directed

behavior (i.e., Attempt), and the outcome of the behavior (i.e., a Consequence, which indicates attainment or nonattainment of the goal) (Roth & Spekman, 1986; Stein & Glenn, 1979).

Roth and Spekman (1986) studied the spontaneously generated oral stories of 93 learning-disabled (LD) and normally achieving (NA) students, 14 to 16 years old. The stories were analyzed using an adapted version of Stein and Glenn's (1979) story grammar. The results showed significant group and age differences. The stories told by the LD subjects contained fewer propositions and complete episodes and contained significantly fewer Minor Setting statements than those of their NA peers. Within an episode, the LD subjects were less likely to include Response, Attempt, and Plan statements than the NA counterparts.

Interepisodic Development

Episodes are connected to each other by four types of relations: temporal, causal, additive, and embedded (Stein & Glenn, 1979). Roth and Spekman (1986) identified group differences in the area of interepisodic relations. The major age-related findings were an increased occurrence of complete episodes and a greater frequency of embedded episodes as a function of increasing age. Little research has been conducted on the development and production of interepisodic relations including that of low SES minority

children. No empirical information was found in the research literature regarding the interepisodic relation development in the narratives of low SES minority children.

Intervention Programs and Academic Success

Many early intervention programs have focused on modifying the child rearing environment to better prepare the socioeconomically disadvantaged child for elementary school. Project Head Start was one of the earliest and best known compensatory programs. The program provided for a one year general educational intervention with no structured developmental or language curriculum. Project Head Start sought to determine whether an enriched, stimulating preschool environment presented intensively during the critical learning years of early childhood improves linguistic, cognitive, and social skills, and leads to greater academic success (Zigler & Valentine, 1979). Researchers reported Head Start enabled children to function better initially, but without continued enrichment in school, gains showed questionable lasting intellectual benefits (Robert et al., 1989; Westinghouse, 1969; Zigler & Valentine, 1979).

Lazar and Darlington (1982) observed and reviewed the long-term effects of intervention of 12 other early intervention programs begun in the 1960's. Some of the programs focused on facilitating language through teacher-

child dialogue and parent-child interactions, while others had limited or no language focus. Children who attended the programs that focused on facilitating language through teacher-child dialogue and parent-child interactions, made greater gains in intelligence test scores and academic achievement. A small number of projects reported effects on language, such as increasing children's verbalizations during play and use of descriptive complete sentences (Bereiter & Englemann, 1966; Robert et al., 1989).

Oral Mediation as a Language Intervention Strategy

Researchers studying language development have concluded language is actually a "whole-to-part" process (Brown, 1973; Bruner, 1987; Nelson, 1985, 1991; Norris & Hoffman, 1993; Piaget, 1952; Snow, 1972; Vygotsky, 1962; Wells, 1986). Goodman (1986) posited three principles that are the bases of this philosophy of learning. The following principles are used to guide the development of curricula, teaching, or intervention: 1) language is whole, 2) language is learned from whole to part, 3) written language is developed in parallel with oral language, each serving to develop and refine an integrated language system.

Verbal mediation or talk that occurs between a person with greater competence in some area and a person attempting to learn is effective in language teaching and intervention. As suggested by many theorists (e.g., Bruner, 1988; Cummins,

1984; Feuerstein, Rand, & Rynders, 1988; Langer & Applebee, 1986) mediation is effective in providing learners with the appropriate level of input to achieve comprehension in language-learning situations and activities. The use of mediation enables the interventionist to provide scaffolds for the learner, in the form of prompts, models, nonverbal cues, and other assistance. With scaffolding, the interventionist can present comprehensible language that would normally be beyond the student's current level of interpretation. In this manner, the interventionist "pushes" the student's language capacities beyond his or her current level toward a greater complexity of functioning. Vygotsky (1978) referred to this as working within the student's "zone of proximal development," thus facilitating language learning (Feuerstein, Rand, & Rynders, 1988).

Interventions that facilitate literacy of culturally different, low SES children who are poor readers have not been sufficiently addressed, either in reading instruction or in speech/language intervention. The need for early preschool intervention for these children is recognized as critical to facilitate social and intellectual development during the beginning of their school-based experiences, when they are willing to take risks and learn, with the long term goal of halting the perpetuation of illiteracy and life-long dependency on others.

Communicative Reading Strategies

One reading approach that makes use of highly scaffolded interactions ongoing between a child, the text, and a facilitative adult is termed Communicative Reading Strategies (CRS) (Norris, 1985, 1989). In this procedure, reading is treated as an interaction ongoing between the author of a text (as represented by the written words), the readers, and a facilitator who assists the interaction by directing the reader to the a correct reading of the text, teaching vocabulary or other aspects of language that are unfamiliar to the readers as they are encountered in context, and guiding interpretations and inferences related to the meaning communicated by the author.

In this procedure, the interaction generally precedes as a three-step process. First, the facilitator establishes the content and intent of the author's message prior to the reading of the text using a Preparatory Set. The Preparatory Set serves a variety of functions, including activating relevant concepts or background knowledge, simplifying large and/or abstract units of meaning, or parsing complex grammatical structures and/or discourse structures to demonstrate how the form of the language functions to establish relationships of meaning between ideas.

Secondly, one or more readers interpret the author's message by orally reading the text independently or in unison. During this reading, the facilitator monitors the

reading for indications that the information either is or is not being meaningfully processed by the child. Indicators such as word miscues, slow rate of word recognition, frequent decoding, poor phrasing, word-by-word reading, intonation that is inappropriate to the meaning of the message, or poor response to comprehension checks suggest that something about the message is unknown or difficult to process.

Thirdly, the facilitator provides differential feedback to the reader based on whether the child's reading suggested that the text was or was not adequately processed for meaning and intent. When the text is inappropriately read, the facilitator may choose to teach the unknown language, activate background knowledge possessed by the reader, clarify or challenge a misinterpretation, or model a response to the intended message.

Communicative Reading Strategies (CRS) has not been investigated for its effectiveness as an intervention methodology for culturally different, low SES children who demonstrate language differences and poor reading achievement. It has been investigated by Hernandez (1989) to determine the effectiveness of using oral mediation to enhance reading fluency and comprehension with third grade low ability readers. After four weeks of instruction (30 minutes per day in small groups) Hernandez evaluated changes in reading and writing improvement and reported the CRS group demonstrated significantly more improvement in reading

comprehension scores compared to a control group that received 30 minutes of small group basal reading instruction. Trends observed in the data showed greater gains for the CRS group in all other measures, including word recognition, instructional reading level, story retelling ability, inferencing ability, spontaneous writing ability, and thematic maturity in spontaneous editing, although these differences did not reach a level of significance following this short intervention period.

CRS has been used clinically with language delayed children for five years at the LSU Speech and Hearing Clinic, with consistent increases in language and reading performance on standardized tests administered pre- and post-intervention. Reported gains have suggested that measurable shifts are obtained in a relatively short period on standardized measures that sample oral and written language behaviors. For example, clinical results for one group of 19 subjects showed an average gain in percentile rank of 11 on the Test of Language Development (Newcomer & Hammill, 1988) following seven weeks (20 hours total) of intervention, as well as an average percentile gain of 12% in reading comprehension and 6 in reading recognition on the Gray Oral Reading Test (Wiederholt & Bryant, 1986). In a relatively short intervention period, these gains suggest that measurable shifts are obtainable on standardized measures that sample oral and written language behaviors.

These clinical records, accompanied by the significant changes in comprehension and greater gains in other language-related measures used by Hernandez (1989) imply that it is a potentially puissant method of language intervention. If CRS can be shown to be effective in facilitating improvements in language abilities, and have a positive effect upon academic performance, then the use of oral language facilitation can serve as an oral and written language intervention methodology that has relevance and efficacy in meeting the pragmatic language needs of the culturally different, low SES school aged child.

The Direct Instruction Controversy

While oral mediation, including the use of scaffolding, has been shown to be important to oral and written language learning, not all theorists agree that this type of instruction is appropriate for all children, particularly those from low SES environments. Many researchers believe that written language is different in nature from oral language and that the conventions of print must be explicitly and systematically taught (Chall, 1989). This perspective also considers the systematic teaching of vocabulary and grammar critical to increasing levels of literacy, resulting in curricula where language arts are taught separately from reading or composition. According to this view, children with the least exposure to print and literate language uses

during the preschool years require more carefully controlled experiences with specific aspects of language and print in order to overcome this deficit, including increased drill, practice, and repetition on discrete reading-related skills (Bowman, 1992; Gersten & George, 1990; Warren-Leubecker & Carter, 1988).

The controversy between more indirect, contextualized instruction versus more direct, decontextualized instruction has been debated for many years for middle class children, as well. Many studies examining reading instruction have supported the efficacy of direct instruction, but many others have supported the value of indirect instruction. Researchers have argued that while the direct instruction model may favorably impact student achievement, other instructional models have greater impact on outcomes related to broader cognitive and affective outcomes (Flood, Jensen, Lapp & Squire, 1991; Peterson, 1979).

Vocabulary Instruction and Comprehension

Directed Reading (DR) refers to the practice of providing direct, decontextualized instruction in reading. Rosenshine (1986) summarized studies of effective teaching into six teaching functions that are characteristic of Directed Reading, including daily review, presentation of new material, guided practice, provision of feedback and correctives, independent practice on vocabulary, language,

and reading skills, and perioding reviews. This instructional model has received substantial research support in promoting outcomes related to improved student achievement (Becker & Gersten, 1982; Gersten, Carnine, & Williams, 1981; Gersten & Keating, 1987; Meyer, Gersten, & Gulkin, 1983; Rosenshine, 1979; Rupley & Blair, 1981; Stallings, 1975, 1976).

While the direct instruction model has been shown to favorably impact student achievement, it is unclear whether the Directed Reading approach is the most efficacious instruction. Many researchers suggest that more meaning based, integrated approaches may have equal effects on traditional measures of achievement and also have greater impact on outcomes related to broader cognitive and affective outcomes (Flood, Jensen, Lapp, & Squire, 1991; Peterson, 1979).

Research consistently shows that direct instruction in vocabulary results in increases in the ability to associate words with their meanings. Many direct instructional approaches have been examined, including associating words with their definitions, categorizing words by semantic classes, and completing sentences with the appropriate vocabulary word. While it can be stated that some form of instruction is better than no instruction, the efficacy of direct instruction compared to indirect instruction has not been systematically examined and no conclusion can be drawn

regarding their relative effectiveness (Flood, Jensen, Lapp, & Squire, 1991).

Several studies have challenged the benefits of direct vocabulary instruction, advocating the need for vocabulary to be taught in semantically and topically related networks to improve overall comprehension (Beck, McKeown & Omanson, 1984, 1987; Beck, Perfetti & McKeown, 1982; Flood et al., 1991). Beck and associates (1984, 1987) posited that vocabulary instruction that is not tied to building a broad background of knowledge relevant to the text will not result in generalized vocabulary or comprehension growth.

Several researchers have argued for the effectiveness of indirect instruction, concluding that language skills such as vocabulary acquisition and syntax are positively influenced by listening to trade books read aloud (Cohen, 1968; Feitelson, 1988; Flood et al., 1991). Independent reading was cited as a major source of vocabulary growth (Anderson, Hiebert, Scott, & Wilkinson, 1985; Flood et al., 1991), accounting for the majority of new vocabulary words acquired. Students learn the meanings of about 3,000 new words a year and direct instruction could only account for a modest proportion of the total (Flood et al., 1991; Nagy, Herman, & Anderson, 1985). Differences have been shown to exist in vocabulary development relative to SES status. Disadvantaged students know from fifty to seventy percent of the words known by middle class students (Flood et al., 1991).

Questioning and Comprehension

Questioning has been identified as the most frequent type of classroom interaction (Cazden, 1986). Asking questions has been shown to improve comprehension and retention of content (Flood et al., 1991; Yost, Avila & Vexler, 1977). However, a high percentage of these questions ask for discrete factual information, thus failing to engage children in high-level thinking or integration (Durkin, 1978, 1979). A broader range of information is recalled when questions are given after content has been presented, and when students are required to construct answers rather than to select from among alternatives (Christenbury & Kelly, 1983; Flood et al., 1991).

Story Grammar Instruction

It has been argued by some researchers that explicit instruction of story structure is unnecessary because students will automatically acquire this knowledge indirectly as a by-product of story listening and reading (Flood et al., 1991; Moffett, 1983). Instruction of narrative structure is thought to be unnecessary and counterproductive, because it isolates and emphasizes only one element of a story and deemphasizes story content (Flood et al., 1992; Schmitt & O'Brien, 1986). Fitzgerald, Spiegel, and Teasley (1987) showed that story structure instruction provided to poor readers in fourth grade improved the overall quality and

organization of written stories, but not coherence and creativity.

Advocates of indirect instruction argue that knowledge of story structure is increased through exposure to narrative patterns encountered when children's literature is read and discussed. A greater understanding of narrative structure in turn improves comprehension of narrative texts (Adams & Collins, 1979; Flood et al., 1991; Stein & Glenn, 1979). These experiences initiate the development of mental representations of how stories are structured and continue to develop in complexity throughout the school years and into adulthood (Flood et al., 1991; Stein & Glenn, 1979).

Summary

The research supporting Directed Reading instruction versus more indirect, mediated learning is incomplete and frequently contradictory. These discrepancies have been found for instruction in all areas of language, including vocabulary acquisition, factual recall, inference making, and story grammar development, as well as for word recognition. One reason for inconclusive findings is that few studies that systematically compare direct instruction versus indirect instruction have been conducted. Thus, conclusions that can be reached to date are that some instruction, whether direct or indirect, is better than no instruction at facilitating achievement in reading and reading related skills.

Research Questions

Research from diverse fields has yielded much information about language development, and the relationship that exists between literacy and language. Children enter school with different experiences and language styles that impact on academic achievement. While much is known about the literacy problems encountered by many culturally different low SES children, little is known about the relative efficacy of instructional approaches that directly teach reading-related skills compared to indirect approaches that facilitate language processing in context.

This study will compare the relative efficacy of direct instruction to indirect instruction with low SES first grade children. The specific questions addressed by this study are:

1. Will a contextualized instructional condition (i.e., Communicative Reading Strategies) (CRS) result in greater accuracy and fluency in a rereading of text than a decontextualized (i.e., Directed Reading) (DR) instructional condition?
2. Will a contextualized instructional condition (CRS) result in a retelling of the story read with more complete narrative structure (i.e., narrative form) than a decontextualized (DR) instructional condition?

3. Will a contextualized instructional condition (CRS) result in a more complete retelling of the story read (i.e., narrative content) than a decontextualized (DR) instructional condition?
4. Will a contextualized instructional condition (CRS) result in greater complexity in a retelling of the story read (i.e., interepisodic relations) than a decontextualized (DR) instructional condition?

METHODS

An alternating treatment design (ATD) (Barlow & Hayes, 1979; Barlow & Hersen, 1984) was employed in the single-subject study to investigate the question of whether the strategy of using contextualized activities (CRS) to facilitate written language processing (i.e., vocabulary acquisition, grammatical understanding, narrative structure, and passage comprehension) during the process of oral reading will result in better internalization of a written story than will decontextualized activities (DR) targeting the same behaviors immediately preceding or following oral reading. Evidence of the internalization of a written story was measured by 1) fluency and accuracy of rereading; and 2) complexity and accuracy of story retelling.

The alternating treatment design, or ATD, enabled two treatment conditions to be compared within a single subject. The duration of the treatment period was short (in the case of this study, five sessions for each condition), and the outcomes immediately observable following the treatment (in this study, rereading and retelling the story read within the treatment condition). These two factors limit the generalization across conditions, but provide for sufficient replication of the outcomes to evaluate the stability of the findings.

This design was selected because it allowed an initial exploration of the question of whether contextualized treatment, consisting of orally mediated language facilitation, is as effective or more effective than more traditional, discrete skill teaching of reading related language skills in the short term. An evaluation of the two treatment conditions was made by connecting and comparing all data points measuring the effects of Treatment CRS (i.e., contextualized instruction) to those measuring the effects of Treatment DR (i.e., decontextualized instruction), and conducting a statistical comparison to determine the reliability of results. A determination was made that one treatment was more effective than the other if, over time, the two series of data points separated (i.e., Treatment DR, for example, produced greater improvement than Treatment CRS). Replication of the comparisons for both short-term and long-term effects using additional subjects is then needed to establish the reliability and validity of these results.

Subjects

The subjects of this study were children of low socioeconomic status who were experiencing difficulty in reading. The four subjects were first grade level females between 6;3 and 6;11 years. Subjects were determined to be of low socioeconomic status by meeting the qualifications and

guidelines of the Federal Free Lunch Program, as verified by School Personnel.

The subjects demonstrated a low achievement level in reading due primarily to low socioeconomic status and not to any apparent cognitive or language disorder. The following operational criteria were used to identify the population:

1. Satisfactorily met criteria for eligibility for participation in Chapter I reading laboratory;
2. Poor performance in classroom reading instruction, as defined by a grade of "C" or below in reading, and/or the teacher's judgement of significantly below average performance in reading compared to peers;
3. A history showing no prior remedial services for speech-language disorders, learning disabilities, or emotional disturbance;
4. Educational levels of parents that did not exceed high school graduation;
5. English was the subject's first language;
6. Normal hearing as verified by passing a pure-tone hearing screening for frequencies of 1,000, 2,000, and 4,000 HZ at 20dB;
7. A performance within the normal range on the Test of Language Development - Primary (TOLD-P) (Newcomer & Hammill, 1988) according to locally established norms;

8. Production of an elicited narrative sample that reflected the use of an oral language style as described by Westby (1985) in Table 1.

Identifying Subjects

Potential subjects were identified through a five-step process. First, teachers of all first grade students at the participating elementary school identified children who were experiencing difficulty learning to read, who were qualified free lunch recipients, and who, in the teacher's estimation, would meet the operational criteria described above. Twelve students were identified who met these criteria. Second, the teachers sent all eligible candidates an invitation to participate in the study, along with the appropriate informed consent forms for parents/guardians to read, sign, and return. Third, from those children for whom permission forms were returned, each child's school records were examined to determine if she met the first five criteria above. Fourth, the formal and informal assessments described in criteria six, seven, and eight above were administered and scored. Fifth, the children who met all eight criteria were placed in the subject pool. From these, four female subjects were randomly selected for participation.

Administration of the TOLD-P

One quantitative measure of language, the Test of Language Development - Primary (TOLD-P) (Newcomer & Hammill,

1988) was administered to qualify subjects for participation (criterion seven, above.) The TOLD-P is normed on speakers of standard English and is biased in its scoring against nonstandard dialects. To establish a local normed reference of mean scores for speakers of the community dialect, the test was administered to ten first grade students who were identified by their teachers as representing the average school population in reading and language abilities. The Spoken Language Quotient (SLQ) (the sums of standard scores from all seven subtests were used to obtain the SLQ) was used to derive the mean of the sample population of average students.

The potential subjects were administered the TOLD-P and their scores were compared to the local normed reference of mean scores. Subjects had to demonstrate a language performance in the average range relative to the adjusted mean score. The criteria set for participation in this study was a TOLD-P score within 1.75 standard deviations from the local mean score. Subjects one, two and three's scores were less than 1.0 standard deviations below the local norms, and subject four scored 1.4 standard deviations below the mean.

Elicitation of the Oral Narrative

One qualitative measure of language, a spontaneously generated oral narrative, was elicited and used to qualify subjects for participation (criterion eight above), and to establish a baseline, or indication of the subject's

narrative abilities prior to intervention. This measure was selected because the narrative is structurally related to actual contextualized speaking, reading, and writing that occurs in meaningful and natural settings, and thus is sensitive to measures of change that cannot be obtained on standardized tests (Norris, 1989). The narrative sample demonstrates what a subject is capable of producing, rather than the tasks or individual subskills that can be responded to outside of a context of use. It reflects the subject's ability to select form, audience, purpose, discourse structure and style, rather than examining the subject's ability to respond to tasks or individual subskills out of a context of use.

A picture from the Apricot 1 series (Arwood, 1985) was used as a stimulus for the spontaneously generated narrative task. A picture was presented and the subject was asked to tell a story using the prompt, "Tell me a story about this picture." The pictures are drawn to depict a complete story, such as a cat jumping on the kitchen counter and spilling a carton of milk to feed her kittens, disrupting the cooking activities of the mother. The topic lends itself to narrative structure, with an ordinary event that is disrupted by a least expected and problematic event that in turn generates an internal response in the characters and suggests actions are required to solve the problem.

All narratives were video recorded. The narratives were transcribed verbatim using standard orthography. The narrative was segmented into T-Units (Hunt, 1977) and analyzed to determine the level of narrative development. To establish the reliability of the narrative transcription, 25% of the total narrative samples across subjects were randomly selected for independent transcription by a second examiner. Agreement between examiners was 100%.

Subject Descriptions

Subject One was a 6;10 year old Anglo-American female. According to her academic records, she had a history of academic difficulties since kindergarten. Her teacher described her as essentially a nonreader and noted she is at-risk for academic failure. Subject One was a member of a first grade classroom in which directed reading instructional methods were used.

Subject Two was a 6;8 year old Hispanic-American female. Her father is Hispanic and her mother is Anglo-American. The parents reported that only English is spoken in the home. Subject Two's mother described herself as illiterate and indicated that the subject's three brothers have been diagnosed as learning disabled. According to her academic records, she had difficulty in kindergarten acquiring the "skills" for that grade level. Her first grade teacher described her as essentially a nonreader, but noted that she

tries very hard. Subject Two was a member of a first grade classroom in which directed reading instructional methods were used.

Subjects Three and Four were African-American females who were 6;3 and 6;11 years old, respectively. Both subjects were members of a non-traditional classroom, described by their teacher as a Whole Language classroom. Their academic records confirmed that both experienced difficulty acquiring the skills expected during their kindergarten year. Their first grade teacher described them as below average students but indicated that they maintained positive attitudes toward reading in the classroom.

Materials

Each subject read the same two books during the intervention sessions. One book was read under the decontextualized approach (i.e., Directed Reading instruction) (DR), and the other was read under the contextualized condition (i.e., Communicative Reading Strategy instruction) (CRS). The books were selected to be within the subjects' instructional reading level, and to be similar in readability, story structure, and plot.

Establishing the Instructional Reading Level

The instructional reading level for each subject was established by administering the Test of Early Reading Ability (TERA) (Reid, Hresko, & Hammill, 1981) prior to

treatment. The four subjects were described by their teachers as essentially non-readers. The teachers reported their reading abilities ranged from pre-primer to primer. The TERA was administered to determine the level of prereading functioning. The teacher judgement of subjects' reading development and the results of the TERA allowed the examiner to make the determination that the Level Two (emergent reading) of The Story Box Series (The Wright Group) was appropriate for the subjects.

Selecting Reading Materials

Two stories from Level Two (emergent reading) of The Story Box Series and Sunshine Series (The Wright Group) were read under the two instructional conditions. The first story, The Kick-a-Lot Shoes (KS) (Cowley, 1990) told the story of a mean witch who terrorized the people in the community by kicking them. The story was resolved when a mouse tricked her into kicking a tree and she lost her kick-a-lot shoes. The second story, Road Robber (RR) (Cowley, 1988) told the story of a mean man who terrorized the people in the community by stealing the roads. The story was resolved when the community tricked him by following his footprints and he lost his stolen road. In addition to the publisher's placement of the two books at the same level of reading difficulty, the stories were reviewed by the examiner to verify they were approximately of the same level of

complexity according to their story grammar, the amount of overlap between the information presented in the text and in the picture, and grammatical complexity.

Story Grammar Comparison

Story grammar is a specific type of narrative analysis, which is characterized by a formal set of rules describing stories as being joined together in predictable ways. Stein and Glenn's (1979) story grammar was employed to analyze the two stories. Each element of a story was assigned to one of the six story components. Both stories began with the establishment of a setting, including characters, locations, and habitual or ordinary states. Both stories presented an Initiating event on either the second (KS) or third (RR) page, or an action or event that changed the ordinary status of the setting. Both books began with an explicit statement the internal responses attributed to the main character, including the goals or intentions leading to a plan sequence. Both later changed the perspective of the story to that of the townspeople and provided their internal response and plan, with the RR elaborating on the plan for two pages compared to one page for KS.

Both stories were told as a series of episodes connected through a temporal sequence, each typically comprised of two pages of illustrated text, the first describing an attempt (i.e., actions toward resolving a situation or achieving a goal), and the second page providing the consequence (i.e.,

actions, natural occurrences, or end states representing the character's attainment or nonattainment of a goal). Story KS consisted of seven episodes and RR of six, one told in flashback to establish the character's past habit of stealing roads. Both resolved the story to include Reactions, or statements about how the characters felt or acted in response to the direct consequence (Merritt & Liles, 1989). Thus, both stories used in the study did have the six components of story grammar as described by Stein and Glenn (1979) and were comparable in story grammar structure and complexity.

Picture Support Comparison

The stories were similar in the degree of support for the text that was present in the picture. Each page of text was judged as 1) the picture and text provided the same information (i.e., the text could be predicted by looking at the picture); 2) somewhat the same information (i.e., the information from the text could be inferred from the picture, but was not obvious); or 3) different information (i.e., the information provided by the text was not pictured). The picture and text provided the same information in 53% and 50% of the pages for KS and RR, respectively; somewhat the same information in 40% and 43% of the pages; and different information in 7% of the pages for both books.

Analysis of Grammatical Complexity

A grammatical analysis was conducted on the two stories, to determine the mean length of utterances (MLU) and the

complexity of the grammatical structures used in the stories. To determine the MLU, the number of words and sentences in each book was tallied, and the words were divided by the sentences. The story The Kick-a-lot Shoes consisted of 422 words and 60 sentences, which yielded an MLU of 7.03 words per sentence. The Road Robber consisted of 283 words and 33 sentences, which yielded an MLU of 8.57 words per sentence.

The sentences were also examined to determine the ratio of simple sentences, compound sentences, and complex sentences. Lile's (1987) definitions of simple, compound and complex sentences were used to identify the sentences.

Simple sentence: A sentence consisting of only one main clause.

Example: "She put on her mean old kick-a-lot shoes."

Compound sentence: A sentence consisting of two or more main clauses joined together. When the subject of both clauses is the same, it can be promominilized or deleted.

Example: "I'll go and kick people," she said."

Complex sentence: A sentence consisting of a combination of one main clause and one or more subordinate clauses.

Example: "I'll kick them so hard that they can't sit down."

The grammatical analysis of the sentence structures revealed that of the 60 sentences in The Kick-a-Lot Shoes, 78.33% of the sentences were simple sentences, 15% of the sentences were compound sentences, and 6.66% of the sentences were complex sentences. The story Road Robber consisted of 33 sentences, of which 57.58% of the sentences were simple, 18.18% of the sentences were compound, and 24.42% of the sentences were complex.

Reliability

To establish the reliability of the coding of the MLU and grammatical analysis, the books were independently analyzed by a second examiner. Interexaminer agreements for the MLU and grammatical analysis was 100% and 96%, respectively.

Assignment of Reading Materials

The story The Kick-a-Lot Shoes (Cowley, 1990) was randomly assigned to the contextualized reading condition (i.e., CRS/KS) for subjects one and three, and to the decontextualized condition (i.e., DR/KS) for subjects two and four. The Road Robber (Cowley, 1988) was assigned to the opposite conditions for all subjects (i.e., CRS/RR and DR/RR), so that the effects of story-related differences in the two instructional conditions were counterbalanced.

Each story was parsed into five segments, each representing an element of story structure. Each segment was

approximately equal in length, comprised of either 2 or 3 pages of text. One segment was assigned to be introduced during each of the five treatment sessions. Each day only the assigned segment was read. Under the DR condition, a review of the prior events of the story was verbally presented by the examiner before reading the new segment. Under the CRS condition, the examiner engaged the subject in reviewing old information prior to reading the new segment.

Procedures

The word recognition, fluency, and retelling of stories read under two instructional conditions were compared. The first treatment condition, termed Communicative Reading Strategies (CRS) (Norris, 1988; 1991) used a contextualized, oral language style in which all language learning occurred within the context of reading the story. The second treatment condition, termed Directed Reading (DR) used a decontextualized, literate language style in which skills were taught outside of a context of meaningful use. Each of four subjects received instruction under both conditions for a five day period.

Treatment Conditions

Each subject attended two thirty-minute instructional sessions daily, with one session in the morning and the other session in the afternoon for a period of five days. All instruction was individually implemented in a room outside of

the regular classroom. Only the instructor and the child were present during intervention in a room that provided for minimal distractions. The treatments were randomly alternated across days to resolve any possible sequential confounding effects (i.e., CRS Treatment might be different if it always followed DR Treatment.) The order of the counterbalanced treatments received by each subject is profiled on Table 2. To ensure that treatments were discriminable and to reduce any carryover effects (i.e., the influence of one treatment on an adjacent treatment, irrespective of overall sequencing), only two treatments were administered daily, a different story was used for CRS treatment and DR treatment, and each treatment was separated by a minimum of two hours.

CRS Instruction

Each treatment condition provided instruction in vocabulary, word recognition, syntax, comprehension, and story structure. Under the CRS condition, all instruction took place in the context of reading the story. For example, word recognition and comprehension were facilitated by providing preparatory sets, or statements that activate relevant background information prior to reading a phrase or sentence. For example, if the text reads "She put on her mean old kick-a-lot shoes", the preparatory set provided might be "This is how the witch got ready to kick people." Similarly, vocabulary was taught when there were indications

Table 2
Treatment Schedules Assigned to Subjects Including Order of Instructional Approaches, Story Read, and Time of Treatment

Time	Day 1	Day 2	Day 3	Day 4	Day 5
	Condition/Story	(C/S)	(C/S)	(C/S)	(C/S)

Subjects One and Three

AM	CRS/KS	DR/RR	DR/RR	CRS/KS	CRS/KS
PM	DR/RR	CRS/KS	CRS/KS	DR/RR	DR/RR

Subjects Two and Four

AM	DR/KS	DR/KS	CRS/RR	CRS/RR	DR/KS
PM	CRS/RR	CRS/RR	DR/KS	DR/KS	CRS/RR

DR = Directed Reading

CRS = Communicative Reading Strategies

KS = The Kick-a-Lot Shoes

RR = Road Robber

from the child that the word was unknown, such as a miscue, or a drop in volume. For example, if the child exhibited difficulty with the word mail carrier, the word would be pointed to and semantic cues provided, as in "the mailman, the man who carries the mail, the mail carried in the man's backpack." A description of the steps conducted and the strategies used when conducting CRS instruction is provided in Appendix A.

Direct Instruction

Parallel instruction in vocabulary, word recognition, syntax, comprehension, and story structure was provided under the DR condition. In this condition the skills were separated and taught in isolation from the reading event. For example, the difficult vocabulary from the story was taught on the first day before the actual reading was begun. Similarly, comprehension questions were asked following the reading of pages, episodes or other logical segments of text. The activities and worksheets used to teach the skills under the DR condition are provided in Appendix B. The five targeted skills and the methods for instructing them under the CRS and DR conditions are contrasted on Table 3.

Measurement Techniques

The purpose of the data analysis was to determine if children at-risk because of socioeconomic disadvantage showed greater success at reading, as measured by word recognition

Table 3
Five targeted skills and the methods used for instructing them under the CRS and DR Treatment Conditions

Condition	Instructional Method
Vocabulary	
CRS	Word meaning taught in reading context
DR	Vocabulary words taught prior to reading
Word Recognition	
CRS	Prepsets and semantic cues for miscued words
DR	Read unassisted, sound out miscued words
Syntax	
CRS	Analyze difficult sentence patterns in the context of reading: Parse up difficult sentences Provide preparatory sets for component ideas Point to the relationships between phrases Clarify concepts in context
Syntax	
DR	Analyze difficult sentence patterns after reading: day 1: Conjunctions day 2: Prepositional Phrases day 3: Verb Phrases day 4: Describing Words/Adjectives
Comprehension	
CRS	Jointly create comprehension in the context of reading: Model inferences and interpretations of text Discuss metaphors and unfamiliar language Ask questions to engage problem solving Restate ideas in a variety of relationships
DR	Ask comprehension questions at the ends of episodes or other logical junctures
Story Structure	
CRS	Refer to old information while reading new Reread relevant passages to link ideas Interrelate the story across the days through discussion and problem solving
DR	Fill out a story structure worksheet on day 5

and comprehension, under conditions of contextualized instruction (i.e., Communicative Reading Strategies) or decontextualized instruction (i.e., Directed Reading). The dependent variables included measures of 1) accuracy and fluency of rereading; and 2) complexity and accuracy of story retelling.

Story Rereading Task

At the completion of each CRS and DR treatment session, each subject was asked to reread the story for purposes of measuring word recognition, fluency, and paralinguistics such as intonation and phrasing. Differences in the dependent measures were used to compare subjects' reading recognition abilities under the CRS and the DR conditions.

Elicitation of Rereading

Each day, one of the five segments of the story was read. At the end of the session, the subject reread only the assigned segment read that day. The examiner told the subject "Now I want you to reread the part of the story that we read today." If the subject miscued during the rereading, she was not corrected or prompted. If the subject paused for ten seconds, the word was provided. The rereading was video recorded.

Transcribing and Coding of Rereading

The rereading was checked against the text. All miscues (i.e., mispronunciation, substitution, omission, insertion,

repetition and reversal), as well as intonational markings were coded using the rules and symbols specified in Appendix C. The number of miscues were tallied upon completion of analysis. Because the number of words varied daily, a percentage of the total number of words that were miscues was calculated.

Each rereading was subjected to a timed rate analysis. A stopwatch was used to time each rereading. The timed rate was used to calculate the word per minute ratio.

Reliability

To establish the reliability of the transcription, miscue analysis and timed rereading, 25% of the total number of samples collected was selected randomly for independent transcription by a second examiner. Interexaminer agreements for the dependent variables were as follow:

Transcription	99%
Miscue Analysis	99%
Timed Rereading	100%
Intonational Analysis	100%

Story Retelling Task

At the completion of each CRS and DR treatment session, each subject was asked to retell the story immediately after the rereading. The retelling task was conducted for purposes of measuring the number of ideas recalled and the elements of story structure represented by these ideas. Differences in

the dependent measures were used to compare children's reading comprehension and ability to structure the events using conventional story grammar under the CRS and the DR conditions.

Elicitation of Story Retelling Task

At the end of the session the examiner told the subject "I want you to help me understand the story. Start from the beginning and tell me the whole story." No prompts were allowed, other than "uh hum", during the story retelling. The story retelling was video recorded.

Transcribing and Coding of Story Retellings

All story retellings were transcribed verbatim, using standard English orthography. Revisions, false starts, tongue slips, as well as whole and part-word repetitions were transcribed.

Each sample was segmented into T-units (Hunt, 1977). Hunt defined a T-unit as the minimal group of words that stands on its own as a sentence, with nothing left over. It may have one or more subordinate clauses attached to or embedded within it. T-Unit length is highly correlated not only with holistic measures of written expression, but also with reading comprehension (Hunt, 1977). The T-units were used as a measure of story length and as the basic unit of meaning within a story (Roth & Spekman, 1986).

Reliability

To establish the reliability of the transcription of the narrative, 25% of the total number of samples collected was selected randomly for independent transcription by a second examiner. Interexaminer agreement was 100%.

Analyzing Story Retelling for Story Grammar

Following the story segmentation, the story retelling was subjected to a story grammar analysis using a modified version of Stein and Glenn's (1979) story grammar. The type of information contained within a T-unit and the function of that T-unit within the story determined how the each T-unit was coded.

Coding of Story Grammar Components

The following six discrete categories based on Stein and Glenn Story Grammar (1979) were used to code each T-unit:

Setting	Introduction of main characters: sets stage and gives context
Initiating Events	Action that changes the story environment, evokes formation of the goal
Internal Responses	Goal: serves as motivation for later action
Attempt	Overt actions that are directed toward goal attainment

Consequences	Result of an attempt: attainment or nonattainment of goal
Reactions	Emotion, cognition, or end, expressing protagonist's feelings about goal generalization to some broader consequence

Reliability

To establish the reliability of assigning story grammar components to T-Units, 25% of the total number of samples collected was selected randomly for independent coding by a second examiner. Interexaminer agreement was 96%.

Analyzing Story Retelling for Episodes

Each story was divided into episodes. An episode was defined as a sequence of events that have specified hierarchical relationships (e.g., initiating event, plan, goal attempts, & consequence). The relationships between episodes are considered to be logical (e.g., causal, temporal, additive) and not necessarily bound by specific content (Liles, 1987).

Each episode was further categorized as being complete or incomplete. A complete episode contains an Initiating Event, An Attempt, and a Consequence. When one or more of the essential components was not present, an episode was identified as incomplete.

The total number of episodes, complete episodes and incomplete episodes were counted. The completeness of the episodes was determined by calculating the episode integrity. The number of complete episodes was divided by the total number of episodes, which yielded a percentage of episodes produced that were complete, the episode integrity.

The manner in which successive episodes were connected to each other was analyzed using the three discrete kinds of interepisodic relations identified and defined by Stein and Glenn (1979) as a **Additive** relation, **Temporal** relation, and **Causal** relation. The following rules, as described by Stein and Glenn (1979), were used to code the interepisodic relations:

1. **Additive** relation was coded when the events in two episodes occurred simultaneously.
2. **Temporal** relation was coded when the events in two episodes occurred successively in time but were not causally related.
3. **Causal** relation was coded when there was an explicitly stated direct causal relationship between the events in two succeeding episodes.

Coding of Episodic Structures

The narrative was segmented into episodes. The episodes were further identified as complete or incomplete. All interepisodic relations were coded according to the rules

listed above. The total number of episodes, complete episodes, incomplete and interepisodic relations were tallied upon completion of analysis. The episode integrity was calculated to determine the percentage of complete episode produced.

Reliability

To establish the reliability of coding episode segmentation, episode structure analysis (e.g., complete episodes & incomplete episodes), interepisodic relations, and episode integrity, 25% of the total number of samples collected was selected randomly for independent coding by a second examiner. Interexaminer agreements for the dependent variables were as follows:

Episode Segmentation	100%
Episode Structure Analysis	100%
Episode Integrity	100 %
Interepisodic Relation	98 %

Story Length

The length of the narratives was analyzed for the purpose of measuring comprehension as indicated by the total number of T-units, message inaccuracies, repeated propositions, and irrelevant perceptual details. Differences in the dependent measures were used to compare subjects' comprehension under the CRS and the DR conditions.

Coding of Story Length Analysis

The total number of T-units was tallied. The T-units were examined for the purpose of determining if maze behavior, such as message inaccuracies (e.g., false statements), repeated propositions, or irrelevant perceptual details (e.g., details inferred from pictures in the story, but not significant to the plot) could be identified in the T-unit. The number T-units coded as message inaccuracies, repeated propositions, and irrelevant perceptual details was subtracted from the total number of T-units, which yielded the actual Story Length.

Reliability

To establish the reliability of the story length analysis, 25 % of the total number of samples collected was selected randomly for independent coding by a second examiner. Interexaminer agreements was 100 %.

Analysis of the CRS and DR Sessions

Three video recorded sessions of the study were viewed by three members of the study site faculty (i.e., three classroom teachers) for the purpose of determining if the administration of the contextualized instruction (CRS) and the decontextualized instruction (DR) were free of experimental bias, the objectives were parallel for both conditions, and the subjects understood their roles. They compared randomly selected contextualized and

decontextualized sessions for equal procedural and attitudinal treatment.

Coding of Procedural and Attitudinal Treatment

Three members of the study site faculty were asked to view three randomly selected treatment sessions, two CRS and one DR. Following the viewing of the sessions, the faculty members were asked to complete a questionnaire consisting of 10 yes/no items (see Appendix D).

Reliability

To establish the reliability of equal procedural and attitudinal treatment for the contextualized instruction and the decontextualized instruction, the scores of the three questionnaires were tallied and averaged. Interexaminer agreement was at 96.66%, and indicated that equal procedural and attitudinal treatment was given under the two conditions.

Data Analysis

Measurements were made at the end of each treatment session. The data from each session was graphed to provide a visual inspection. The data was further subjected to a Sign Test analysis for paired observation to test the null hypothesis, that there were no differences in the effects of the contextualized and decontextualized conditions. The differences were calculated and ranked. Because the number of differences with plus signs should be equal to the number with minus signs, the Z score was distributed approximately

RESULTS

This study investigated whether the use of contextualized instructional activities (i.e., Communicative Reading Strategies) (CRS) to facilitate language processing (i.e., vocabulary acquisition, grammatical understanding, narrative structure, and passage comprehension) during a reading event, resulted in better internalization of a written story than did decontextualized instructional activities (i.e., Directed Reading) (DR) targeting the same behaviors immediately preceding or following oral reading. Evidence of the internalization of a written story was measured by 1) accuracy and fluency of rereading; and 2) complexity and completeness of story retelling. Four first graders participated in the single subject design study. The subjects were identified as at-risk poor readers and met criteria for the Chapter One Reading Program. The children were randomly selected for participation in the study. Each subject received the contextualized treatment (CRS) and the decontextualized treatment (DR) for five days with session occurring twice daily during that period. Measures of rereading and story retelling were collected at the end of each treatment session.

Four questions addressing differential effects of the two treatments on 1) reading accuracy and fluency, 2) narrative structure of a story retelling, 3) completeness of

a story retelling, and 4) complexity of a story retelling were examined. Each question was tested using a series of component hypotheses predicting null treatment effects, for a total of ten hypotheses.

For each of the ten hypotheses tested, a visual analysis of the data points was conducted using the graphic representation in the figures corresponding to each subject. The analysis for each subject examined the divergence of data points representing the two treatment conditions across the five sessions. The Sign Test (Neter, Wasserman, & Whitmore, 1979; Edwards, 1973) for paired observations was applied to the data to determine the significance of the difference between the two treatments. The results of the analysis of the five rereadings and the five story retellings for the contextualized (Communicative Reading Strategies) and the decontextualized (Directed Reading) conditions are discussed below by addressing the four questions posed by this study and the ten component hypotheses used to test those questions.

Question One

The effects of the contextualized instructional condition (CRS) compared to decontextualized instructional condition (DR) on producing differences in the accuracy and fluency in the rereading of the text were examined in question one. Three hypotheses were tested, representing different measures of rereading. They were 1) accuracy of

word recognition, 2) rate of word recognition, and 3) phrasing of the rereading.

Hypothesis One

Hypothesis one predicted that there would not be a significant difference in the accuracy of word recognition in the rereadings under the contextualized (CRS) and decontextualized (DR) conditions. Accuracy was measured by the number of miscues occurring during the rereading, which were identified and tallied for each subject. These scores were converted to a ratio of the number of miscues per total number of words read.

The profiles of miscue types and frequency for the four subjects are displayed in Table 4. The miscue totals for each subject are graphically presented in Figures 1, 2, 3, and 4, respectively. A visual analysis was conducted using the graphic representation in each figure. Each analysis examined the divergence of data points representing the two treatments across the five sessions. The Sign Test for paired observations was conducted on the data for each subject, and the differences between the paired observations were calculated and ranked.

Subject One

Analysis of miscues produced by Subject One under the two treatment conditions revealed a wide divergence of data points early in the Alternating Treatment Design, a trend of

Table 4
Number and Types of Reading Miscues Produced under the
Conditions of Contextualized Instruction (CRS) and
Decontextualized Instruction (DR)

Miscue type	Treatment series									
	DAY 1		DAY 2		DAY 3		DAY 4		DAY 5	
	CRS	DR	CRS	DR	CRS	DR	CRS	DR	CRS	DR
Subject One										
Omissions	0	0	1	0	0	1	2	2	0	1
Additions	0	1	3	3	0	1	1	7	1	4
Reversals	0	0	0	0	0	0	0	0	0	0
Self-Correct	2	1	6	0	1	0	4	3	5	0
Wd. Provided	1	9	1	7	1	13	5	0	3	2
Substitutions	19	17	7	41	6	29	28	31	14	17
Total	22	28	18	51	8	44	40	43	23	24
Percent	28	60	26	76	13	51	38	108	22	60
Subject Two										
Omissions	1	0	0	1	1	0	1	0	0	1
Additions	5	1	0	0	1	0	1	1	0	1
Reversals	0	0	0	0	2	0	0	0	0	0
Self-Correct	3	1	2	2	7	3	3	11	1	3
Wd. Provided	1	0	0	1	0	0	1	0	0	1
Substitutions	9	17	5	20	16	5	9	19	3	10
Total	19	19	7	24	27	8	15	31	4	15
Percent	40	24	10	35	31	13	36	29	10	14
Subject Three										
Omissions	0	0	0	0	0	0	0	0	0	0
Additions	0	0	0	0	0	0	1	1	0	0
Reversals	0	0	0	0	0	0	0	0	0	0
Self-Correct	2	2	2	2	0	4	2	0	2	0
Wd. Provided	0	2	0	0	1	0	0	2	0	3
Substitutions	2	1	1	2	0	1	0	4	1	0
Total	4	5	3	4	1	5	3	7	3	3
Percent	5	11	4	6	2	5	3	17	3	8
Subject Four										
Omissions	0	0	0	0	0	0	0	0	0	0
Additions	0	0	0	0	1	0	0	0	0	1
Reversals	0	0	0	0	0	0	0	0	0	0
Self-Correct	1	3	1	2	1	2	2	3	1	0
Wd. Provided	0	1	0	1	0	0	0	2	2	3
Substitutions	1	7	7	2	6	1	4	7	0	9
Total	2	11	8	5	8	3	6	12	3	13
Percent	4	14	12	7	9	5	14	12	8	12

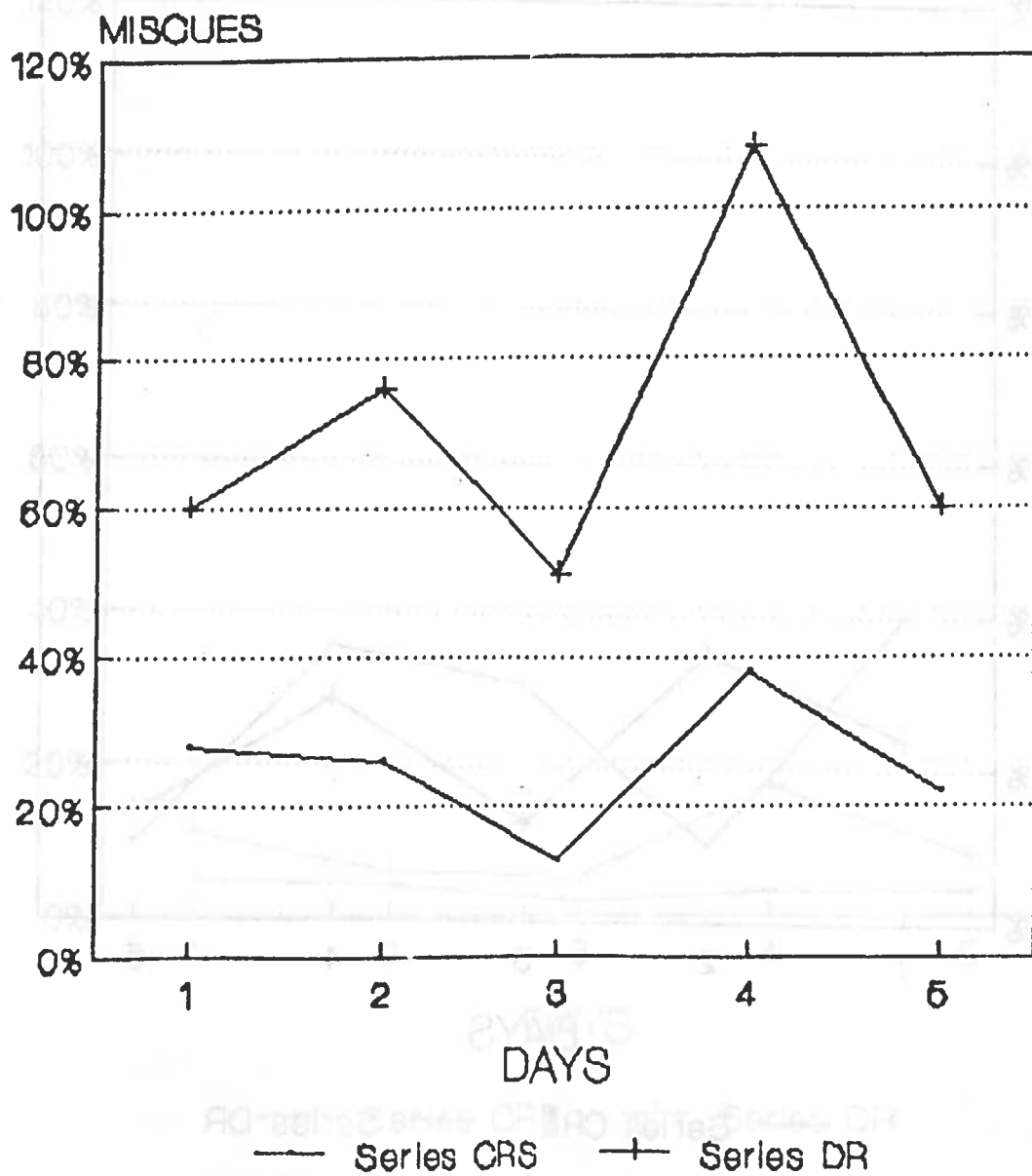


Figure 1. Ratio of total number of miscues per total number of words read for Subject One

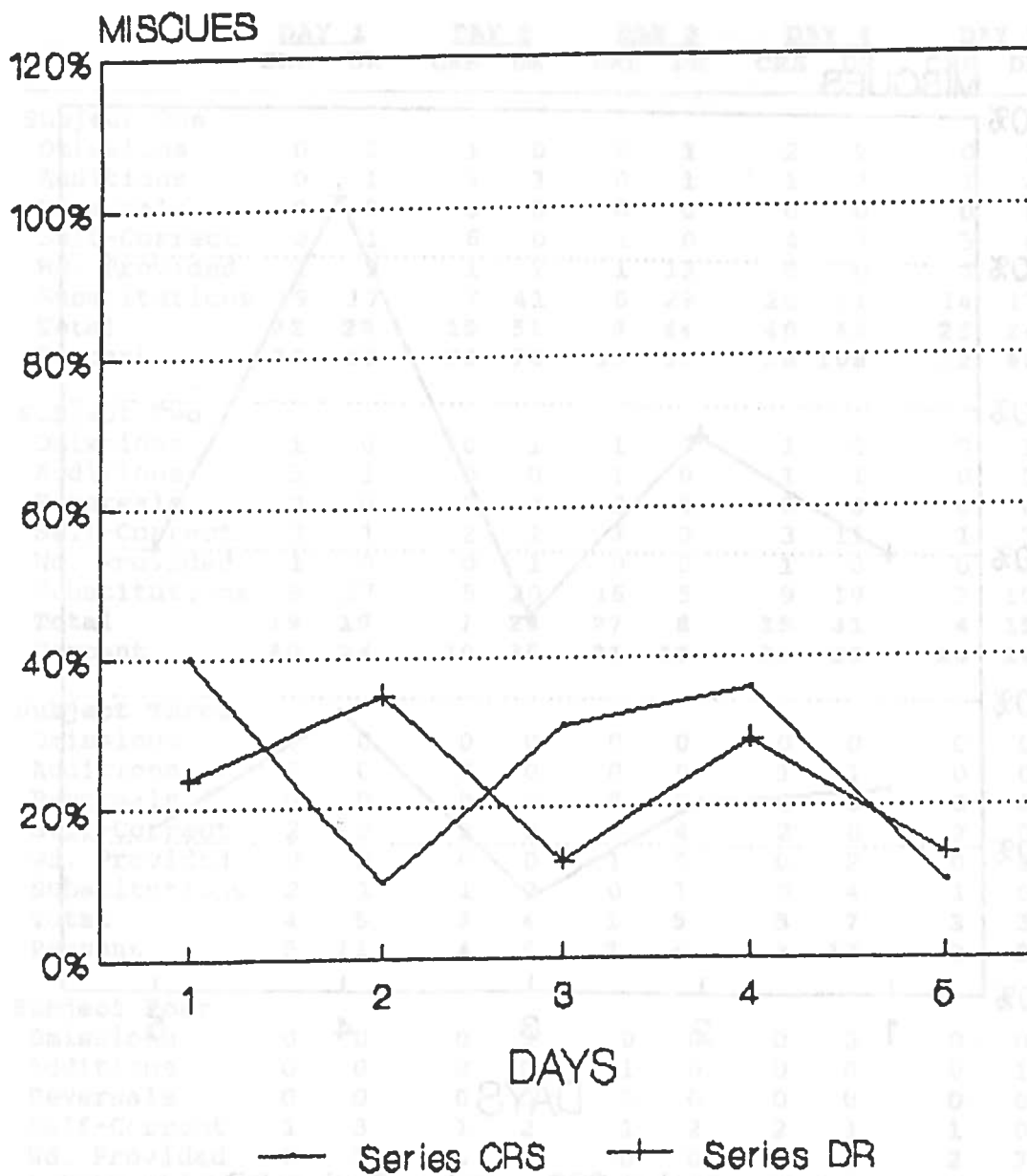


Figure 2. Ratio of total number of miscues per total number of words read for Subject Two

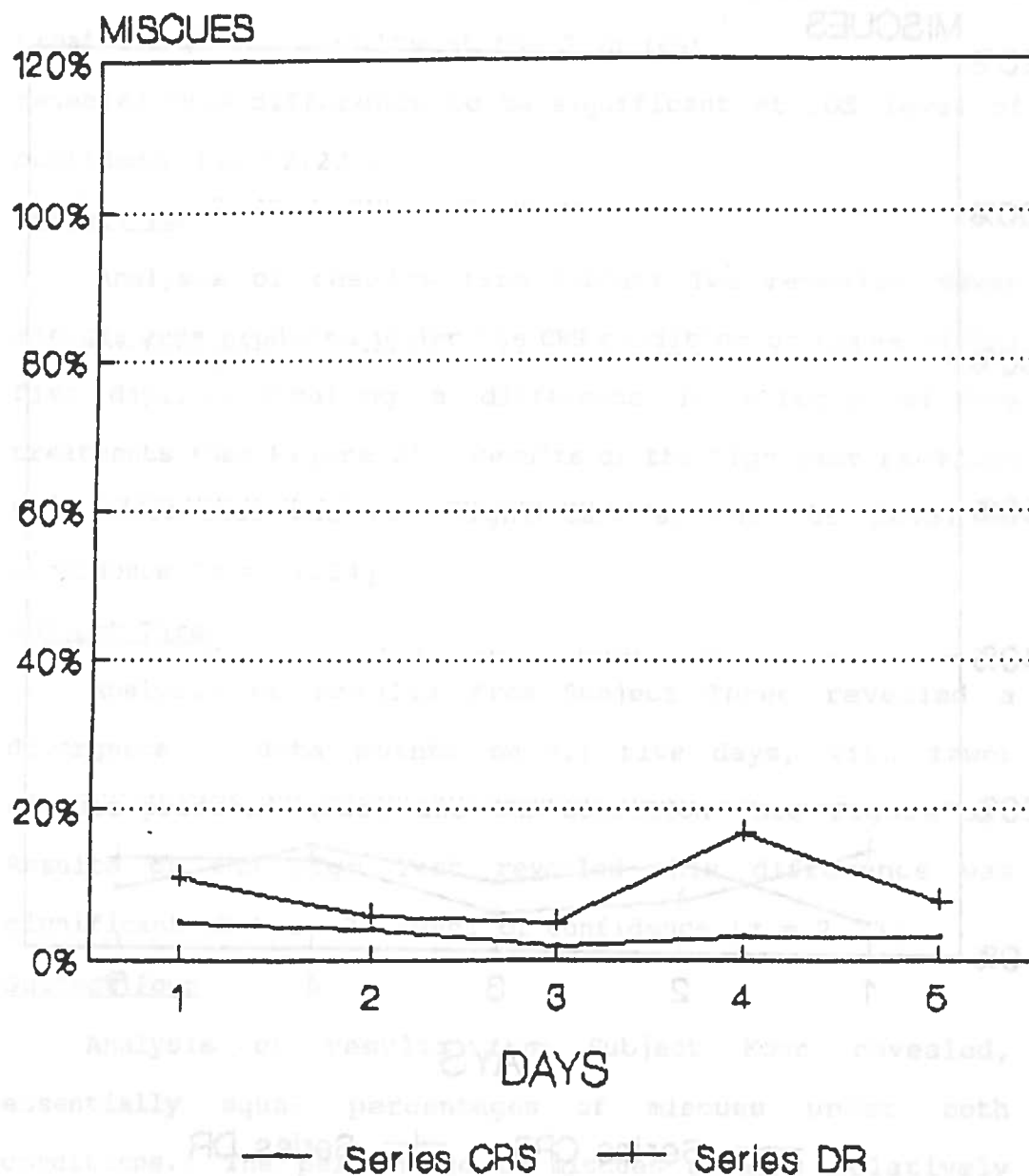


Figure 3. Ratio of total number of miscues per total number of words read for Subject Three

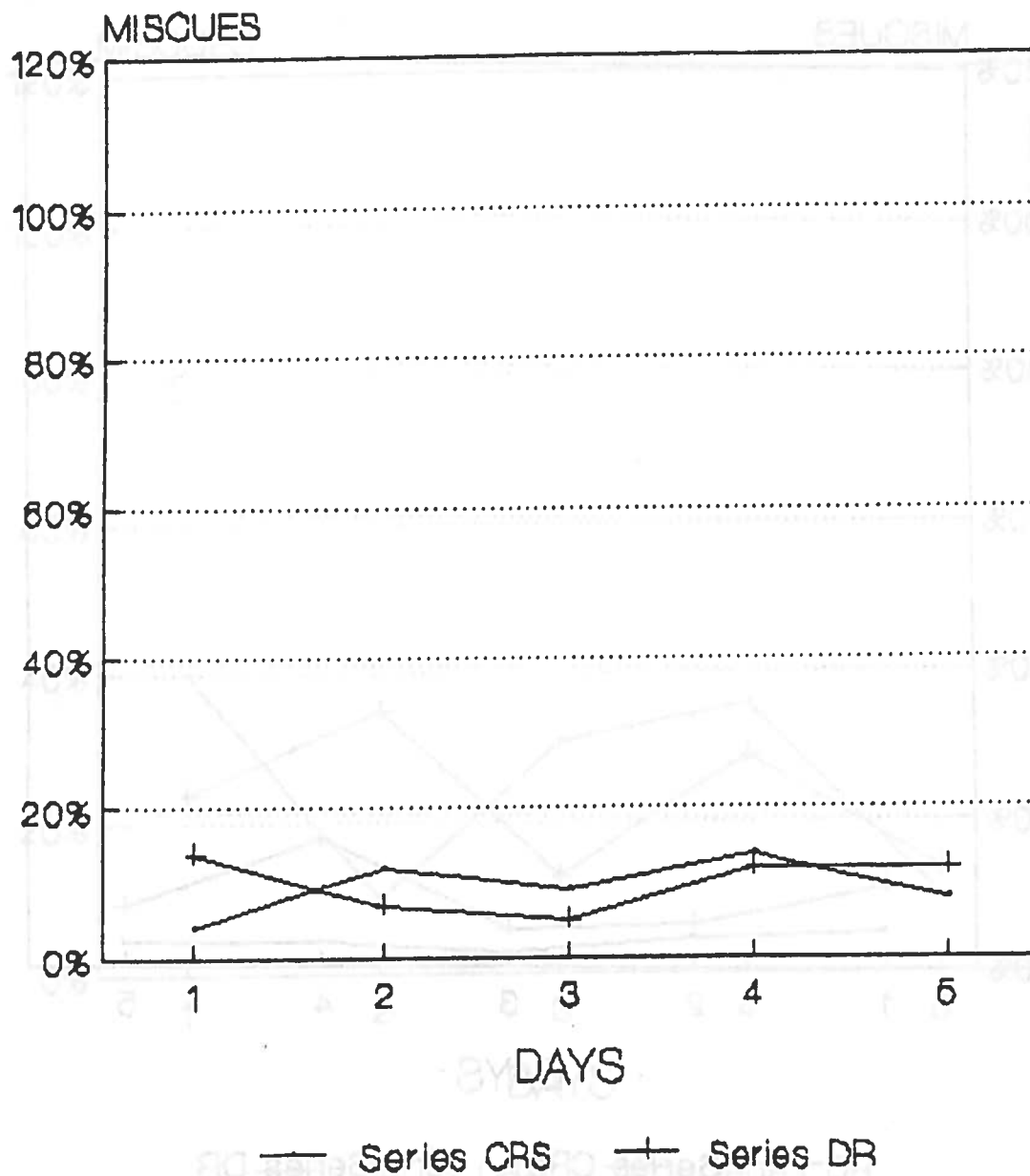


Figure 4. Ratio of total number of miscues per total number of words read for Subject Four

some convergence at the end, but no overlapping (see Figure 1). This suggests a difference in the treatment effects, with the contextualized treatment (CRS) resulting in the production of fewer miscues than the decontextualized treatment (DR). Results of the Sign Test revealed this difference to be significant at .05 level of confidence [$z = -2.23$].

Subject Two

Analysis of results from Subject Two revealed fewer miscues were produced under the CRS condition on three of the five days, indicating a difference in effects of the treatments (see Figure 2). Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = -1.34$].

Subject Three

Analysis of results from Subject Three revealed a divergence of data points on all five days, with fewer miscues produced under the CRS condition (see Figure 3). Results of the Sign Test revealed this difference was significant at the .05 level of confidence [$z = 2.23$].

Subject Four

Analysis of results from Subject Four revealed, essentially equal percentages of miscues under both conditions. The percentage of miscues remains relatively consistent across all five days (see Figure 4). This

suggests that there was no difference in the treatments. Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = -.45$].

Hypothesis Two

Hypothesis two predicted that there would not be a significant difference in the rate of word recognition under the contextualized (CRS) and decontextualized (DR) instructional conditions. Rate was defined as the mean number of words read per minute. This score was derived by tallying the total the number of words read and dividing this number by the time required to complete the rereading of the passage.

The mean number of words read per minute for each of the four subjects are displayed in Table 5 and are graphically presented in Figures 5, 6, 7, and 8, respectively. A visual analysis of the graphic representation in each figure and a Sign Test for paired observations was conducted on the data for each subject.

Subject One

Analysis of the mean number of words read per minute for Subject One revealed a consistent divergence of data points across the five day series (see Figure 5). This suggests a difference in the treatments, with the CRS condition resulting in a higher words-per-minute ratio than the DR

Table 5
Mean Number of Words Read Per Minute During a Rereading under
the Contextualized (CRS) and Decontextualized (DR) Conditions

Treatment day	Treatment condition	
Subject One	CRS/KS	DR/RR
1	11.29	6.29
2	16.56	12.57
3	22.39	17.33
4	18.90	15.73
5	22.73	16.33
Subject Two	CRS/RR	DR/KS
1	23.50	24.84
2	35.64	30.80
3	44.16	43.84
4	34.17	39.62
5	42.11	38.88
Subject Three	CRS/KS	DR/RR
1	52.67	31.33
2	49.04	36.61
3	40.82	56.13
4	47.25	24.28
5	57.69	25.47
Subject Four	CRS/RR	DR/KS
1	36.15	14.50
2	28.51	23.84
3	41.04	51.28
4	25.00	32.49
5	35.71	36.84

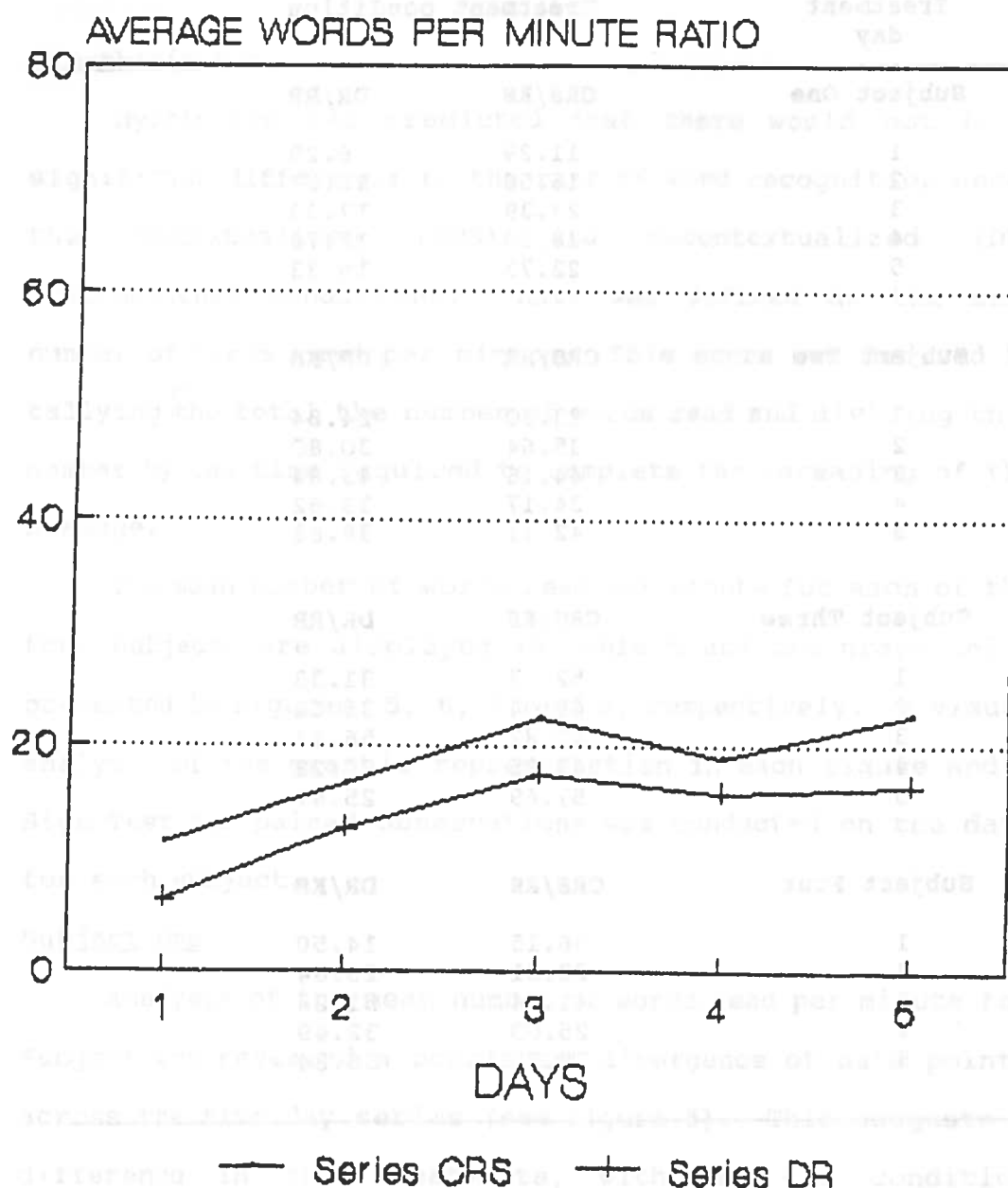


Figure 5. Mean number of words read per minute in the passage rereading for Subject One

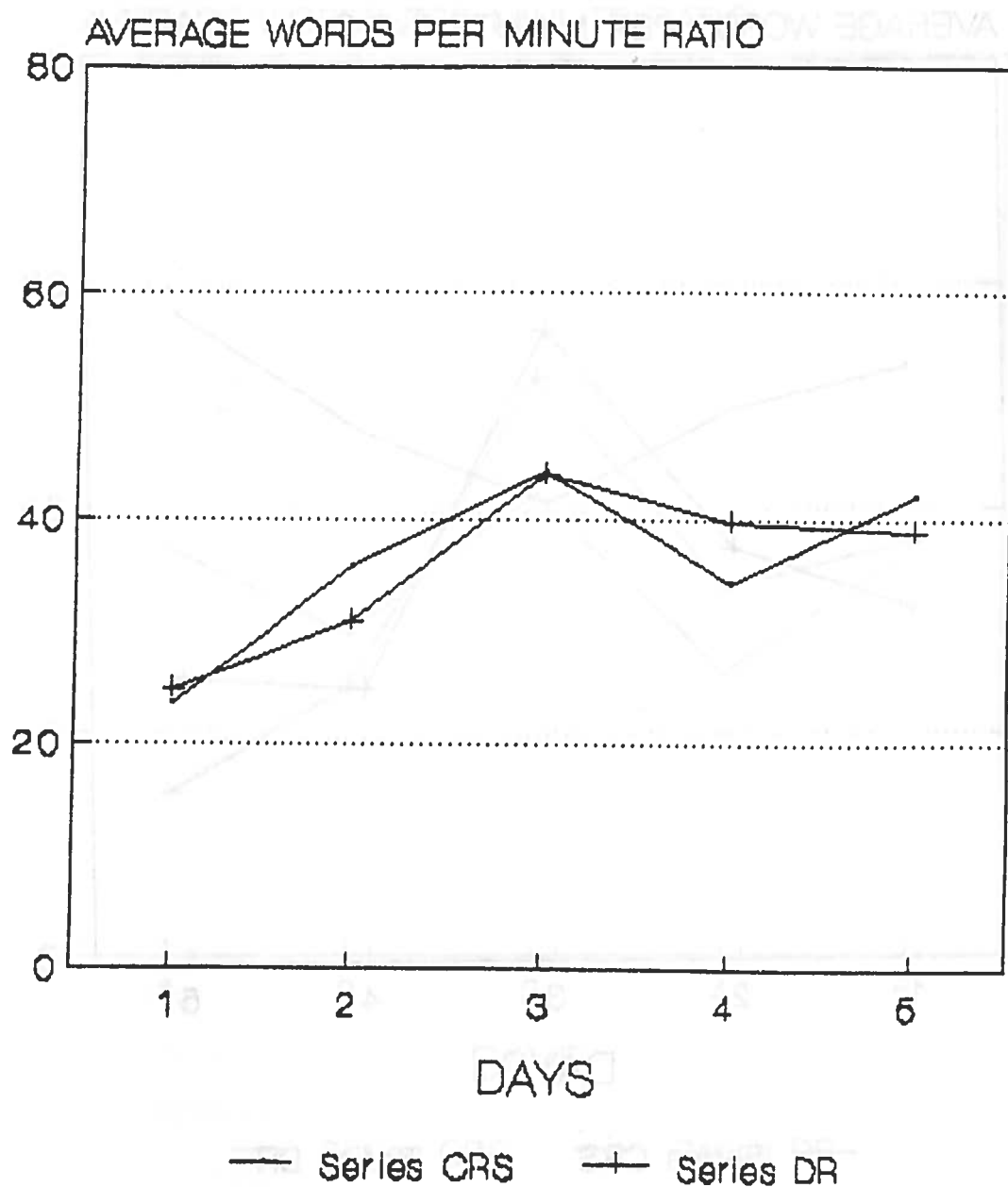


Figure 6. Mean number of words read per minute in the passage rereading for Subject Two

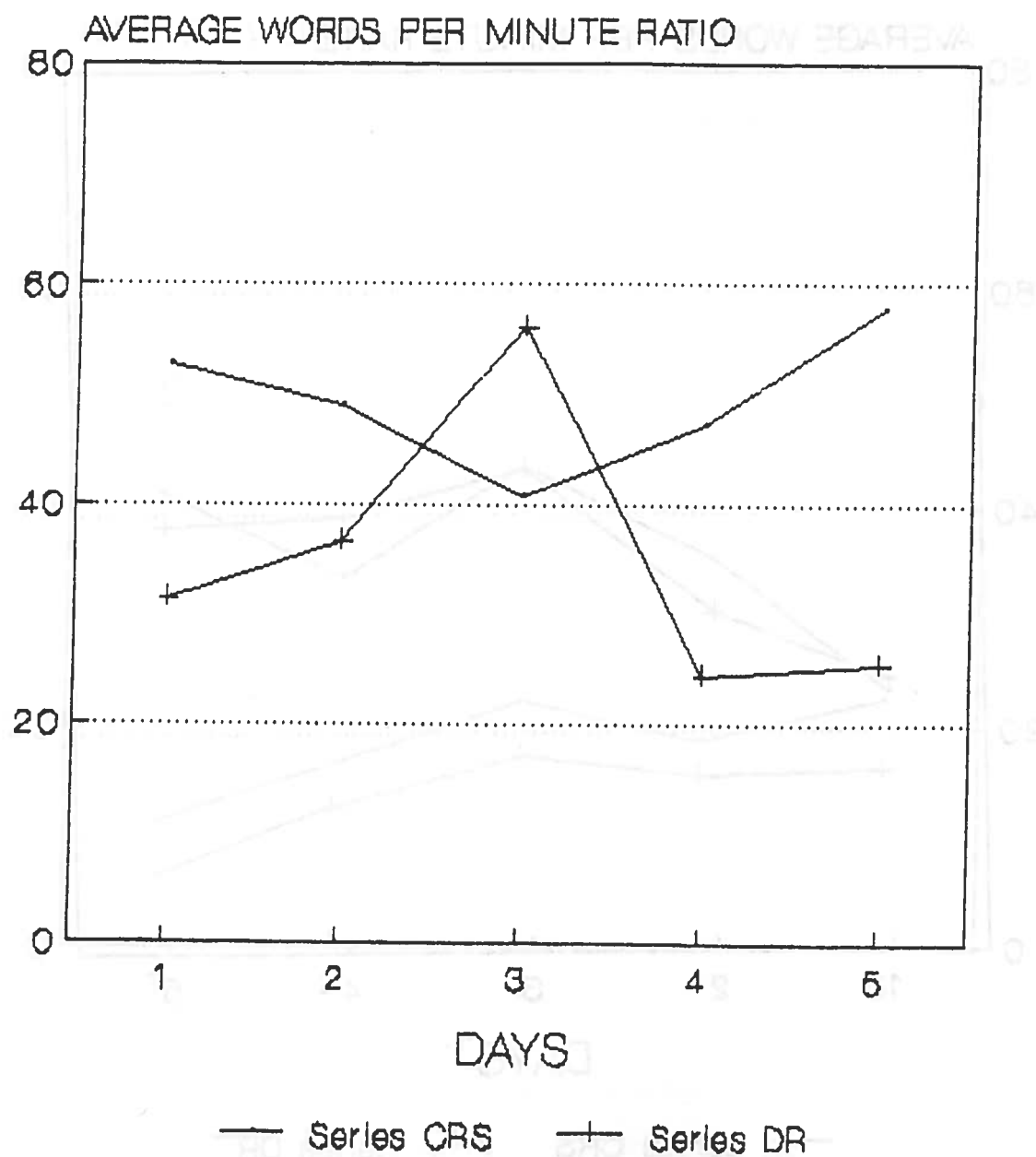


Figure 7. Mean number of words read per minute in the passage rereading for Subject Three

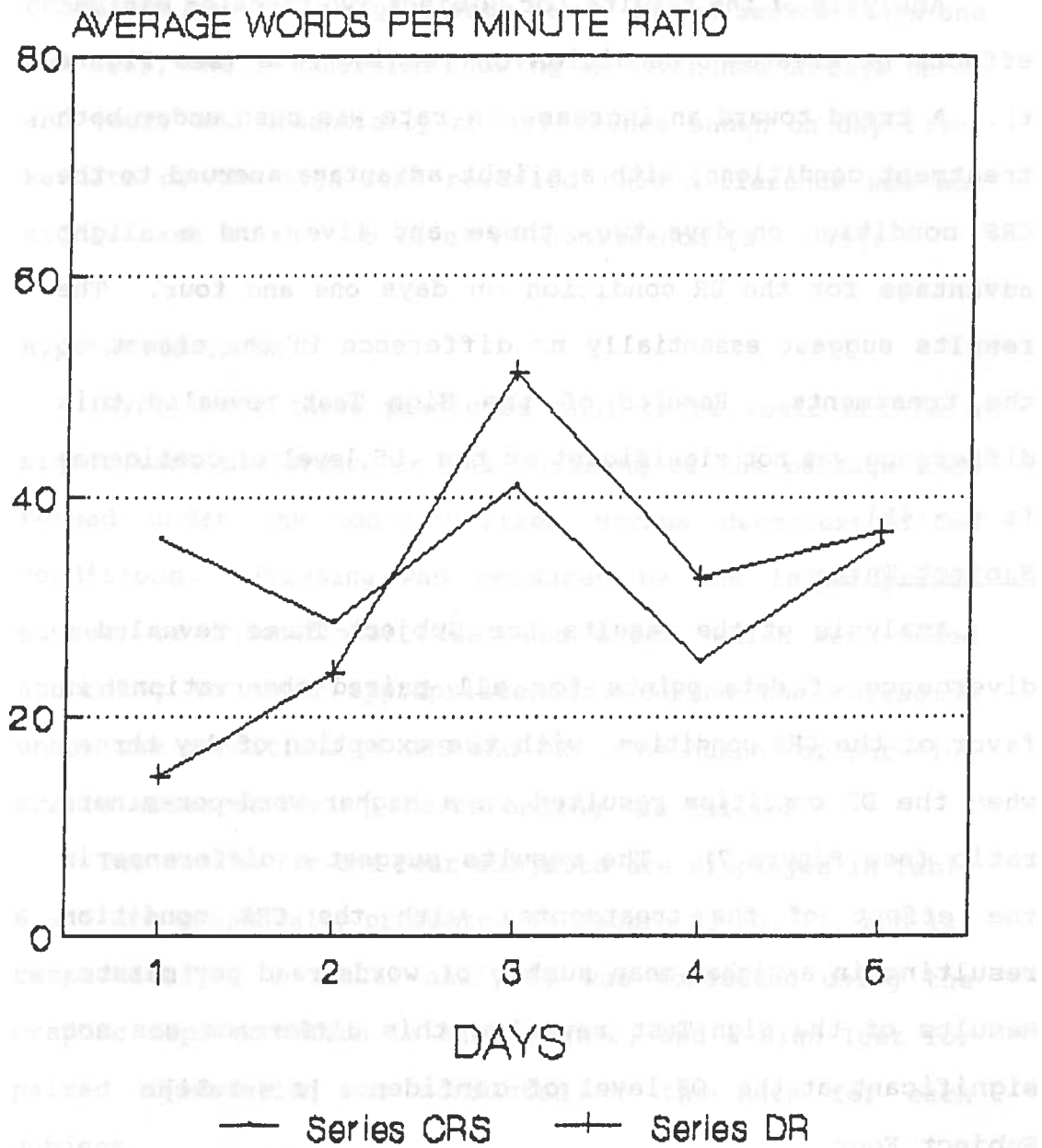


Figure 8. Mean number of words read per minute in the passage rereading for Subject Four

treatment. Results of the Sign Test revealed this difference to be significant at the .05 level of confidence [$z = 2.23$].

Subject Two

Analysis of the results for Subject Two revealed minimal effects of treatment condition on reading rate (see Figure 6). A trend toward an increase in rate was seen under both treatment conditions, with a slight advantage accrued to the CRS condition on days two, three and five, and a slight advantage for the DR condition on days one and four. The results suggest essentially no difference in the effect of the treatments. Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = -.45$].

Subject Three

Analysis of the results for Subject Three revealed a divergence of data points for all paired observations in favor of the CRS condition, with the exception of day three, when the DR condition resulted in a higher word-per-minute ratio (see Figure 7). The results suggest a difference in the effect of the treatments, with the CRS condition resulting in a higher mean number of words read per minute. Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = 1.34$].

Subject Four

Analysis of results from Subject Four revealed parallel changes in reading rate under the two conditions, with an

increase in rate shown for both that peaked on day three and then decreased to previous levels (see Figure 8). No advantage was accrued to either condition, with the CRS condition showing a higher rate early in the series (days one and two), the DR condition showing an advantage on days three and four, and essentially no difference shown on day five. Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = .45$].

Hypothesis Three

Hypothesis three predicted that there would not be a significant difference in the phrasing of the passage when reread under the contextualized versus decontextualized conditions. Phrasing was measured by the inappropriate pauses, or intonational rises and drops, which were coded according to their appropriateness, during the rereading under the conditions of CRS and DR. The number of phrasing errors observed during the rereading was tallied.

The scores for the four subjects are displayed in Table 6 and are graphically presented in Figure 9, 10, 11, and 12, respectively. A visual analysis was conducted using the graphic representation in each figure, and a Sign Test for paired observation was conducted on the data for each subject.

Figure 9. Phrasing errors produced during rereading by Subject One

Table 6
Number of Intonational Errors Produced under the Conditions
of Contextualized Instruction (CRS) and Decontextualized
Instruction (DR)

<u>Intonational</u> <u>Error Type</u>	<u>Treatment series</u>									
	<u>Day 1</u>		<u>Day 2</u>		<u>Day 3</u>		<u>Day 4</u>		<u>Day 5</u>	
	CRS	DR	CRS	DR	CRS	DR	CRS	DR	CRS	DR
Subject One										
Omissions	0	3	0	3	0	2	0	1	2	0
Additions	0	0	0	2	0	0	0	0	0	0
Substitutions	0	0	0	0	0	0	0	0	0	0
Phrasing	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	5	0	2	0	1	2	0
Subject Two										
Omissions	0	1	1	0	0	0	0	1	0	0
Additions	0	0	0	0	0	0	0	0	0	0
Substitutions	0	0	0	0	0	0	0	0	0	0
Phrasing	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	1	0	0
Subject Three										
Omissions	0	0	1	0	0	0	1	0	1	0
Additions	0	0	0	0	0	0	0	0	0	0
Substitutions	0	0	0	0	0	0	0	1	0	0
Phrasing	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	1	1	1	0
Subject Four										
Omissions	1	0	0	2	1	0	0	0	0	0
Additions	0	0	0	0	0	0	0	0	0	0
Substitutions	0	0	0	0	0	0	0	0	0	0
Phrasing	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	2	1	0	0	0	0	0

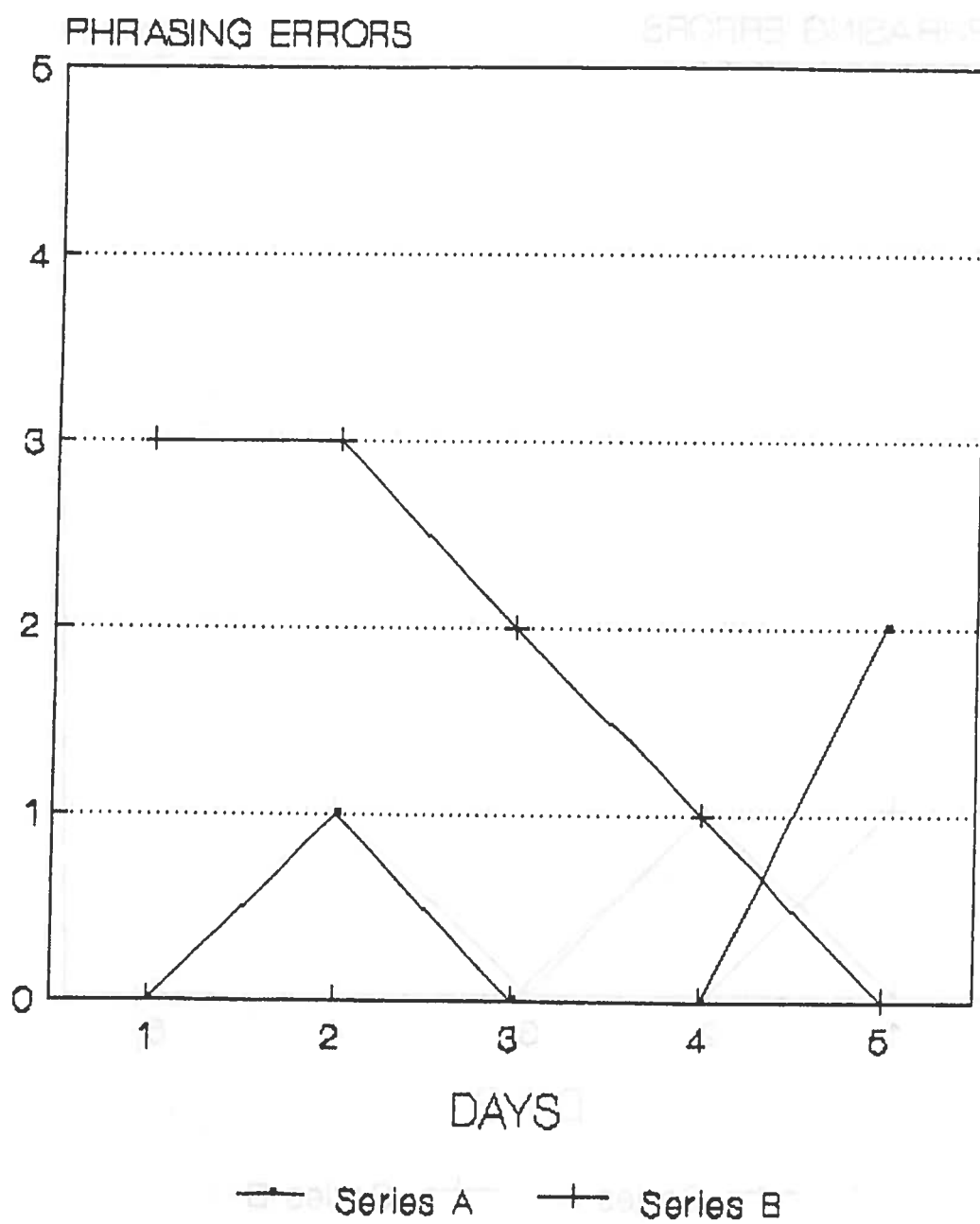


Figure 9. Phrasing errors produced during rereading by Subject One

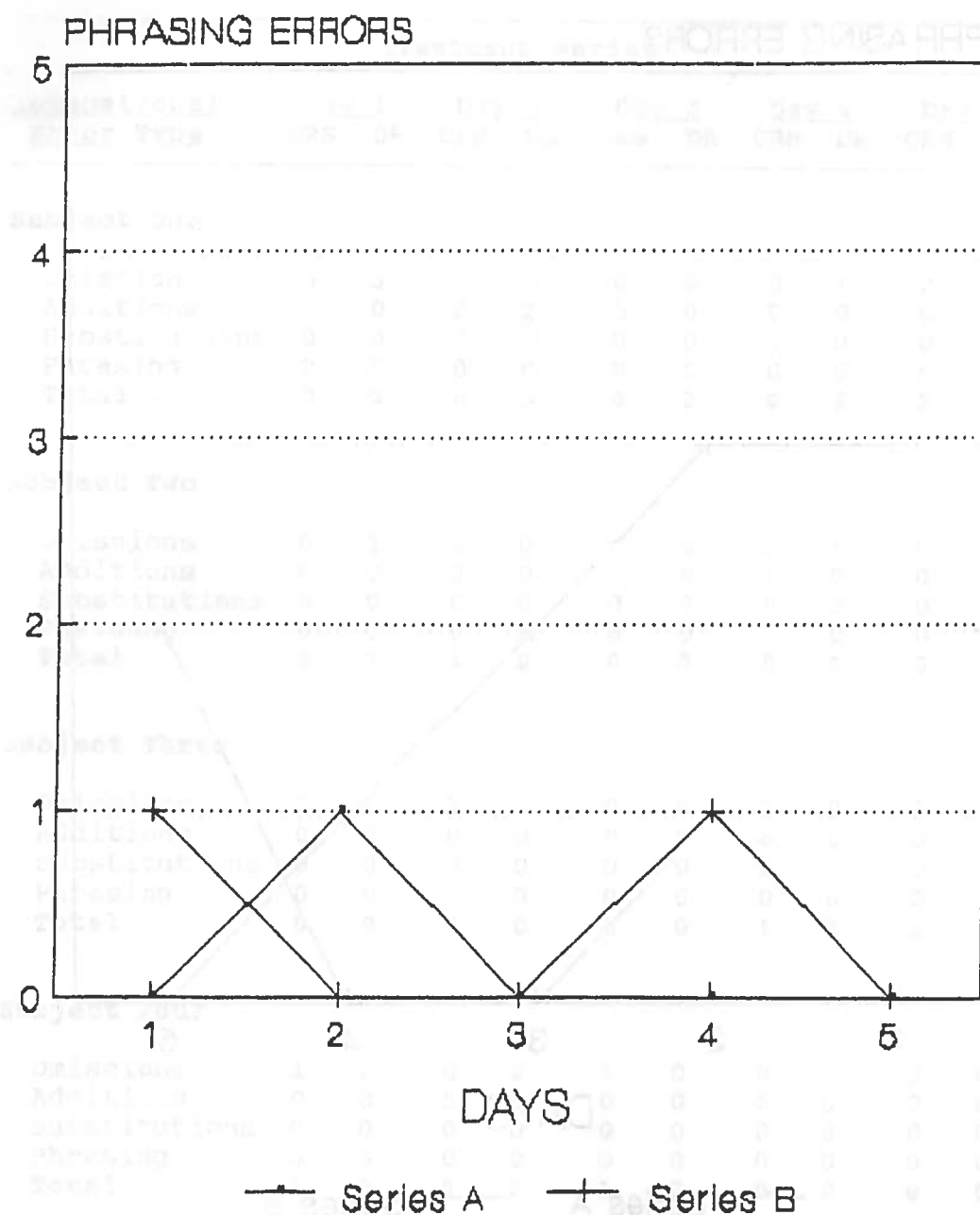


Figure 10. Phrasing errors produced during rereading by Subject Two

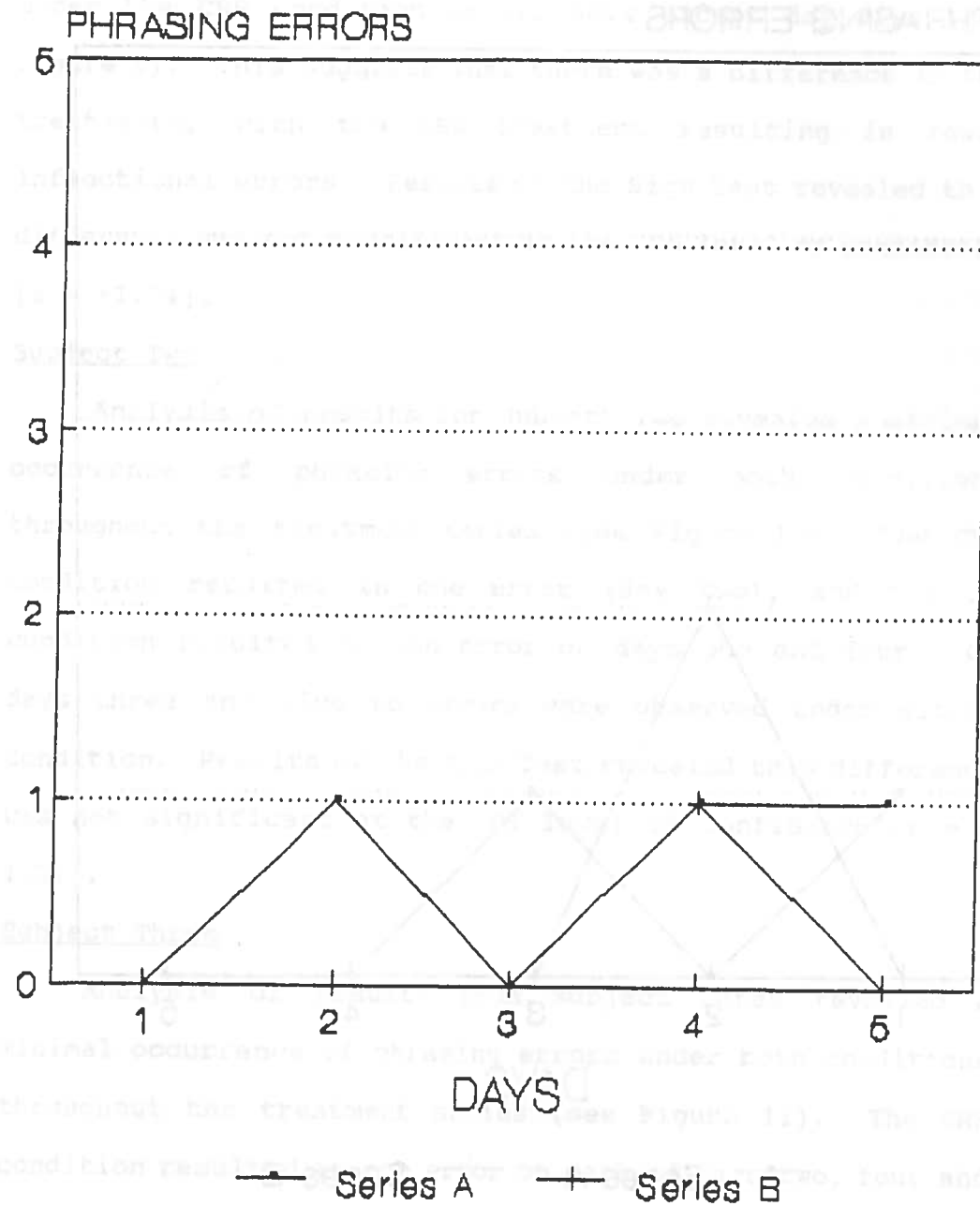


Figure 11. Phrasing errors produced during rereading by Subject Three

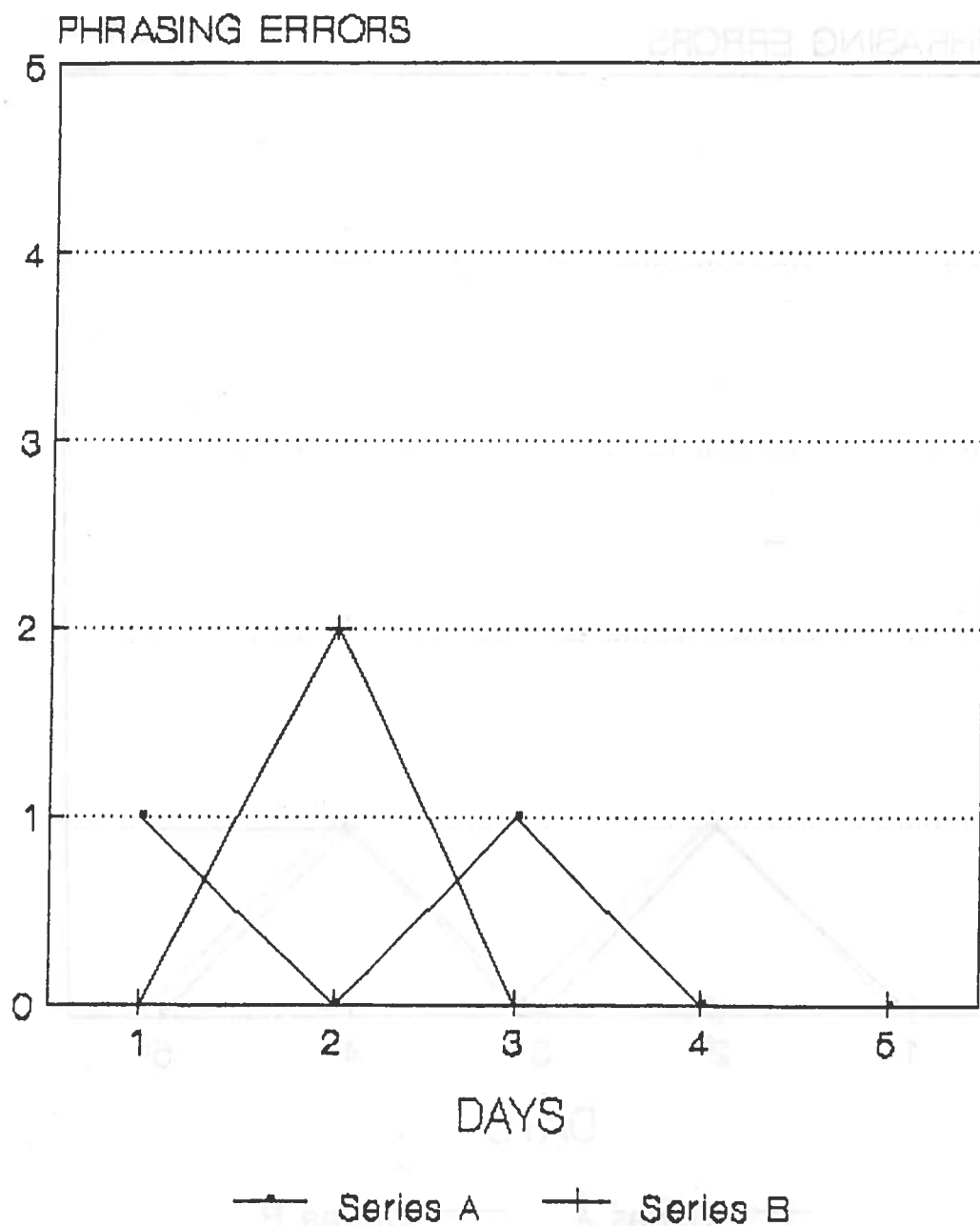


Figure 12. Phrasing errors produced during rereading by Subject Four

Subject One

Analysis of results for Subject One revealed a divergence of the scores early with fewer errors produced under the CRS condition on all days except day five (see Figure 9). This suggests that there was a difference in the treatments, with the CRS treatment resulting in fewer inflectional errors. Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = -1.34$].

Subject Two

Analysis of results for Subject Two revealed a minimal occurrence of phrasing errors under both conditions throughout the treatment series (see Figure 10). The CRS condition resulted in one error (day two), and the DR condition resulted in one error on days one and four. On days three and five no errors were observed under either condition. Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = -1.34$].

Subject Three

Analysis of results from Subject Three revealed a minimal occurrence of phrasing errors under both conditions throughout the treatment series (see Figure 11). The CRS condition resulted in one error on each of days two, four and five, and the DR condition resulted in one error on day four. This suggests that there was a minimal difference in the

treatments, with the DR treatment resulting in fewer sessions in which phrasing errors occurred. Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = -.45$].

Subject Four

Analysis of results for Subject Four revealed minimal occurrence of phrasing errors under both conditions throughout the treatment series (see Figure 12). The CRS condition resulted in one error on days one and three, the DR condition resulted in two errors on day two, and there was no difference in the treatments on days four and five. The results of the Sign Test revealed there was no significant difference at the .05 level of confidence [$z = -.45$].

Summary

Question One compared the effects of the contextualized instructional condition (CRS) versus the decontextualized instructional condition (DR) on reading accuracy and fluency. Three hypotheses were used to test this question, including accuracy of word recognition, mean number of words read per minute, and accuracy of phrasing. The accuracy of word recognition was the most discriminating of the three dependent measures. These analyses showed an advantage under the CRS condition, where the results of two subjects were significant (Subjects One and Three) and the trends for the other two subjects showed minimally fewer miscues under the

CRS condition. Reading rate also showed effects that favored the CRS condition, with significantly more words read per minute for Subject One, a higher rate on four of five readings for Subject Three, and a higher rate on three of the five rereading for Subject Two. The performance of the four subjects revealed no statistical difference in phrasing/intonation, but Subject One produced fewer intonational errors during four of the five observations under the contextualized (CRS) condition.

Question Two

The effects of the contextualized condition (CRS) compared to decontextualized condition (DR) on producing differences in the narrative structure of a story retelling were examined by question two. Four hypotheses were tested, representing different aspects of story retelling. They were hypotheses 4) number of story grammar components, 5) number of story episodes recalled, 6) number of complete episodes, and 7) percent of episode integrity.

Hypothesis Four

Hypothesis four predicted that there would not be a significant difference in the number of story grammar components produced in the story retelling under the contextualized (CRS) and decontextualized (DR) conditions. Each narrative retelling was segmented into T-units (Hunt, 1979) and assigned to the appropriate story grammar

components (Merritt & Liles, 1987). The number of story grammar components included in the retelling were identified and tallied for each subject.

The scores for the four subjects are displayed in Table 7 and are graphically presented in Figures 13, 14, 15, and 16, respectively. A visual analysis was conducted using the graphic representation in each figure. Each analysis examined the divergence of data points representing the two treatments across the five sessions. The Sign Test for paired observations was conducted on the data for each subject, and the differences between the paired observations were calculated and ranked.

Subject One

Analysis of story grammar components recalled by Subject One revealed that no components were produced under either condition on day one, but a consistently higher number were produced under the CRS condition on all subsequent days, resulting in a clear divergence of data points across the series (see Figure 13). Since the scores are assumed to be continuous, a trend can be predicted of continued divergence in the data points. This suggests that there was a difference in effects from the treatments, with the CRS condition resulting in more story grammar components produced in the retelling than the DR treatment. Results of the Sign Test revealed there was no significant difference at the .05 level of confidence [$z = 1.34$].

Table 7

Number of Story Grammar Components Present in Story Retellings Produced under the Conditions of Contextualized Instruction (CRS) and Decontextualized Instruction (DR)

Treatment series														
Story grammar elements		Day 1		Day 2		Day 3		Day 4		Day 5				
		CRS	DR	CRS	DR	CRS	DR	CRS	DR	CRS	DR	CRS	DR	
Subject One														
Kirk shes	Settings	0	0	0	0	0	0	0	1	0	0	0	1	
	Init. Events	0	0	1	0	4	0	0	1	+3	1	x 8	2	
	Internal Response	0	0	3	0	0	0	4	0	x2	0	x 4	0	
	Attempts	0	0	0	0	0	0	1	0	x2	0	x 3	0	
	Consequence	0	0	3	0	2	0	1	0	+5	3	x 11	3	
	Reactions	0	0	1	0	0	0	0	0	1	1	x 2	1	
	Total	0	0	8	0	6	0	6	2	13	5			
			RR		RR		RR		RR	+13	+5			
Subject Two														
read me	Settings	0	0	0	0	0	0	0	0	0	0	0	0	
	Init. Events	0	0	0	0	0	1	0	1	0	0	0	2	
	Internal Response	0	1	0	2	0	0	0	1	0	+1	0	3	
	Attempts	0	1	0	0	0	1	0	2	0	0	0	4	
	Consequence	0	1	0	1	0	0	0	0	0	+2	0	4	
	Reactions	0	0	0	1	0	0	0	0	0	0	0	1	
	Total	0	3	0	4	0	2	0	4	0	3			
		RR		RR		RR		RR		RR	+0	+0		
Subject Three														
Kirk shes	Settings	0	1	0	1	0	0	1	1	0	0	1	3	
	Init. Events	0	0	2	1	4	1	2	3	+4	2	x 12	7	
	Internal Response	2	0	3	0	3	0	3	0	+4	0	x 15	0	
	Attempts	2	0	1	0	0	0	1	1	0	2	x 4	3	
	Consequence	2	2	3	1	4	1	3	2	+3	3	x 15	9	
	Reactions	0	0	0	0	0	0	0	0	0	1	0	1	
	Total	6	3	9	3	11	2	9	7	11	8			
			RR		RR		RR		RR	+5	+5			
Subject Four														
read me	Settings	0	0	0	0	5	0	4	0	+4	1	x 13	1	
	Init. Events	0	0	0	2	1	2	4	4	1	3	6	11	
	Internal Response	0	1	0	1	1	2	0	0	1	3	2	7	
	Attempts	0	1	0	0	2	1	1	0	+3	1	x 6	3	
	Consequence	0	1	0	2	0	3	2	2	2	5	4	13	
	Reactions	0	0	0	0	2	0	0	1	1	2	3	5	
	Total	0	3	0	5	11	8	11	7	12	15			
		RR		RR		RR		RR		RR	+12	+12		

		RR				KS			
DR	0	0	0	2	3 +5	DR	3	5	8
	3	3	2	7	5 +2		3	4	2
CRS	0	0	0	0	0 +0	CRS	0	8	6
	0	0	11	11	12 +12		0	9	11

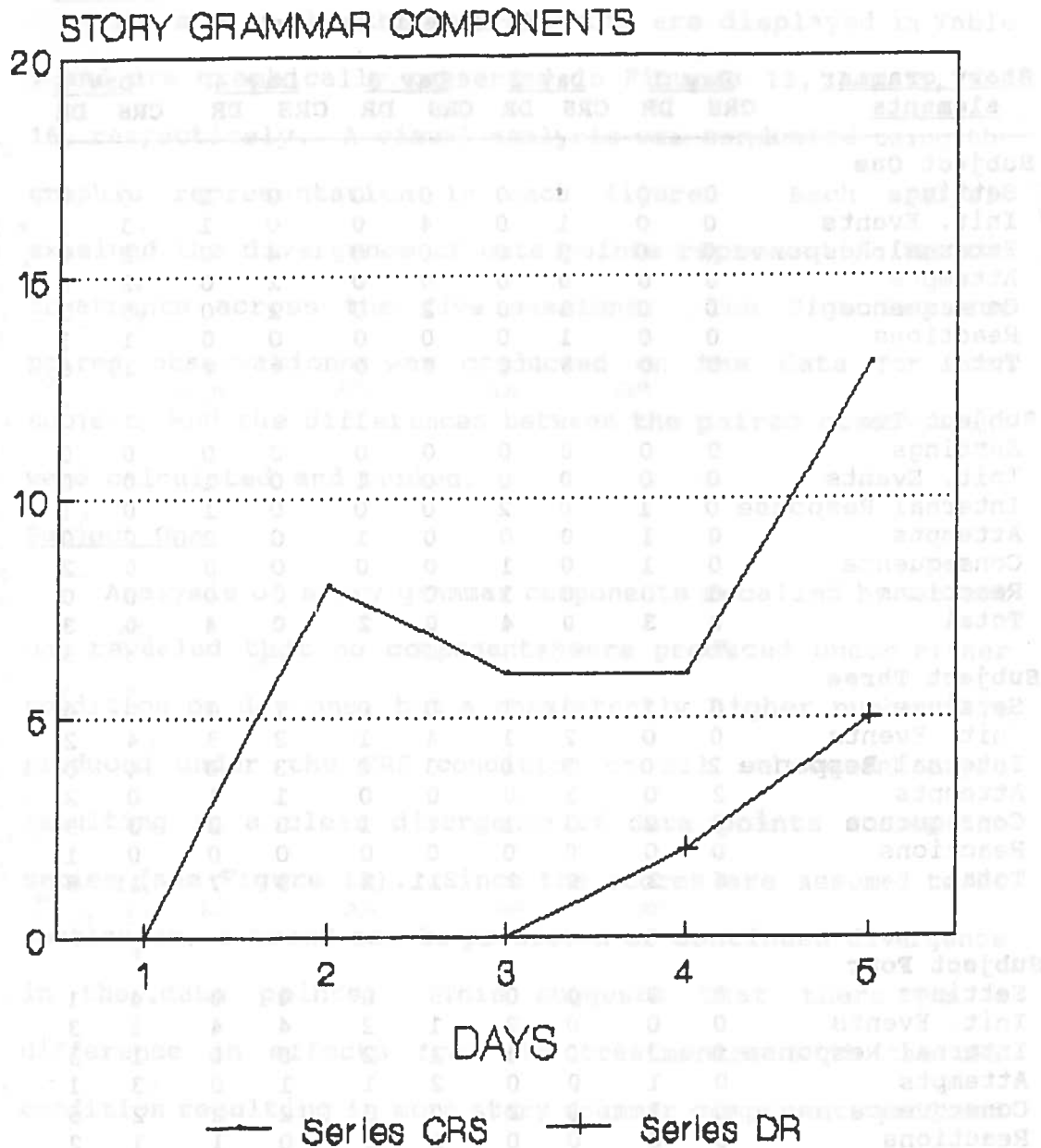


Figure 13. Number of story grammar components produced during the story retelling by Subject One

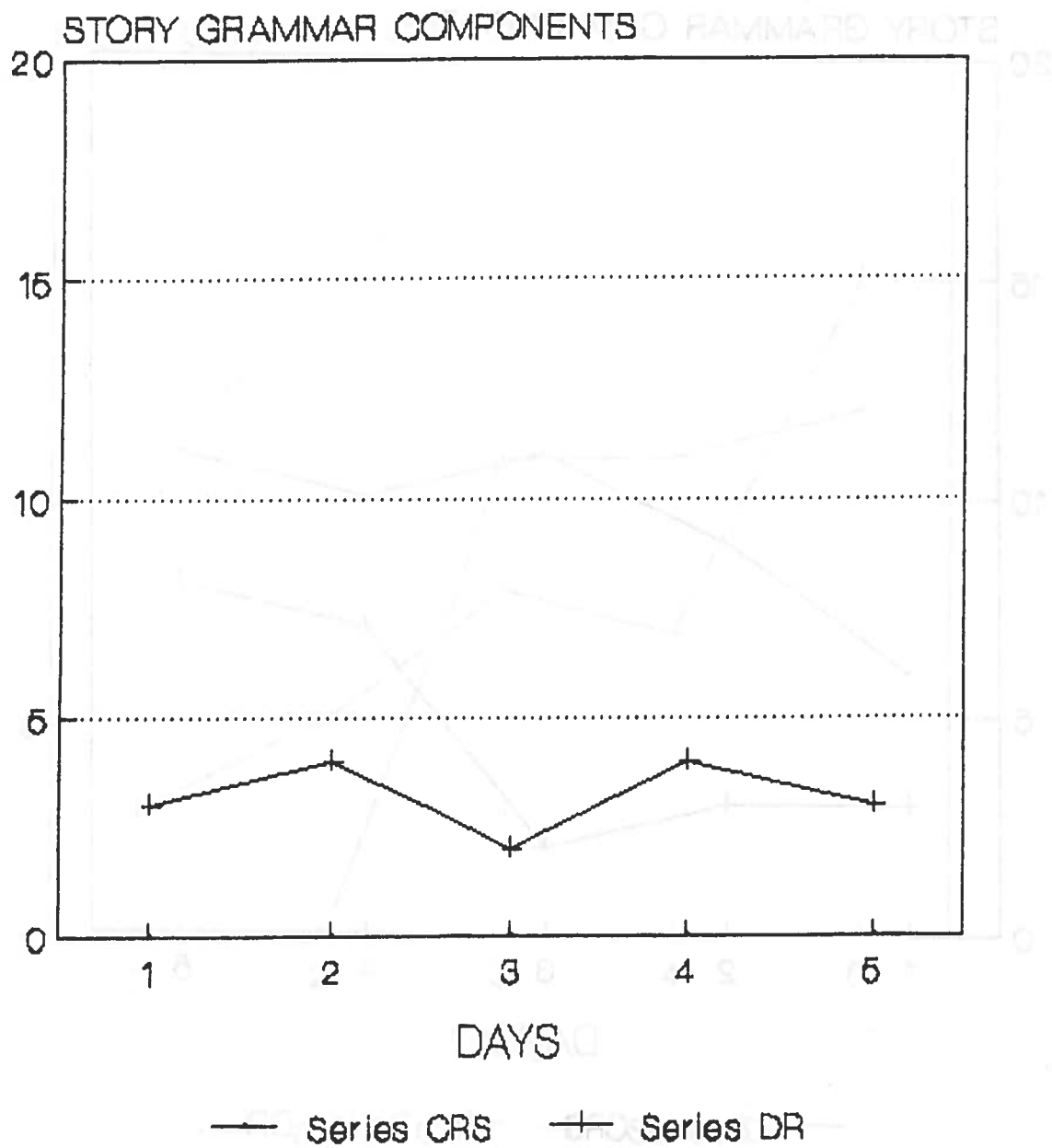


Figure 14. Number of story grammar components produced during the story retelling by Subject Two

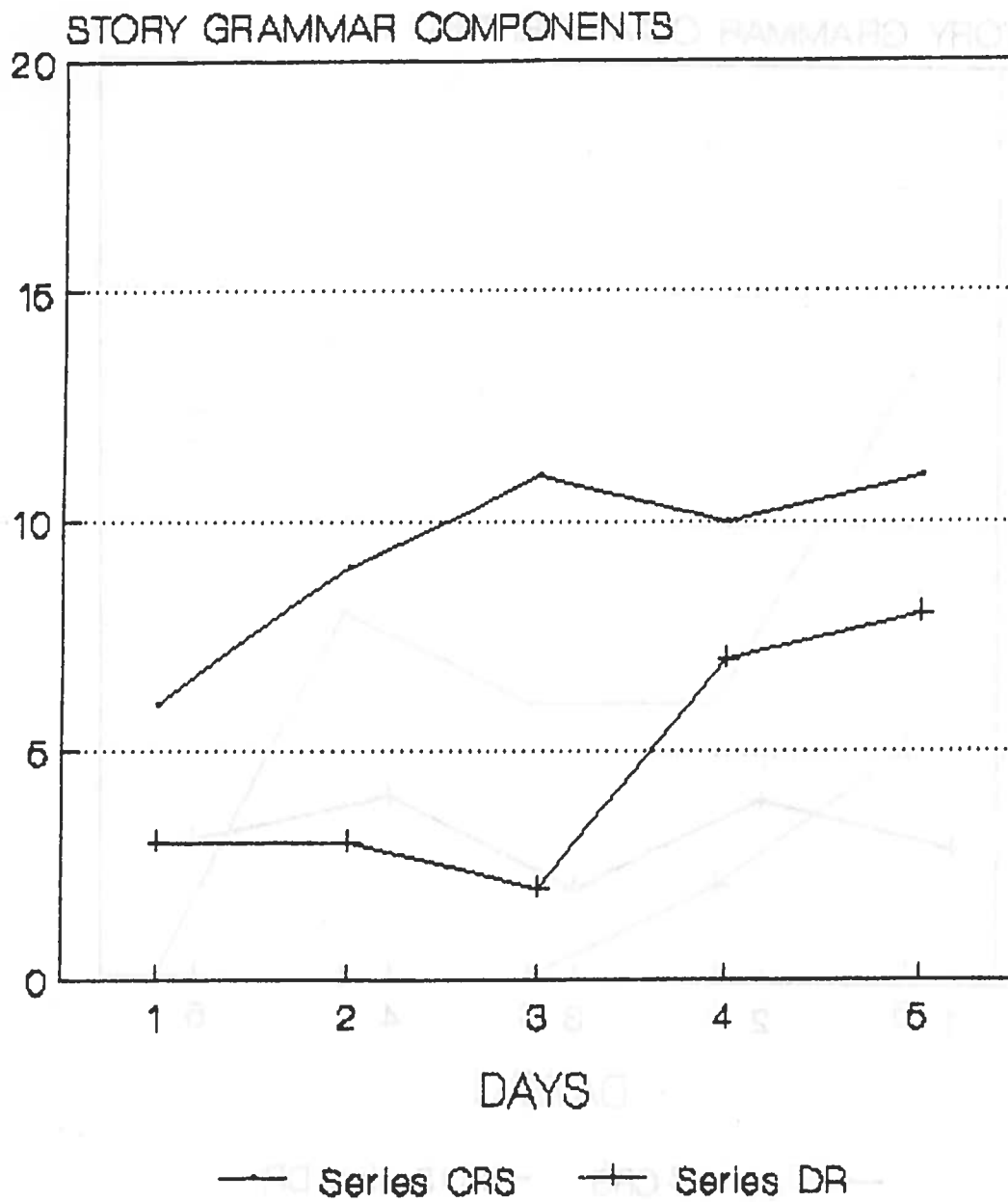


Figure 15. Number of story grammar components produced during the story retelling by Subject Three

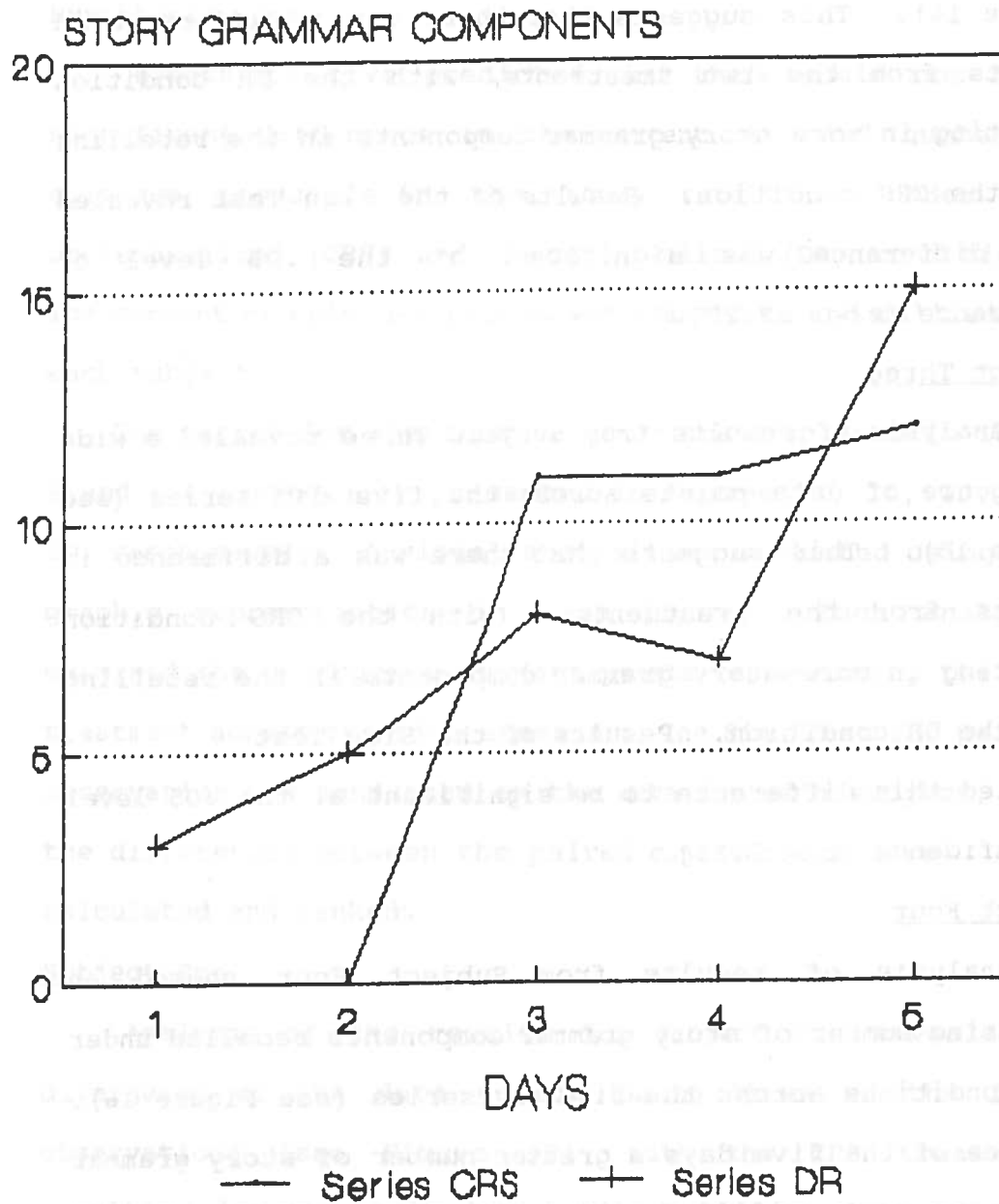


Figure 16. Number of story grammar components produced during the story retelling by Subject Four

Subject Two

Analysis of results from Subject Two revealed a wide divergence of data points across the five day series (see Figure 14). This suggests that there was a difference in effects from the two treatments, with the DR condition resulting in more story grammar components in the retelling than the CRS condition. Results of the Sign Test revealed this difference was significant at the .05 level of confidence [$z = -2.23$].

Subject Three

Analysis of results from Subject Three revealed a wide divergence of data points across the five day series (see Figure 15). This suggests that there was a difference in effects from the treatments, with the CRS condition resulting in more story grammar components in the retelling than the DR condition. Results of the Sign Test revealed this difference to be significant at the .05 level of confidence [$z = 2.23$].

Subject Four

Analysis of results from Subject Four showed an increasing number of story grammar components recalled under both conditions across the five day series (see Figure 16). On three of the five days a greater number of story grammar components were recalled under the DR condition. This suggests that there was no significant difference in effects from the treatments. Results of the Sign Test revealed the

difference was not significant at the .05 level of confidence [$z = -.45$].

Hypothesis Five

Hypothesis five predicted that there would not be a significant difference in the percent of total number of episodes produced in the story retellings under the contextualized (CRS) and decontextualized (DR) conditions. The percent of episodes retold was identified and tallied for each subject.

The scores for the four subjects are displayed in Table 8 and are graphically presented in Figures 17, 18, 19, and 20, respectively. A visual analysis was conducted using the graphic representation in each figure. Each analysis examined the divergence of data points representing the two treatment across the five sessions. The Sign Test for paired observation was conducted on the data for each subject, and the differences between the paired observations were calculated and ranked.

Subject One

Analysis of the results for Subject One revealed a divergence of the data points during three of the five observations (see Figure 17), with the CRS treatment resulting in more episodes in the retelling than the DR treatment. This suggests there was a difference in the two treatments. Results of the Sign Test revealed this

Table 8
Total Number of Episodes, Complete Episodes, Incomplete Episodes, and Episode Integrity Scores under the Contextualized (CRS) and Decontextualized (DR) Conditions

Episode Categories	Treatment series									
	Day 1		Day 2		Day 3		Day 4		Day 5	
	CRS	DR	CRS	DR	CRS	DR	CRS	DR	CRS	DR
Subject One										
T-Episodes	0	0	1	0	3	0	1	1	3	1
C-Episodes	0	0	0	0	1	0	1	0	2	0
IC-Episodes	0	0	1	0	2	0	0	1	1	1
E-Integrity	0	0	0	0	.33	0	1.0	0	.66	0
Subject Two										
T-Episodes	0	1	0	1	0	1	0	2	2	1
C-Episodes	0	1	0	0	0	0	0	0	0	0
IC-Episodes	0	0	0	1	0	1	0	2	0	1
E-Integrity	0	1.0	0	0	0	0	0	0	0	0
Subject Three										
T-Episodes	1	1	2	1	4	1	3	2	3	2
C-Episodes	1	0	1	0	0	0	1	1	0	1
IC-Episodes	0	1	1	1	4	1	0	1	3	1
E-Integrity	1.0	0	.50	0	0	0	.33	.50	3	.50
Subject Four										
T-Episodes	0	1	0	2	2	3	3	3	3	4
C-Episodes	0	1	0	0	0	1	1	0	1	0
IC-Episodes	0	0	0	2	2	2	2	3	2	4
E-Integrity	0	1.0	0	0	0	.33	.33	0	.33	0

- * T-Episodes = Total number of episodes
- * C-Episodes = Total number of complete episodes
- * IC-Episodes = Total number of incomplete episodes
- * E-Integrity = Episode Integrity (The number of complete episodes divided by the total number of episodes)

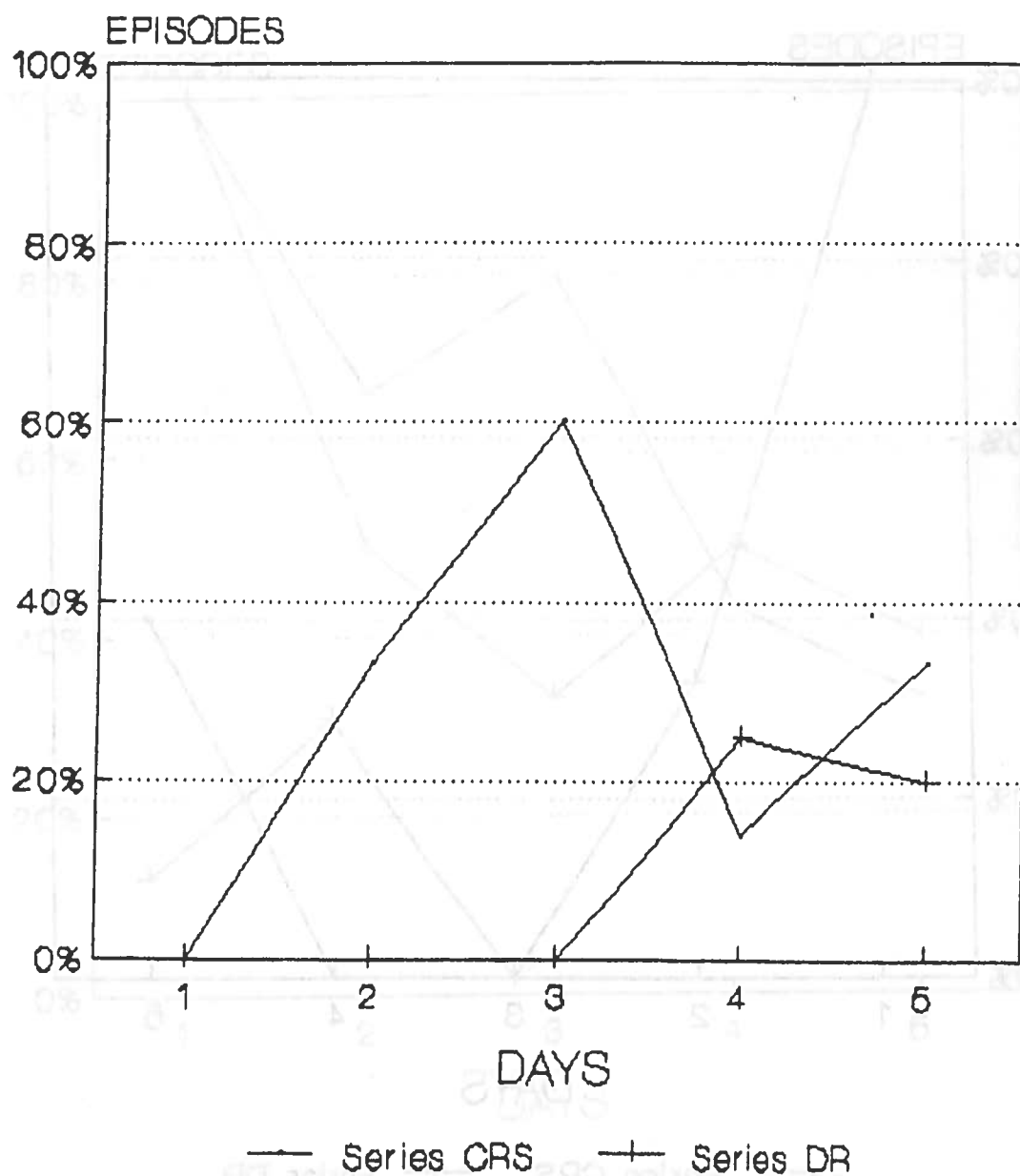
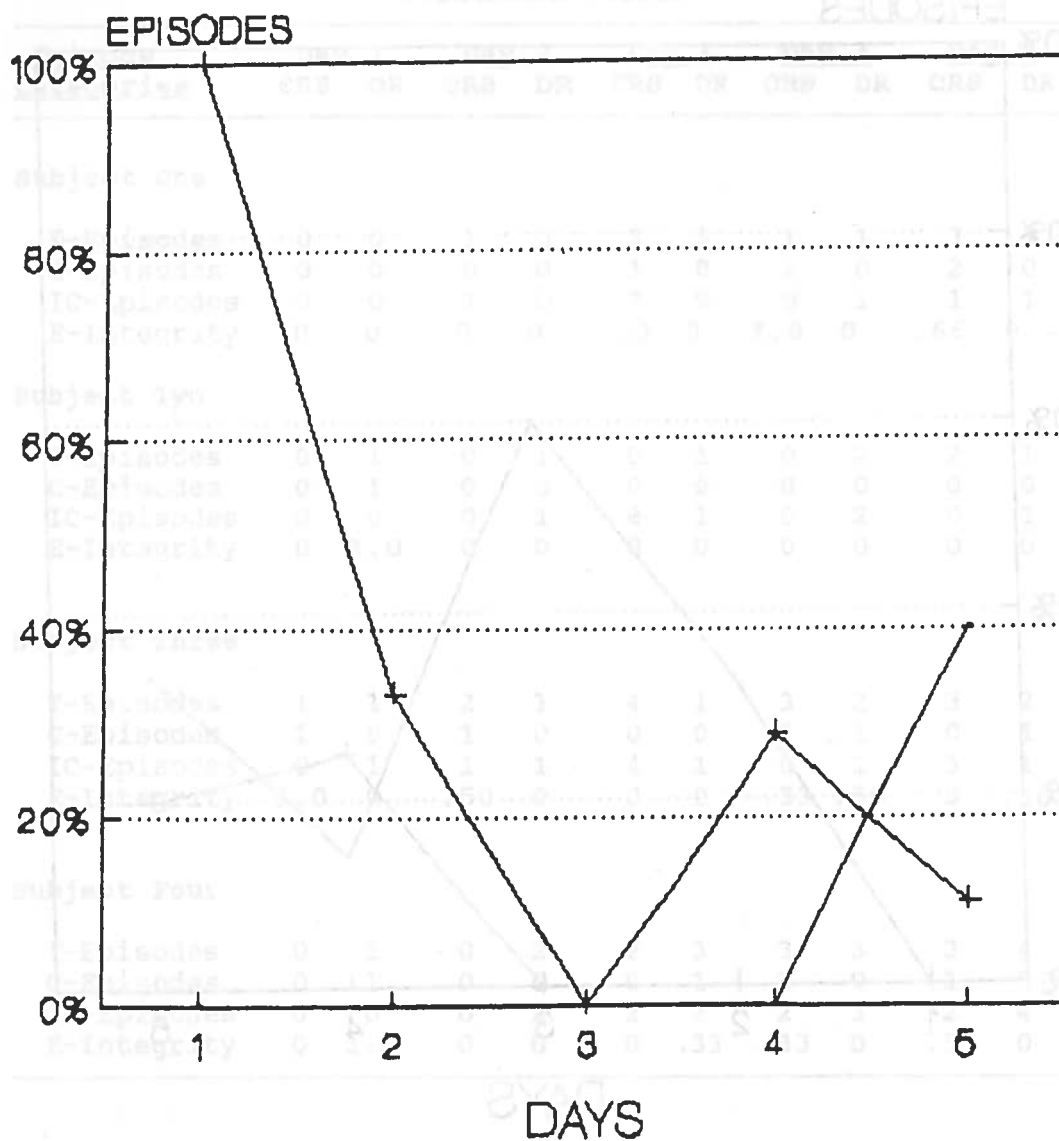


Figure 17. Percentage of episodes produced during a story retelling by Subject One



— Series CRS + Series DR

Figure 18. Percentage of episodes produced during a story retelling by Subject Two

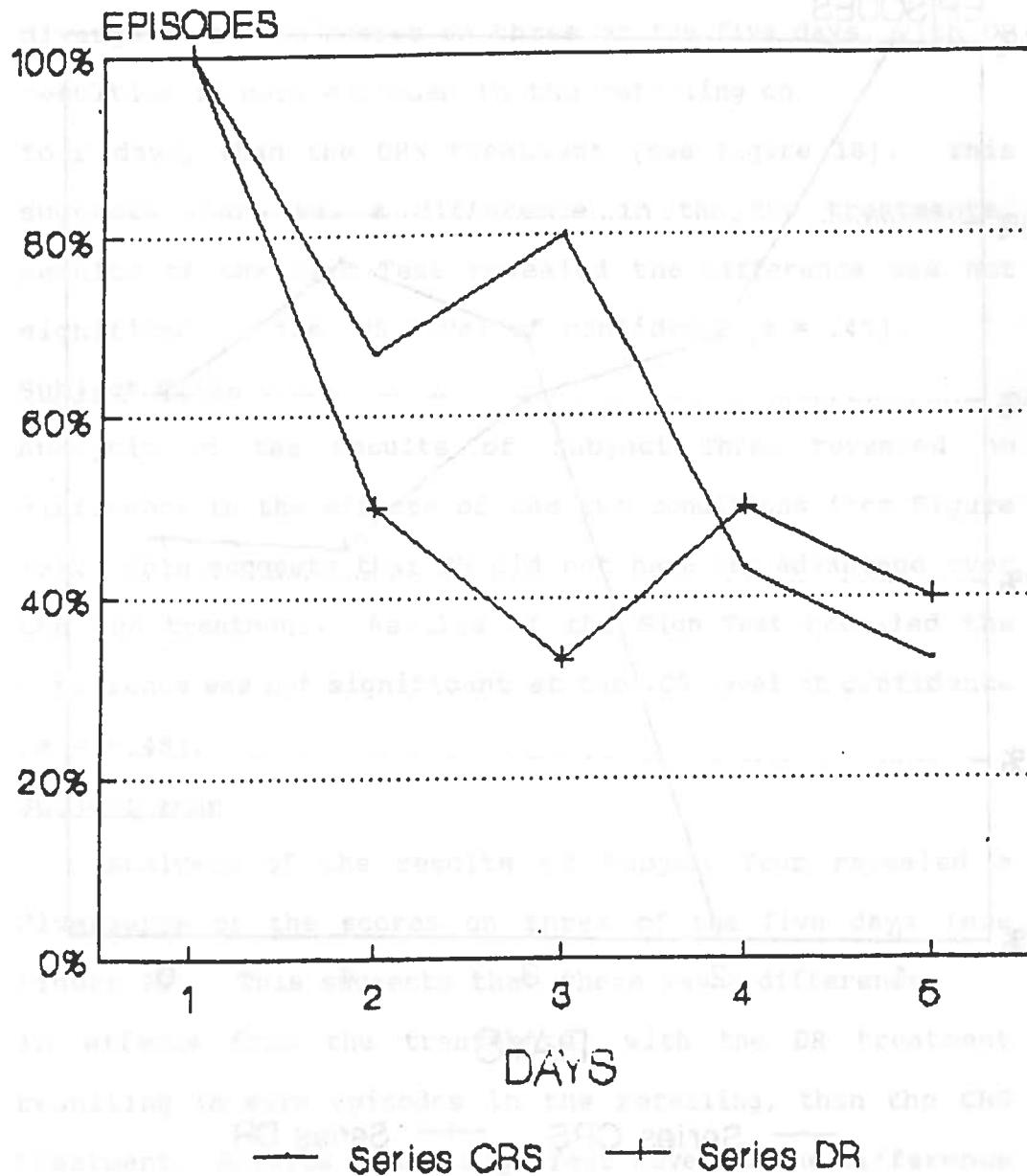


Figure 19. Percentage of episodes produced during a story retelling by Subject Three

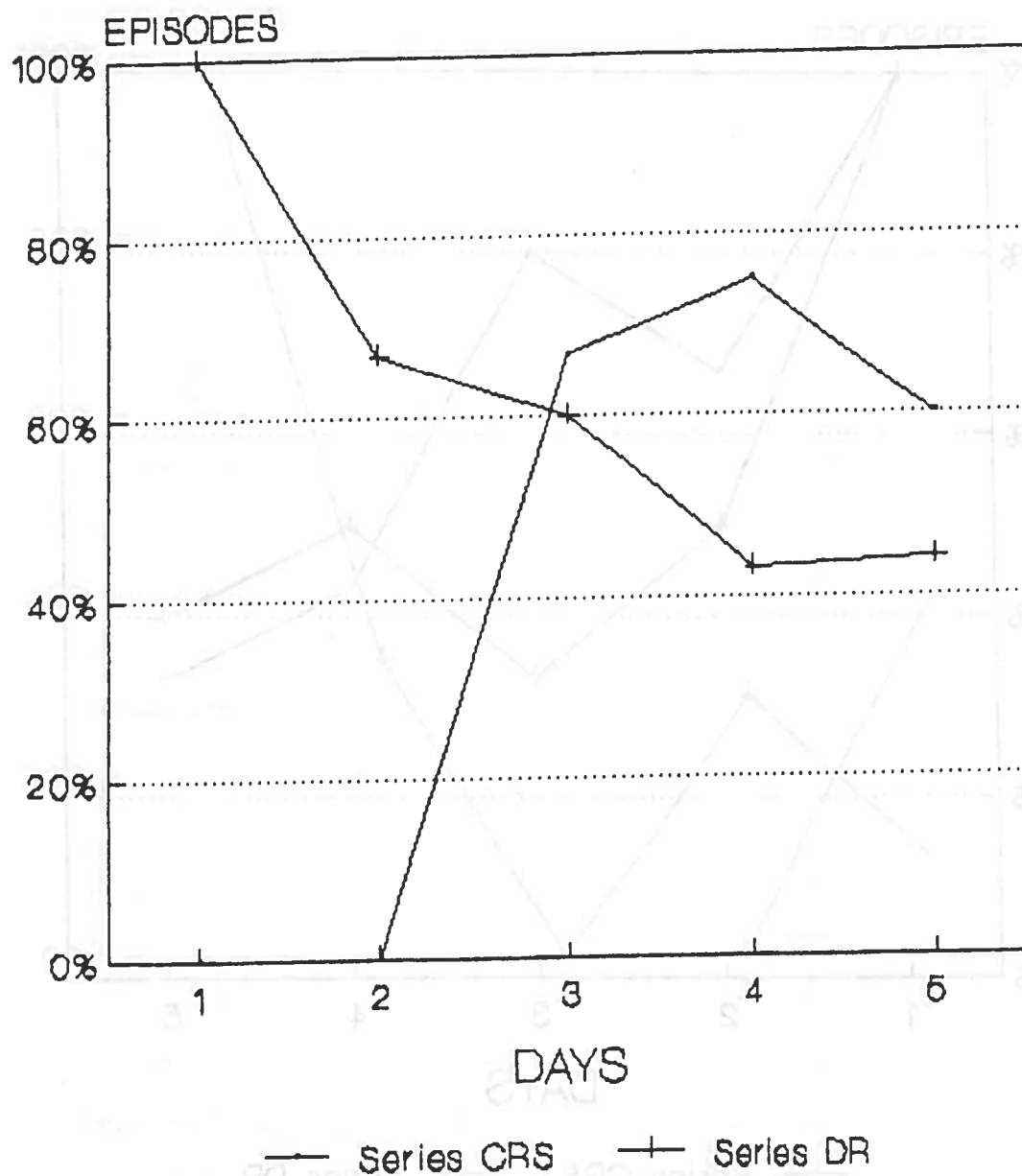


Figure 20. Percentage of episodes produced during a story retelling by Subject Four

difference was not significant at the .05 level of confidence [$z = .45$].

Subject Two

Analysis of the results of Subject Two revealed a divergence of the scores on three of the five days, with DR resulting in more episodes in the retelling on four days, than the CRS treatment (see Figure 18). This suggests there was a difference in the two treatments. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$z = .45$].

Subject Three

Analysis of the results of Subject Three revealed no difference in the effects of the two conditions (see Figure 19). This suggests that DR did not have any advantage over the CRS treatment. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$z = -.45$].

Subject Four

Analysis of the results of Subject Four revealed a divergence of the scores on three of the five days (see Figure 20). This suggests that there was a difference in effects from the treatments, with the DR treatment resulting in more episodes in the retelling, than the CRS treatment. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$z = -2.23$].

Hypothesis Six

Hypothesis six predicted that there would not be a significant difference in the total number of complete episodes produced in the story retelling under the CRS and DR conditions. The number of complete episodes produced during the retelling was identified and tallied.

The number of complete episodes produced during the retelling is displayed in Table 8 and are graphically presented in Figures 21, 22, 23, and 24, respectively. A visual analysis was conducted using the graphic representation in each figure. Each analysis examined the divergence of data points representing the two treatments across the five sessions. The Sign Test for paired observation was conducted on the data for each subject, and the differences between the paired observations were calculated and ranked.

Subject One

Analysis of results from Subject One revealed on days one and two the data points converged at zero, but on day three a trend of data points diverging was observed (see Figure 21). This suggests that there was a difference in effects from the treatments, with the CRS treatment resulting in the production of more complete episodes in the retelling, than the DR treatment. Since the scores are assumed to be continuous, a trend can be predicted of continued divergence in the data points. Results of the

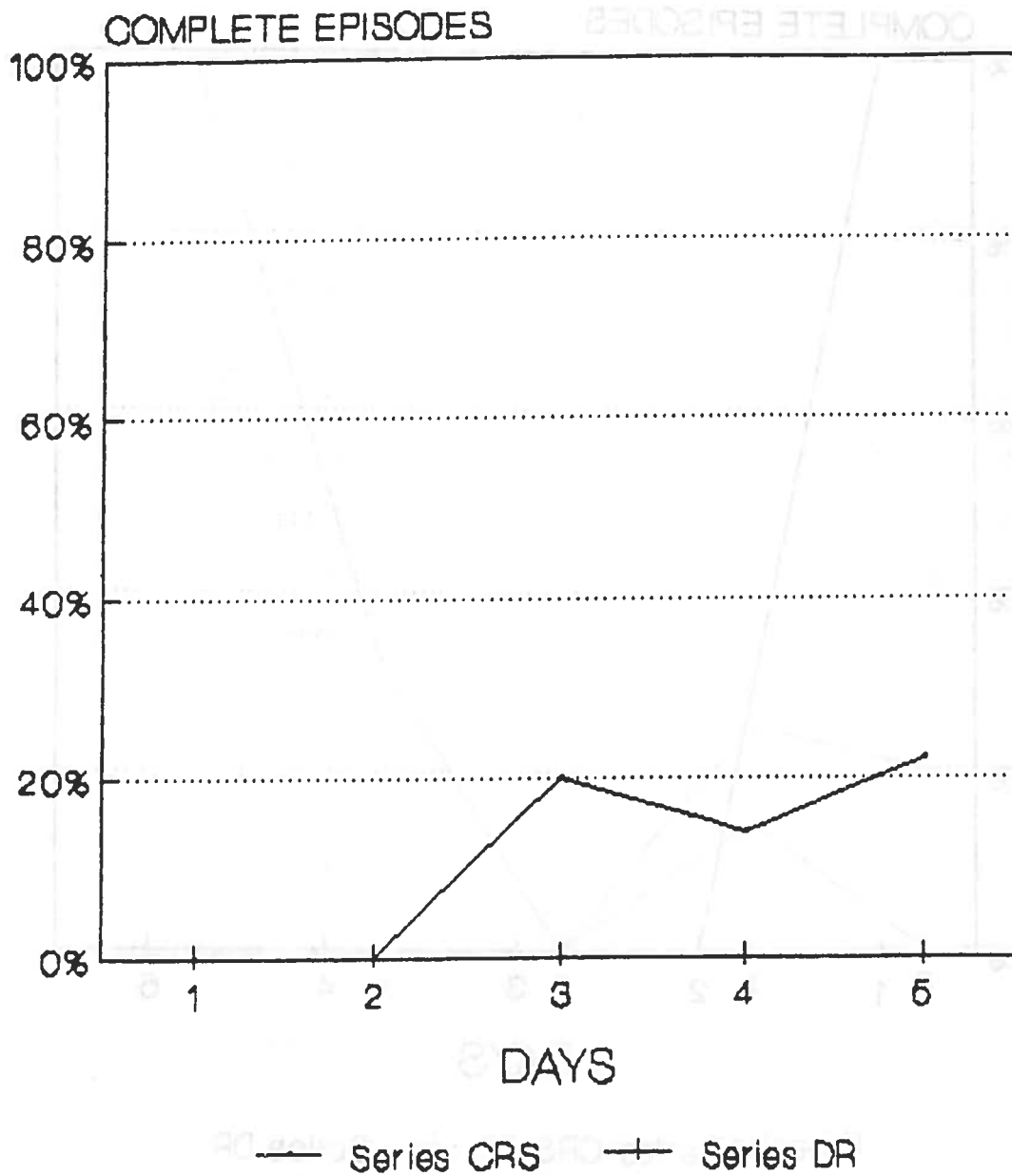


Figure 21. Percentage of complete episodes produced during the story retelling by Subject One

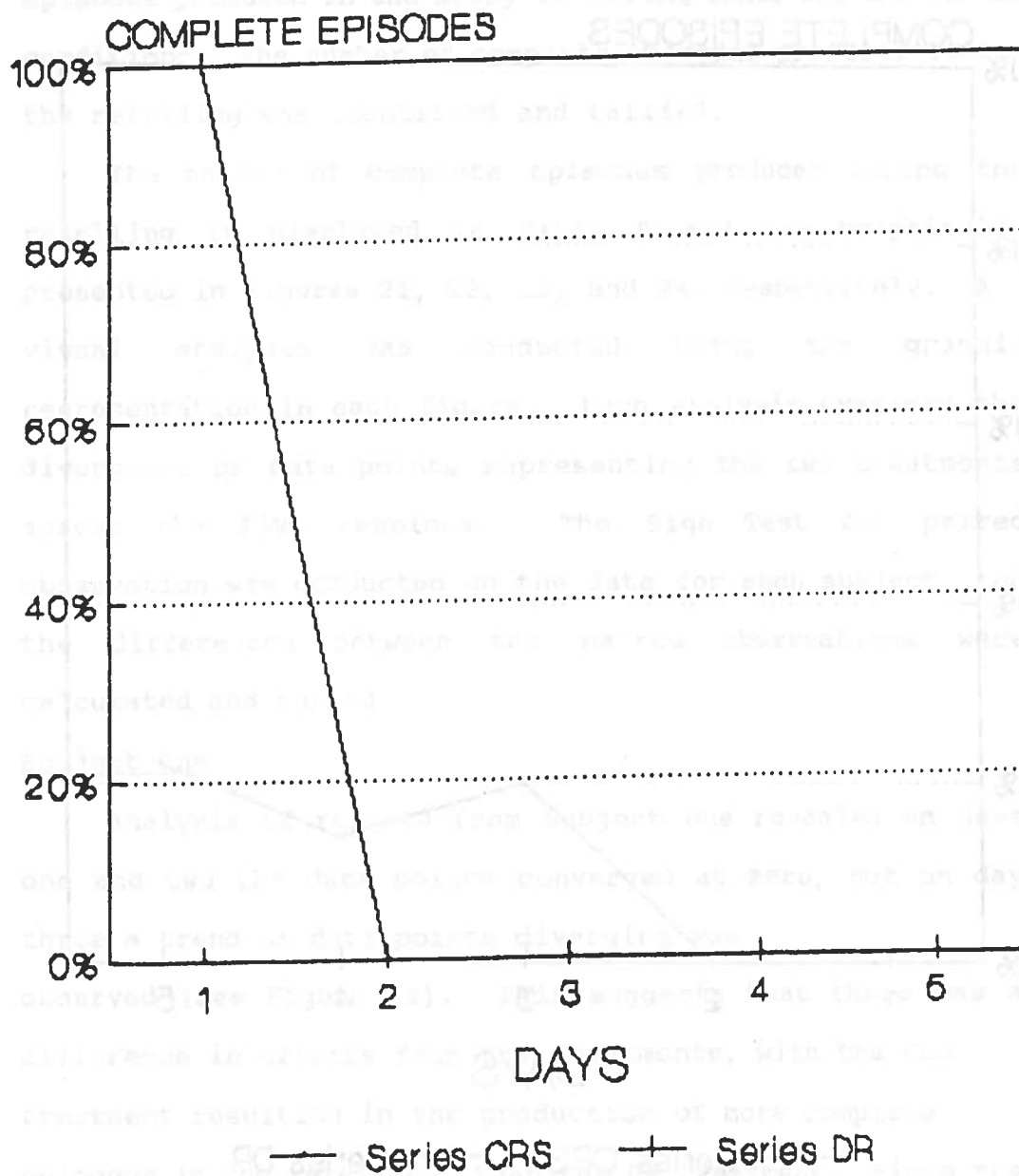


Figure 22. Percentage of complete episodes produced during the story retelling by Subject Two

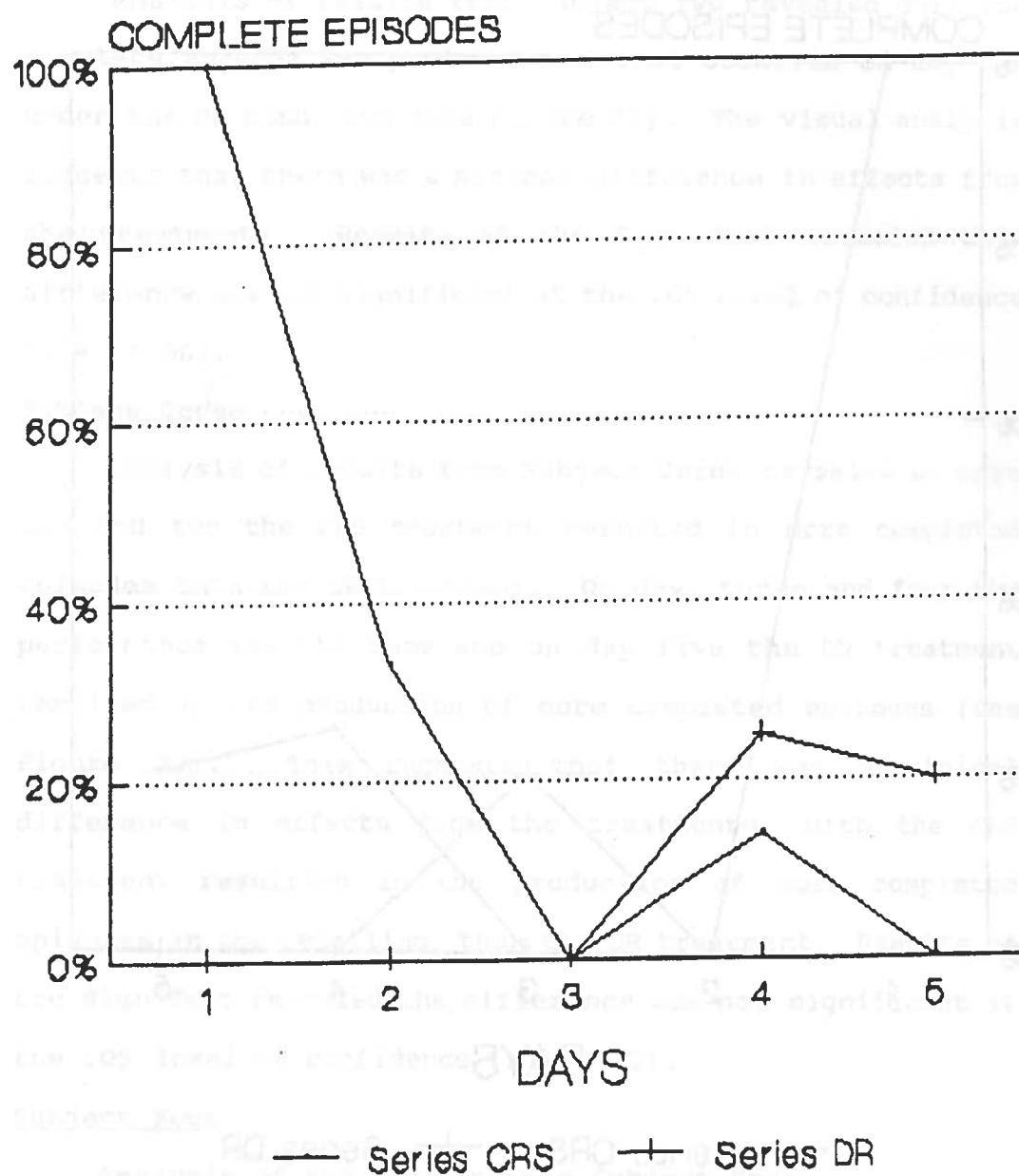


Figure 23. Percentage of complete episodes produced during the story retelling by Subject Three

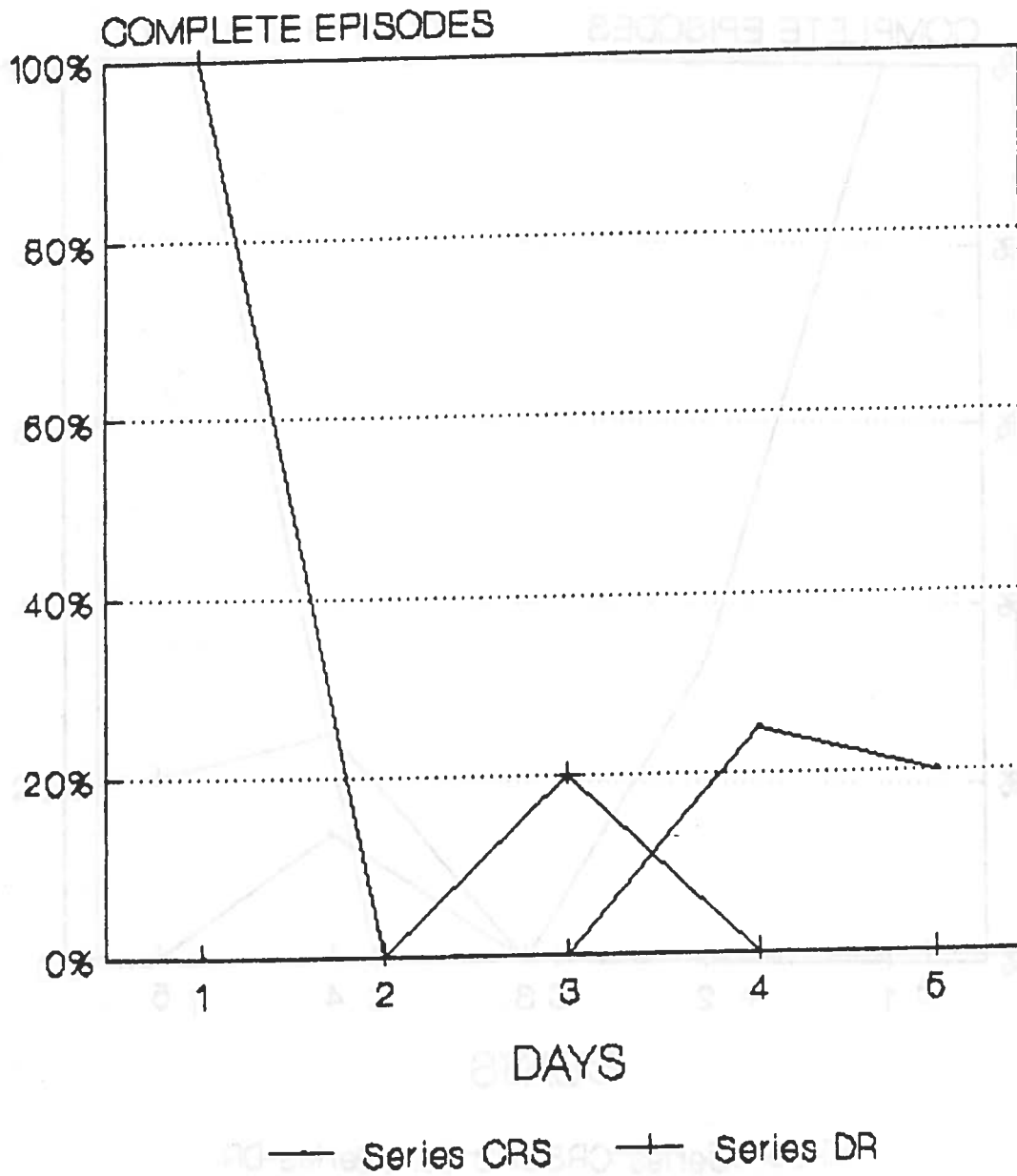


Figure 24. Percentage of complete episodes produced during the story retelling by Subject Four

Sign Test revealed this difference was not significant at the .05 level of confidence [$z = .45$].

Subject Two

Analysis of results from Subject Two revealed only one complete episode was produced and that occurred on day one under the DR condition (see Figure 22). The visual analysis suggests that there was a minimal difference in effects from the treatments. Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$z = -1.00$].

Subject Three

Analysis of results from Subject Three revealed on days one and two the CRS treatment resulted in more completed episodes than the DR treatment. On days three and four the performance was the same and on day five the DR treatment resulted in the production of more completed episodes (see Figure 23). This suggests that there was a minimal difference in effects from the treatments, with the CRS treatment resulting in the production of more completed episodes in the retelling, than the DR treatment. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$z = -.45$].

Subject Four

Analysis of the results from Subject Four revealed no differences in the effects of the CRS treatment and the DR treatment (see Figure 24). Results of the Sign

Test revealed no significant difference at the .05 level of confidence [$z = -.45$].

Hypothesis Seven

Hypothesis seven predicted that there would not be a significant difference in the episodic integrity of the narratives produced during the story retelling under the CRS and DR conditions. The episodic integrity was determined by dividing the total number of episodes into the number of completed episodes.

The scores for the four subjects are displayed in Table 8 and are graphically presented in Figures 25, 26, 27, and 28, respectively. A visual analysis was conducted using the graphic representation in each figure. Each analysis examined the divergence of data points representing the two treatment across the five sessions. The Sign Test for paired observation was conducted on the data for each subject, and the differences between the paired observations were calculated and ranked.

Subject One

Analysis of the results from Subject One revealed on days one and two the data points converged at zero, but on day three a trend of data points diverging began and continued to day five (see Figure 25). This suggests that there was a difference in effects from the treatment, with the CRS treatment resulting in narratives with more episodic

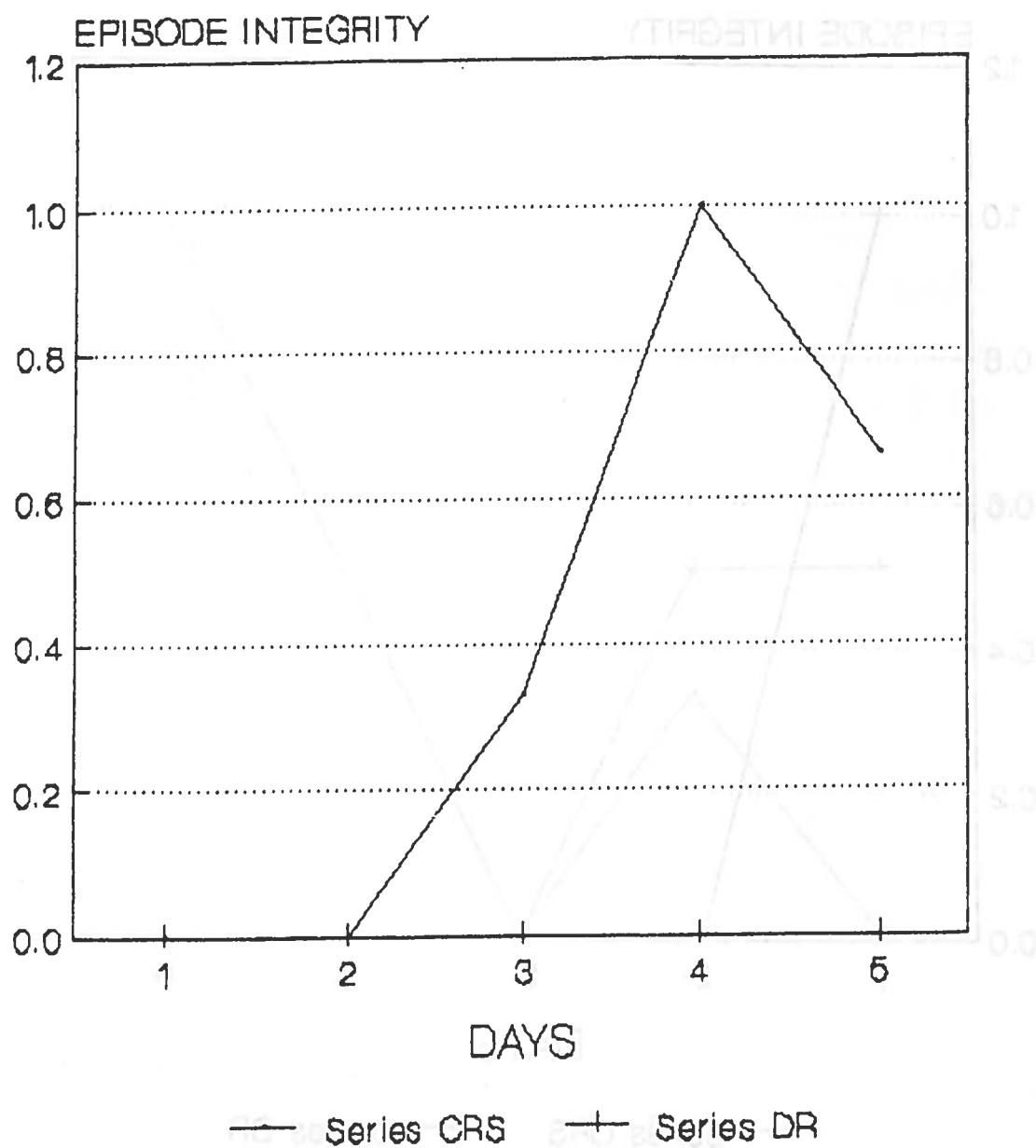


Figure 25. Percentage of episode integrity of the story retelling produced by Subject One

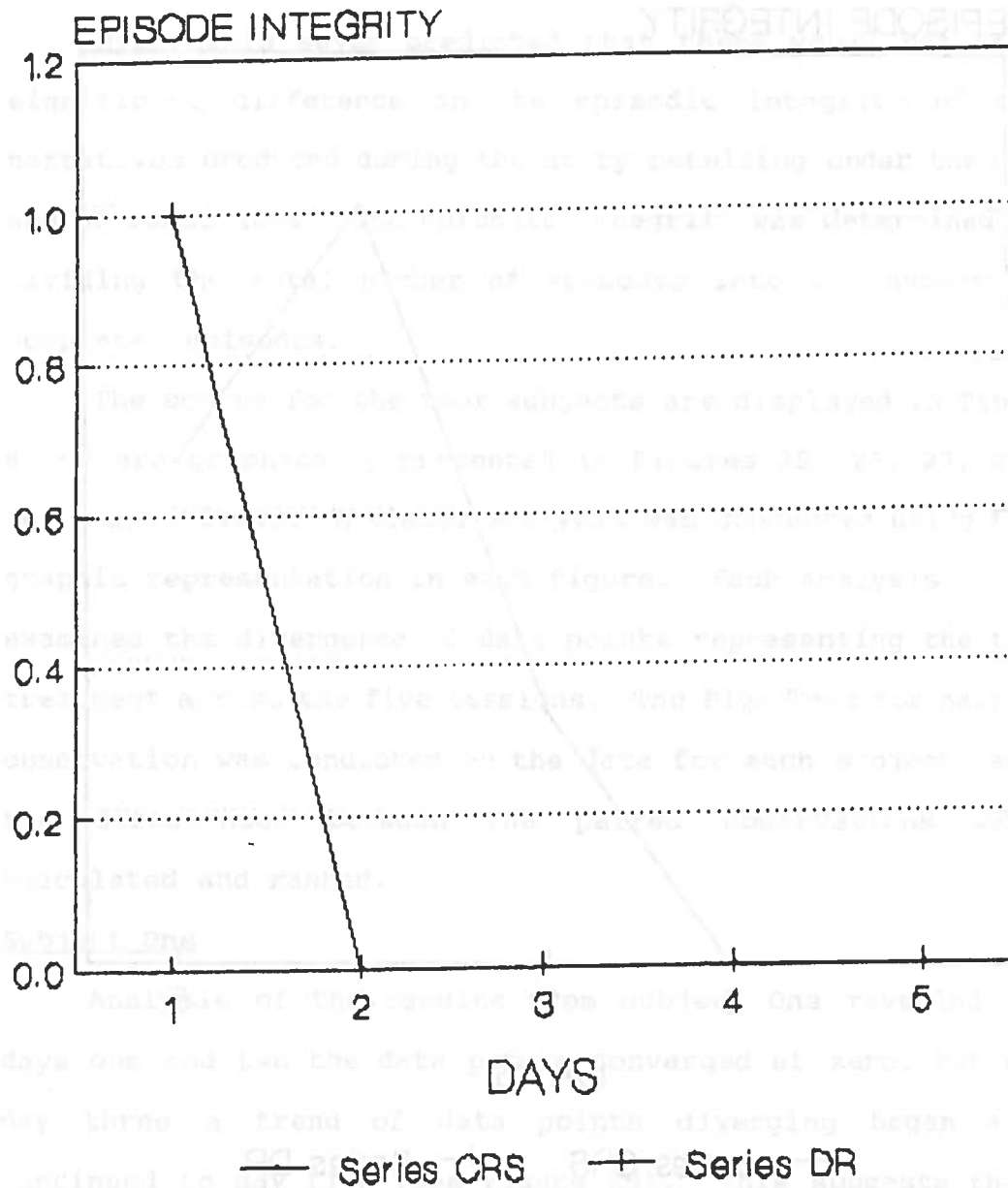


Figure 26. Percentage of episode integrity of the story retelling produced by Subject Two

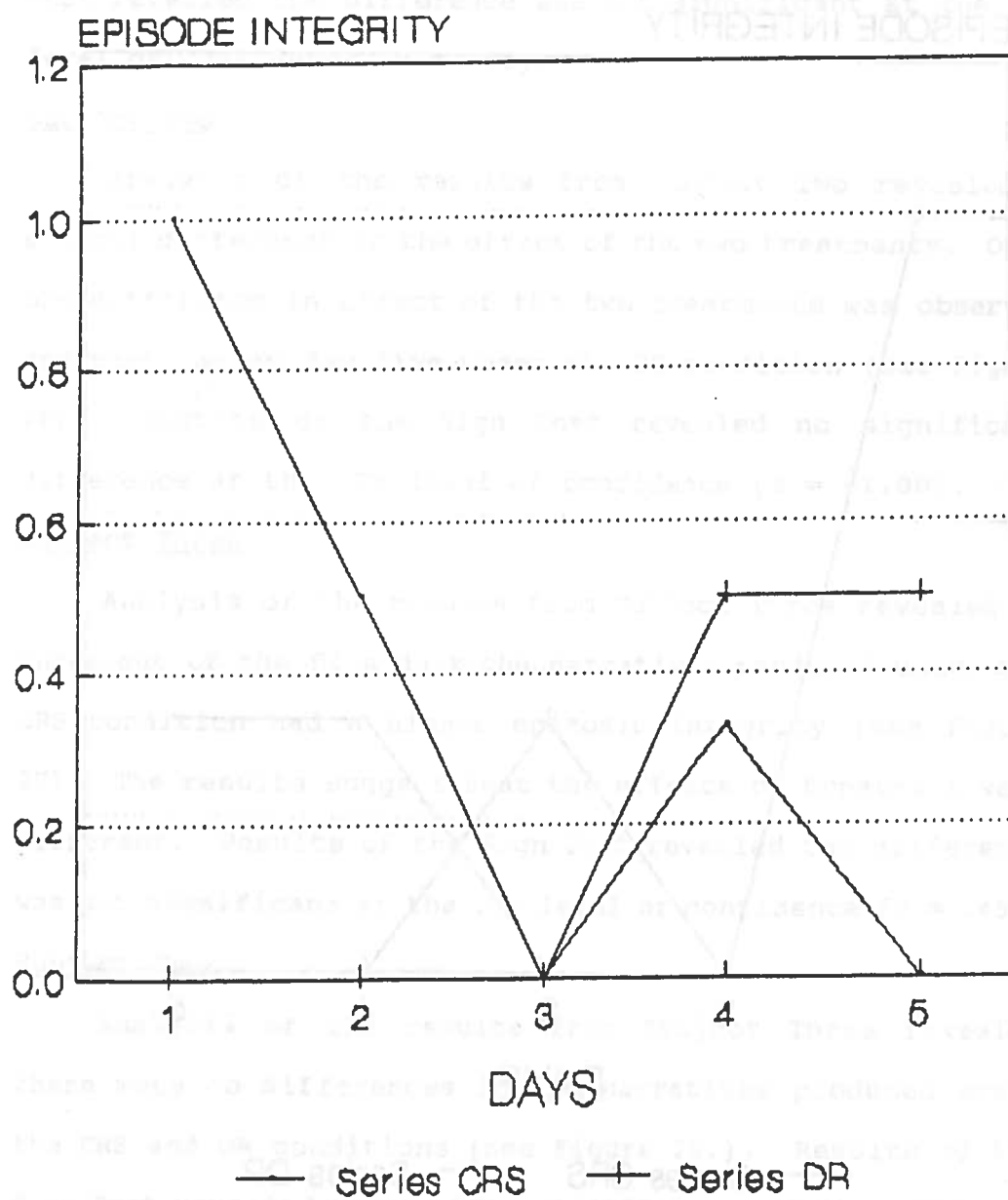


Figure 27. Percentage of episode integrity of the story retelling produced by Subject Three

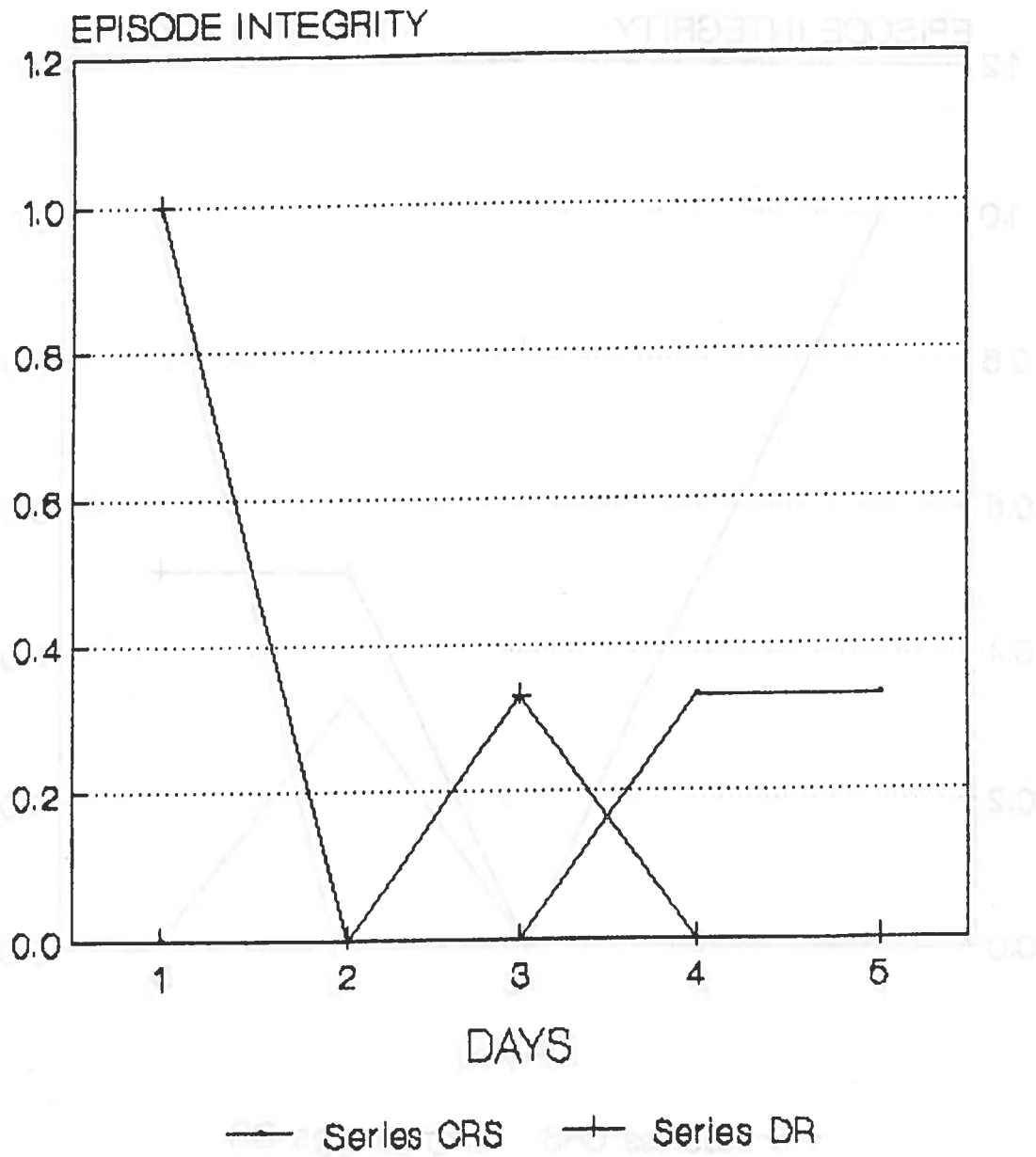


Figure 28. Percentage of episode integrity of the story retelling produced by Subject Four

integrity, than the DR treatment. Since the scores are assumed to be continuous, a trend can be predicted of continued divergence in the data points. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$z = .45$].

Subject Two

Analysis of the results from Subject Two revealed a minimal difference in the effect of the two treatments. Only one difference in effect of the two treatments was observed and that was on day five under the DR condition (see Figure 26). Results of the Sign Test revealed no significant difference at the .05 level of confidence [$z = -1.00$].

Subject Three

Analysis of the results from Subject Three revealed on three out of the five days the narratives produced under the CRS condition had a higher episodic integrity (see Figure 27). The results suggest that the effects of treatment were different. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$z = .45$].

Subject Four

Analysis of the results from Subject Three revealed there were no differences in the narratives produced under the CRS and DR conditions (see Figure 28.). Results of the Sign Test revealed no significant difference at the .05 level of confidence [$z = .45$].

Summary

Question Two compared the effects of the contextualized instructional condition (CRS) versus the decontextualized instructional condition (DR) on producing differences in the narrative structure of a story retelling. Four hypotheses were tested, representing different aspects of story retelling. They were hypotheses 4) number of story grammar components, 5) number of story episodes recalled, 6) number of complete episodes, and 7) percent of episode integrity. These analyses showed no significant advantage under the CRS condition or the DR condition. The results revealed a significant difference on the story grammar analysis for Subject Two under the DR condition and Subject Three under the CRS condition. The trends for Subject One favored the CRS condition, while Subject Four showed no difference under either conditions. The results of the story episodes analysis revealed trends that favored the CRS condition for subjects One and Three, and trends that favored the DR condition for subjects Two and Four. Only Subject one showed trends that favored the CRS condition on the complete episode analysis and the episode integrity analysis, while the other subjects showed no differences on either analyses under the two conditions.

Question Three

The effects of the contextualized instructional condition (CRS) compared to decontextualized instructional condition (DR) on producing differences in the completeness of a story retelling was the focus of question three. Two hypotheses were tested, representing measures of story comprehension and accuracy of the story retelling. They were 8) number of T-units not included in a maze, and 9) percentage of T-units included in a maze.

Hypothesis Eight

Hypothesis eight predicted that there would not be a significant difference in the number of T-units not included in a maze during the story retelling under the contextualized (CRS) and decontextualized (DR) conditions. The number of T-units not included in a maze was identified and tallied. Maze behavior was characterized by message inaccuracies (MIA) or false information, repeated propositions (RP), and/or inclusion of irrelevant perceptual details (IR) that were present in the picture, but not important to the development of the story.

The number of T-units not included in a maze for the four subjects is displayed in Table 9 and are graphically presented in Figures 29, 30, 31, and 32, respectively. A visual analysis was conducted using the graphic representation in each figure. Each analysis examined the

Table 9
Total Number of T-units, Maze Behaviors, and Story Length
Scores under the Contextualized Instruction (CRS) and
Decontextualized Instruction (DR) Conditions

Treatment series										
T-unit Categories	Day 1		Day 2		Day 3		Day 4		Day 5	
	CRS	DR	CRS	DR	CRS	DR	CRS	DR	CRS	DR
Subject One										
T-units	3	2	8	3	19	7	5	8	16	6
MIA,RP,IP %	.00	.50	.00	.33	.21	.57	.00	.67	.25	.16
Story Length	3	1	8	2	14	3	5	2	12	5
Subject Two										
T-units	3	4	7	5	4	2	7	9	4	5
MIA,RP,IP %	.00	1.0	.00	.20	1.0	.00	.43	.56	.25	.40
Story Length	3	0	7	4	0	2	4	4	3	3
Subject Three										
T-units	8	4	10	4	12	5	14	11	17	9
MIA,RP,IP %	.25	.25	.10	.25	.17	.60	.29	.36	.36	.11
Story Length	6	3	9	3	10	2	10	7	11	8
Subject Four										
T-units	5	3	7	5	12	8	7	8	12	15
MIA,RP,IP %	.00	.33	.00	.00	.17	.20	.00	.12	.00	.00
Story Length	5	2	7	5	10	8	7	7	12	14

- * MIA = Message inaccuracies
- * RP = Repeated Propositions
- * IP = Irrelevant perceptual details

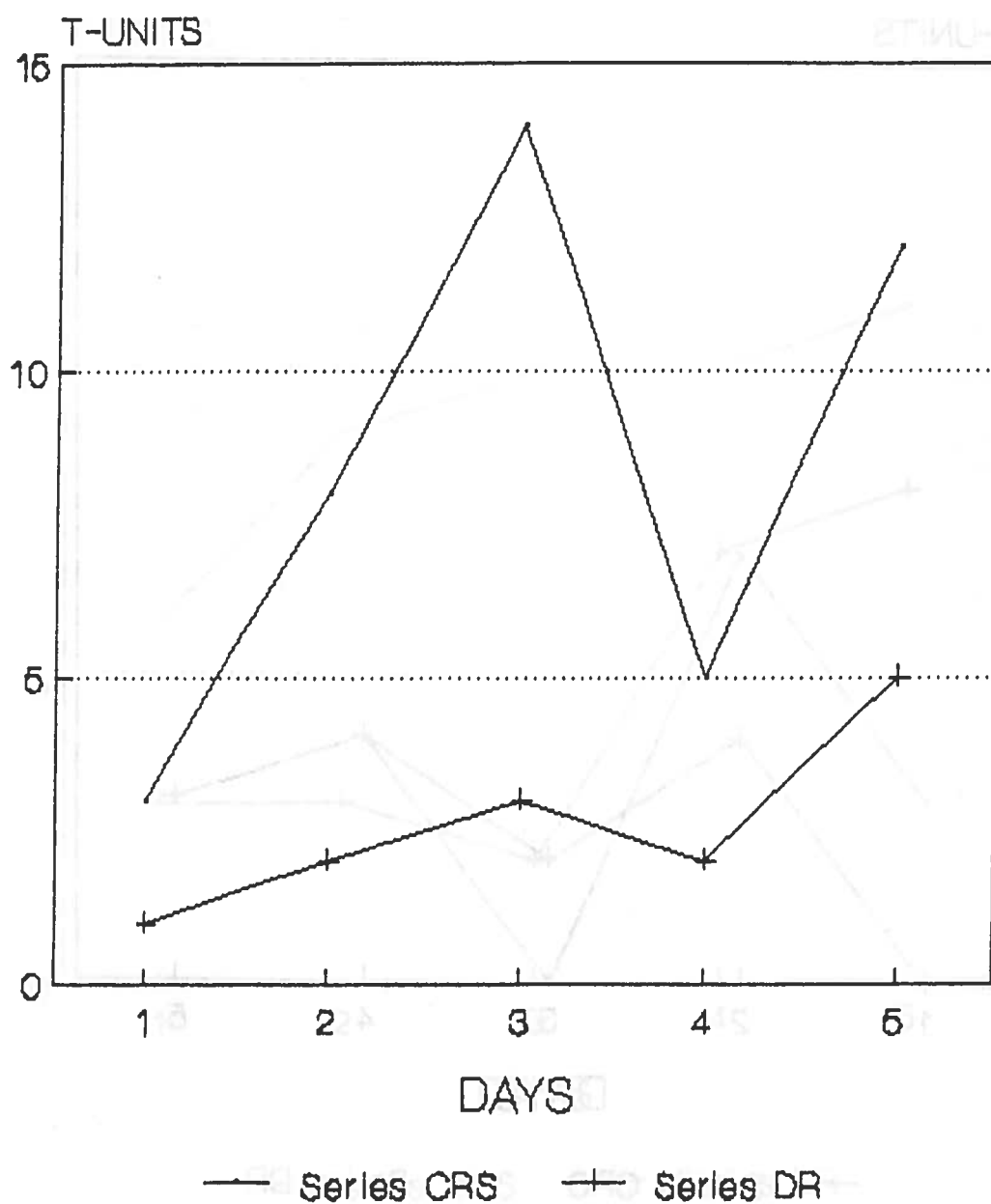


Figure 29. Number of T-units not included in a maze during a story retelling by Subject One

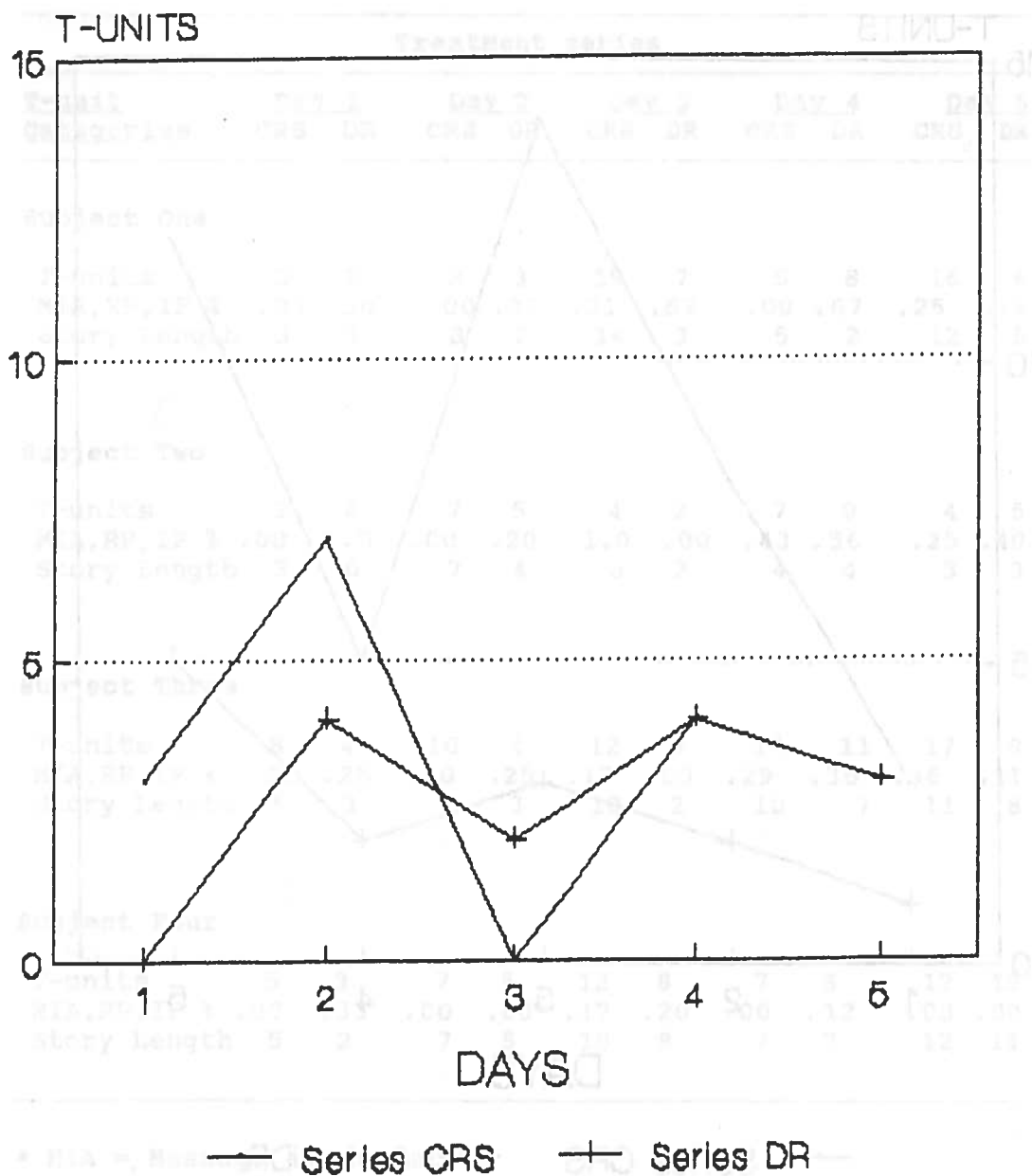


Figure 30. Number of T-units not included in a maze during a story retelling by Subject Two

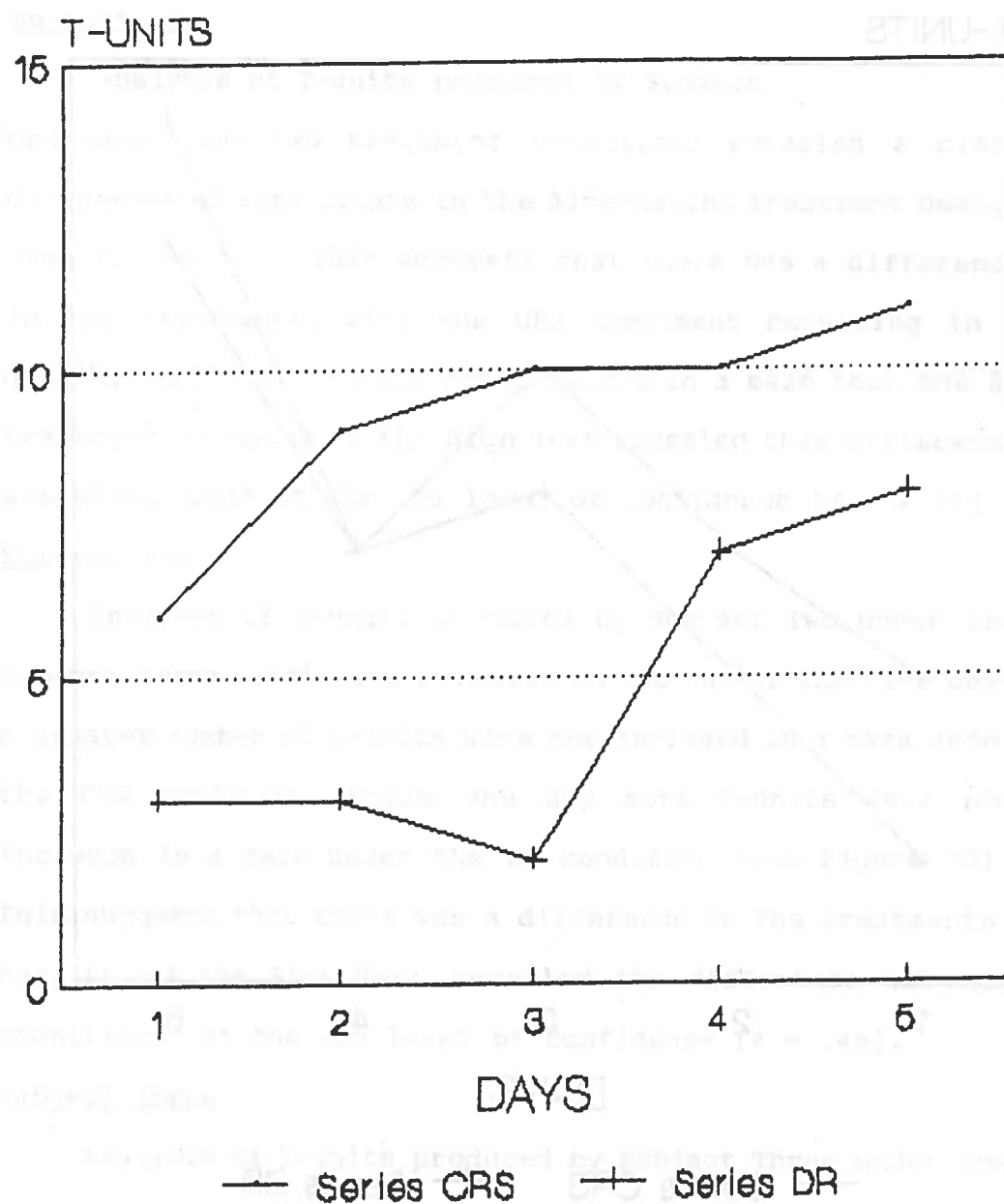


Figure 31. Number of T-units not included in a maze during a story retelling by Subject Three

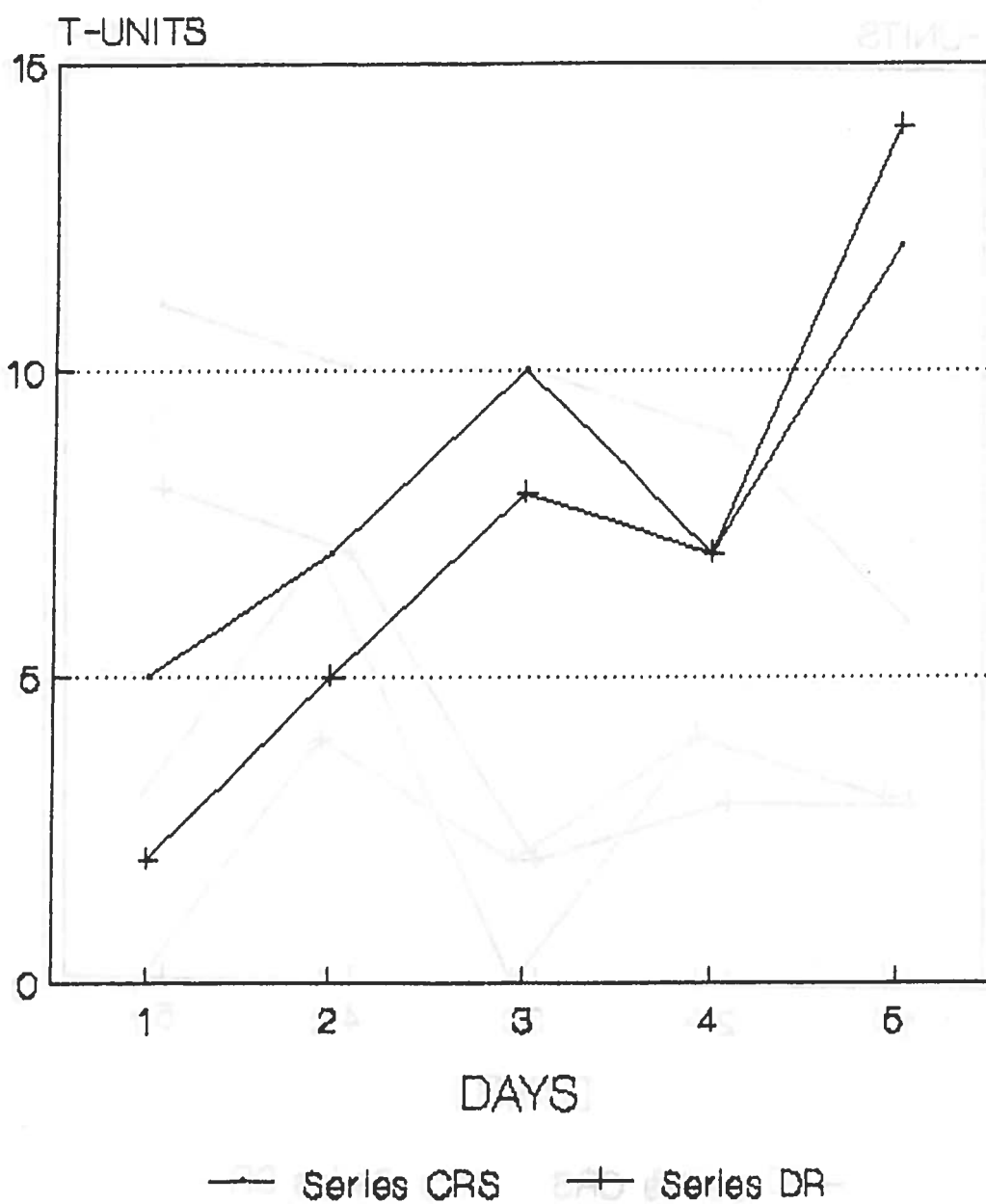


Figure 32. Number of T-units not included in a maze during a story retelling by Subject Four

divergence of data points representing the two treatment across the five sessions. The Sign Test for paired observations was conducted on the data for each subject, and Subject One

Analysis of T-units produced by Subject One under the two treatment conditions revealed a clear divergence of data points in the Alternating Treatment Design (see Figure 29). This suggests that there was a difference in the treatments, with the CRS treatment resulting in a greater number of T-units not included in a maze than the DR treatment. Results of the Sign Test revealed this difference was significant at the .05 level of confidence [$Z = 2.23$].

Subject Two

Analysis of T-units produced by Subject Two under the two treatment conditions revealed on two out of the five days a greater number of T-units were not included in a maze under the CRS condition, while one day more T-units were not included in a maze under the DR condition (see Figure 30). This suggests that there was a difference in the treatments. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$z = .45$].

Subject Three

Analysis of T-units produced by Subject Three under the two treatment condition revealed a clear divergence of all data points in the Alternating Treatment Design (see Figure 31). This suggests that there was a difference in the

treatments, with the CRS treatment resulting in a greater number of T-units not included in a maze. Results of the Sign Test revealed the difference was significant at the .05 level of confidence [$Z = 2.23$].

Subject Four

Analysis of T-units produced by Subject Four revealed that for three out of the five days a greater number of T-units were not included in a maze under the CRS condition (see Figure 32). This suggests a difference in the treatments. The results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$Z = .45$].

Hypothesis Nine

Hypothesis nine predicted there would not be a significant difference in the percentage of T-units included in a maze (i.e., message inaccuracies, repeated propositions and irrelevant perceptual details), produced during the story retellings under the contextualized (CRS) and decontextualized (DR) conditions. The percentage of T-units included in a maze was identified and tallied.

The percentage of T-units included in a maze for the four subjects are displayed in Table 9 and are graphically presented in Figure 33, 34, 35, and 36, respectively. A visual analysis was conducted using the graphic representation in each figure. Each analysis examined the

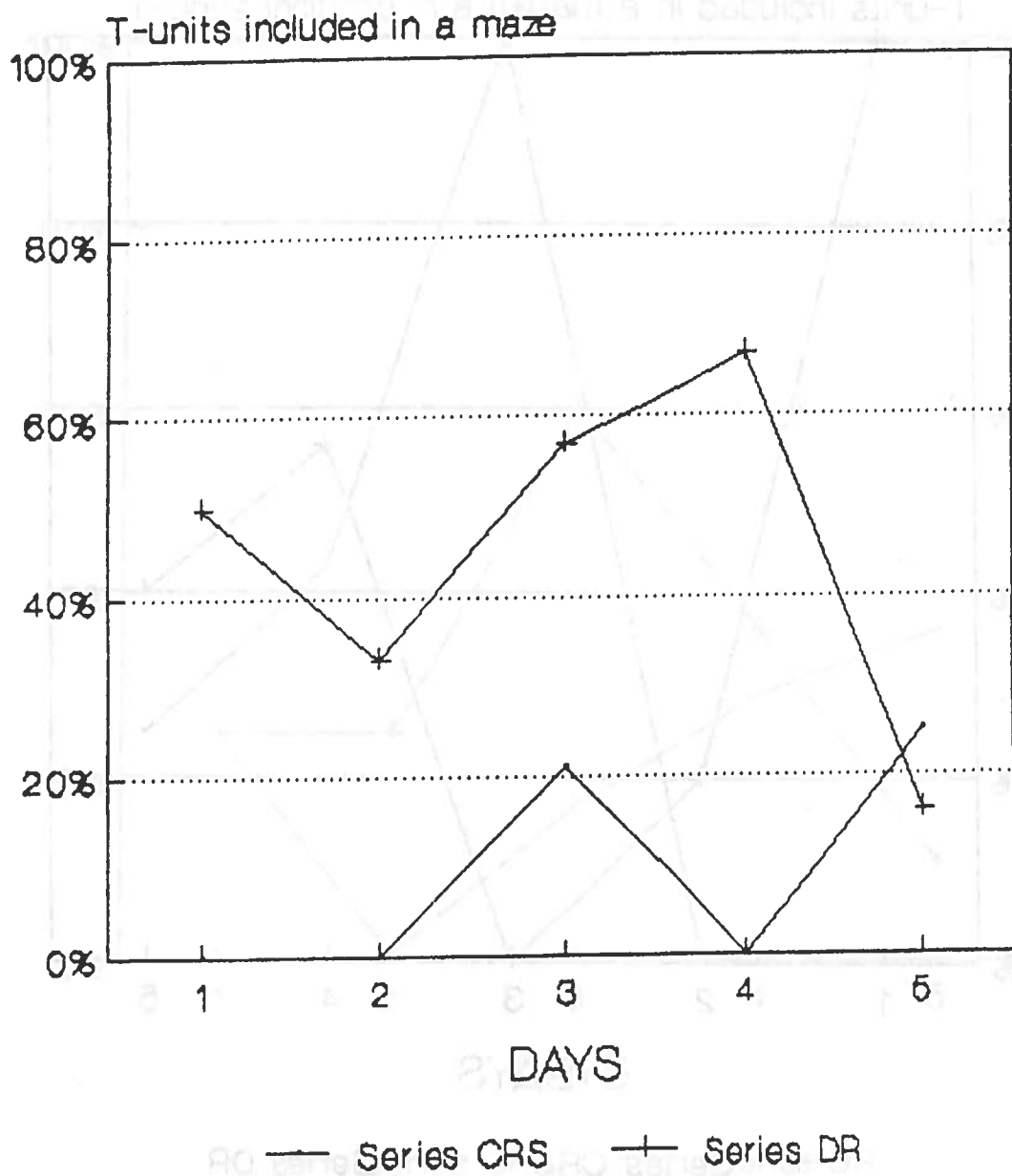


Figure 33. Percentage of T-units included in a maze during a story retelling by Subject One

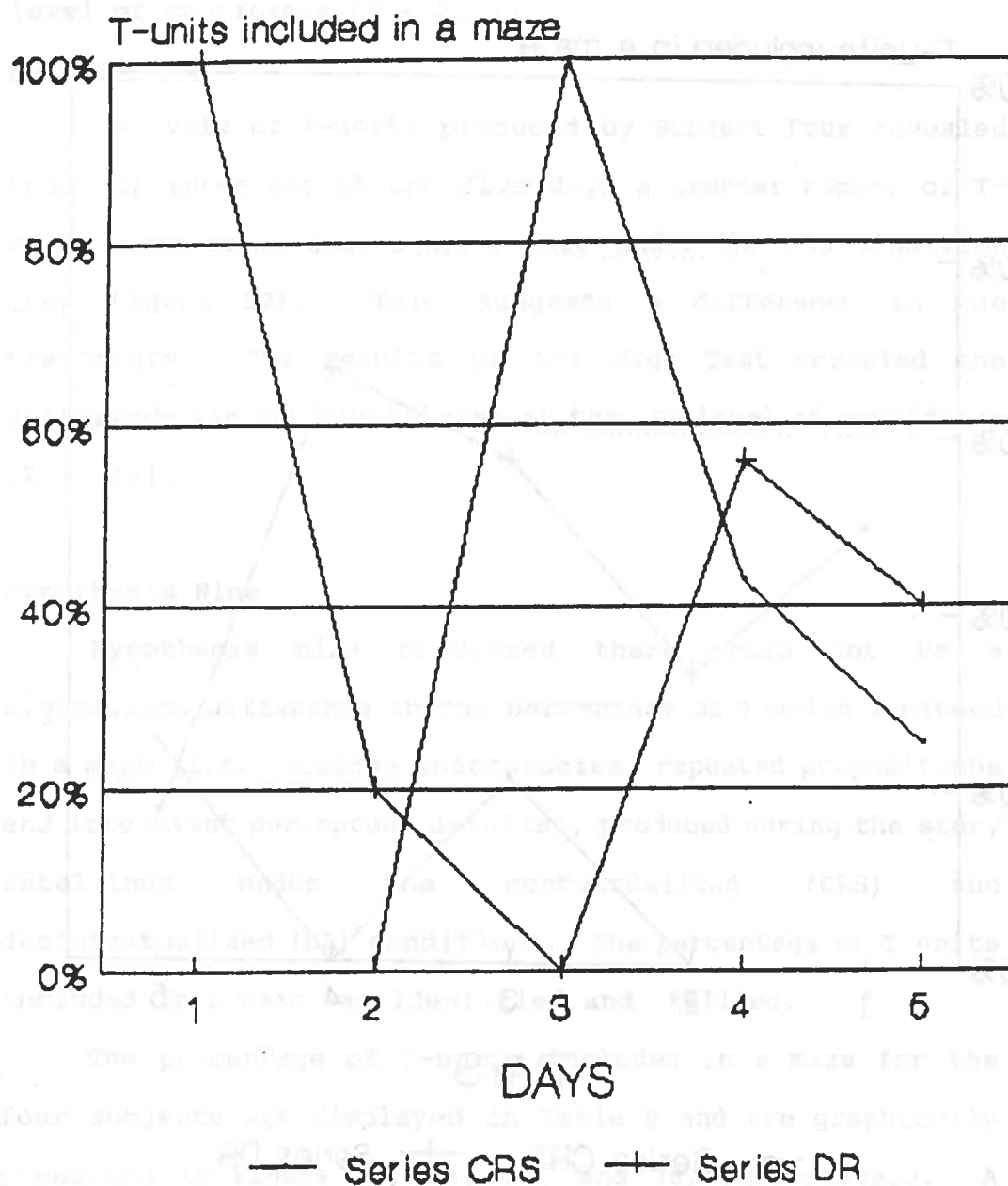


Figure 34. Percentage of T-units included in a maze during a story retelling by Subject Two

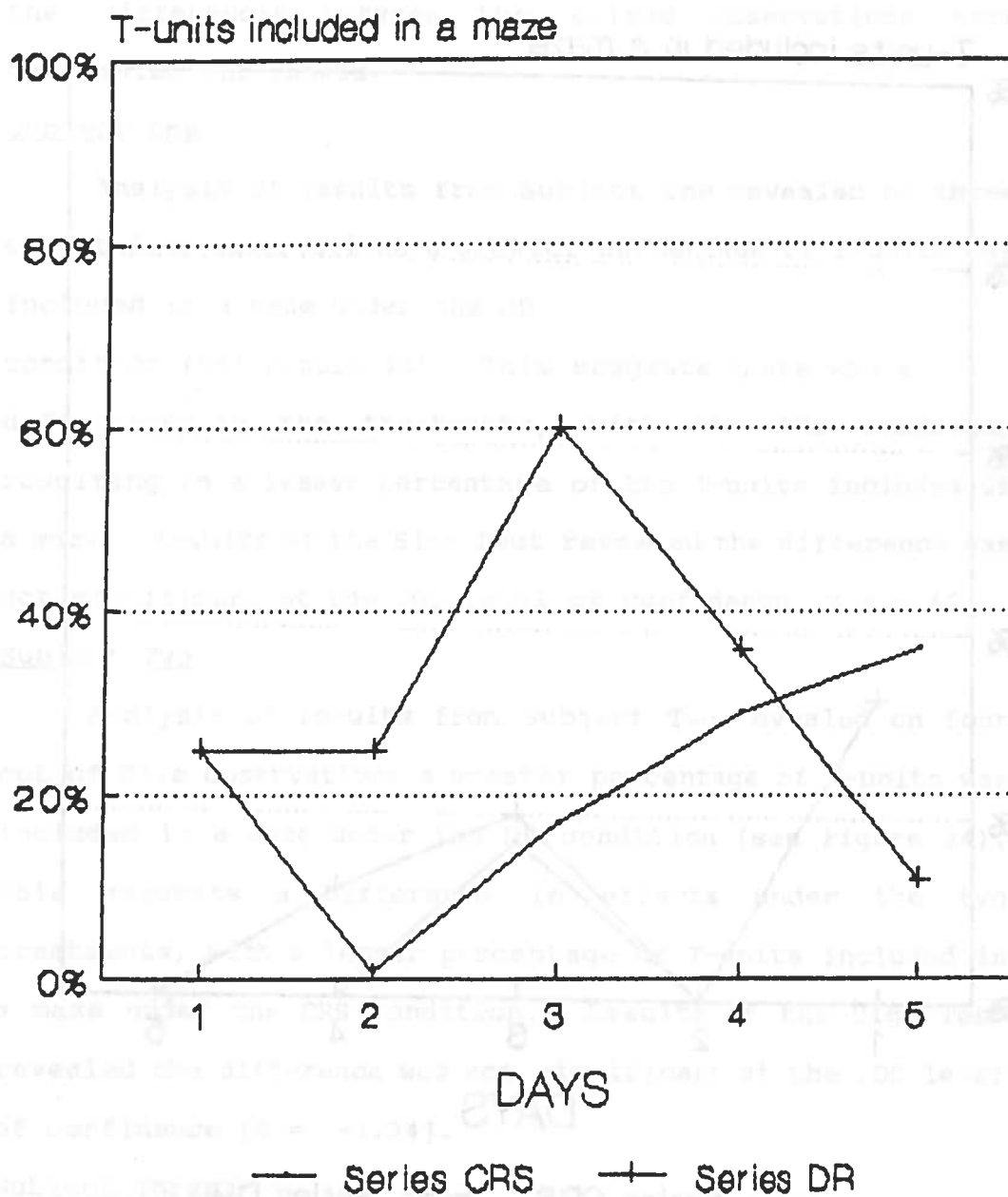


Figure 35. Percentage of T-units included in a maze during a story retelling by Subject Three

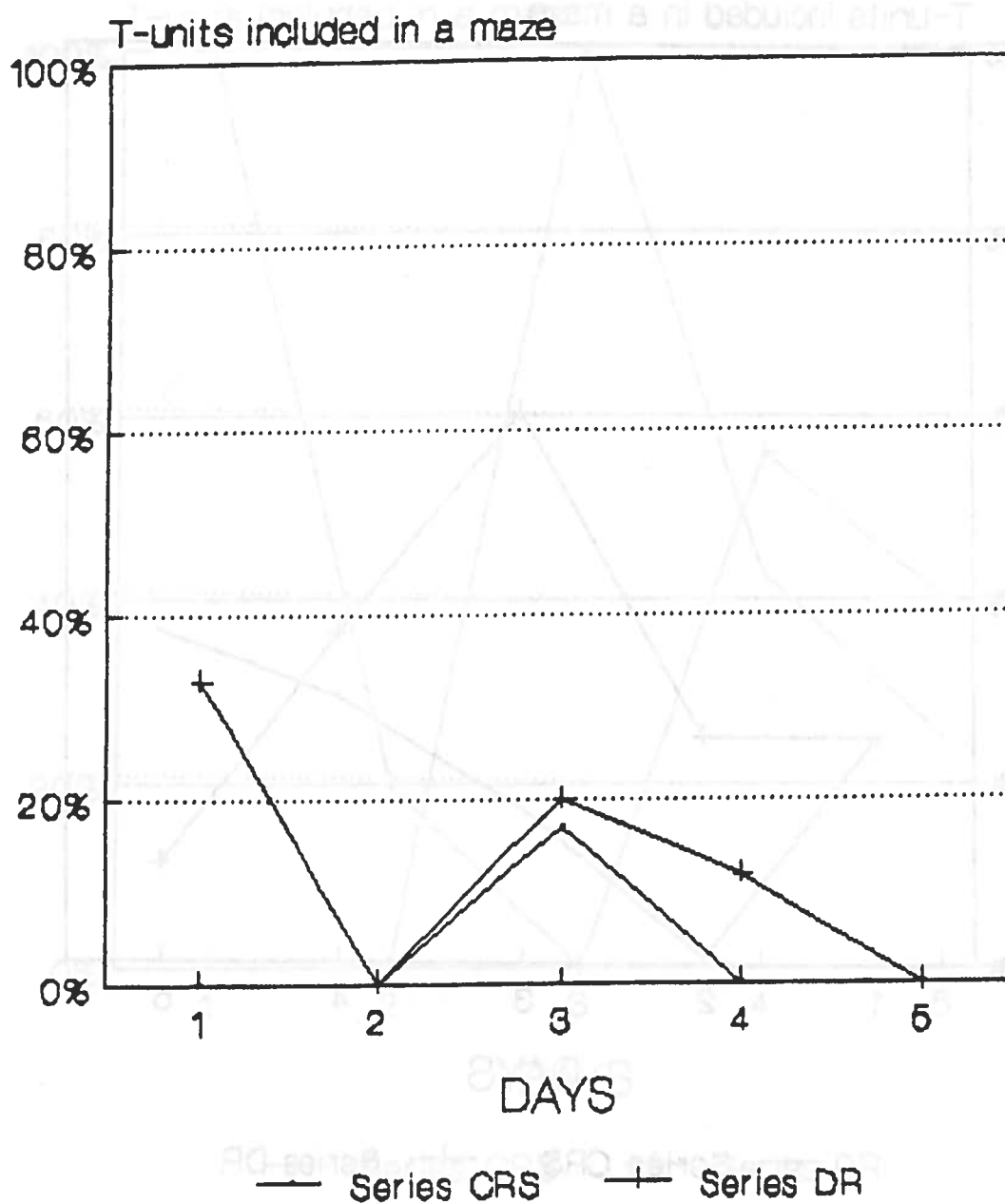


Figure 36. Percentage of T-units included in a maze during a story retelling by Subject Four

divergence of data points representing the two treatment across the five sessions. The Sign Test for paired observations was conducted on the data for each subject, and the differences between the paired observations were calculated and ranked.

Subject One

Analysis of results from Subject One revealed on three out of five observations a greater percentage of T-units was included in a maze under the DR condition (see Figure 33). This suggests there was a difference in the treatments, with the CRS condition resulting in a lesser percentage of the T-units included in a maze. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$Z = -.45$].

Subject Two

Analysis of results from Subject Two revealed on four out of five observations a greater percentage of T-units was included in a maze under the DR condition (see Figure 34). This suggests a difference in effects under the two treatments, with a lesser percentage of T-units included in a maze under the CRS condition. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$Z = -1.34$].

Subject Three

Analysis of results from Subject Three revealed on three out of the five observations, a greater percentage of T-units

was included in a maze under the DR condition (see Figure 35). On day one no difference in the treatments were observed, and on day five the CRS treatment resulted in a greater percentage of T-units included in a maze. This suggests a difference in effects under the two treatments, with the CRS treatment resulting a lesser percentage of T-units included in a maze. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$Z = -.45$].

Subject Four

Analysis of results from Subject Four revealed no difference in the percentage of T-units included in a maze under either treatment (see Figure 36). Results of the Sign Test revealed this difference was not significant at the .05 level of confidence [$Z = 1.34$].

Summary

Question Three compared the effects of the contextualized instructional condition (CRS) versus the decontextualized instructional condition (DR) on producing differences in the completeness of a story retelling. Two hypotheses were used to test this question, including number of T-units not included in a maze, and percentage of T-units included in a maze. The Story Length, as measured by T-units not included in a maze was the most discriminating of the two dependent measures. These analyses showed an advantage under

the CRS condition, where the results of two subjects were significant (subjects one and three) and the trends for the other two subjects showed a greater number of T-units not included in a maze under the CRS condition. The percentage of T-units included in a maze showed a reduction under the CRS condition for Subjects One, Two and Three. The performance of Subject Four revealed no difference in the percentage of T-units included in a maze under either condition.

Question Four

The effect of the contextualized instructional condition (CRS) compared to decontextualized instructional condition (DR) on producing differences in the complexity of a story retelling was examined by question four. One hypothesis, Hypothesis Ten, was tested, representing a measure of the comprehension of the causal, temporal and additive relations of the story, as evidenced by the use of these relations in the subjects' story retellings.

Hypothesis Ten

Hypothesis Ten predicted that there would not be a significant difference in the number of interepisodic relations produced during the story retelling under the contextualized (CRS) and decontextualized (DR) conditions. Complexity was measured by the number of interepisodic

relations used in the story retelling, which were identified and tallied for each subject.

The number of interepisodic relations produced by the four subjects are displayed in Table 10 and are graphically presented in Figures 37, 38, and 39, respectively. A visual analysis was conducted using the graphic representation in each figure. Each analysis examined the divergence of data points representing the two treatments across the five sessions. The Sign Test for paired observations was conducted on the data for each subject, and the differences between the paired observations were calculated and ranked.

Subject One

Analysis of interepisodic relations produced by Subject One revealed on days one and four the data points converged at zero, but on days two, three and five there was a clear divergence of the data points (see Figure 37). This suggests a difference in effects from the treatments, with the CRS condition resulting in the production of more interepisodic relations than the DR treatment, which did not result in any interepisode relations on any of the five days. Results of the Sign Test revealed was not significant at the .05 level of confidence [$Z = .45$].

Subject Two

Analysis of interepisodic relations produced by Subject Two revealed the story retellings did not consist of any multi-episodic narratives, therefore a visual and

Table 10
Number of Additive, Temporal and Causal Relations Produced
under the Conditions of Contextualized Instruction (CRS) and
Decontextualized Instruction (DR)

<u>Interepisode</u> <u>Relations</u>	<u>Treatment series</u>									
	<u>Day 1</u>		<u>Day 2</u>		<u>Day 3</u>		<u>Day 4</u>		<u>Day 5</u>	
	CRS	DR	CRS	DR	CRS	DR	CRS	DR	CRS	DR
Subject One										
Additive	0	0	0	0	1	0	0	0	1	0
Temporal	0	0	1	0	2	0	0	0	1	0
Causal	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	3	0	0	0	2	0
Subject Two										
Additive										
Temporal										
Causal										
Total	0	0	0	0	0	0	0	0	0	0
Subject Three										
Additive	0	0	0	0	1	0	0	0	0	0
Temporal	0	0	1	0	2	0	3	1	2	1
Causal	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	3	0	3	1	2	1
Subject Four										
Additive	0	0	0	1	1	1	0	0	0	1
Temporal	0	0	0	0	0	0	1	2	2	0
Causal	0	0	0	0	0	1	1	0	0	2
Total	0	0	0	1	1	2	2	2	2	3

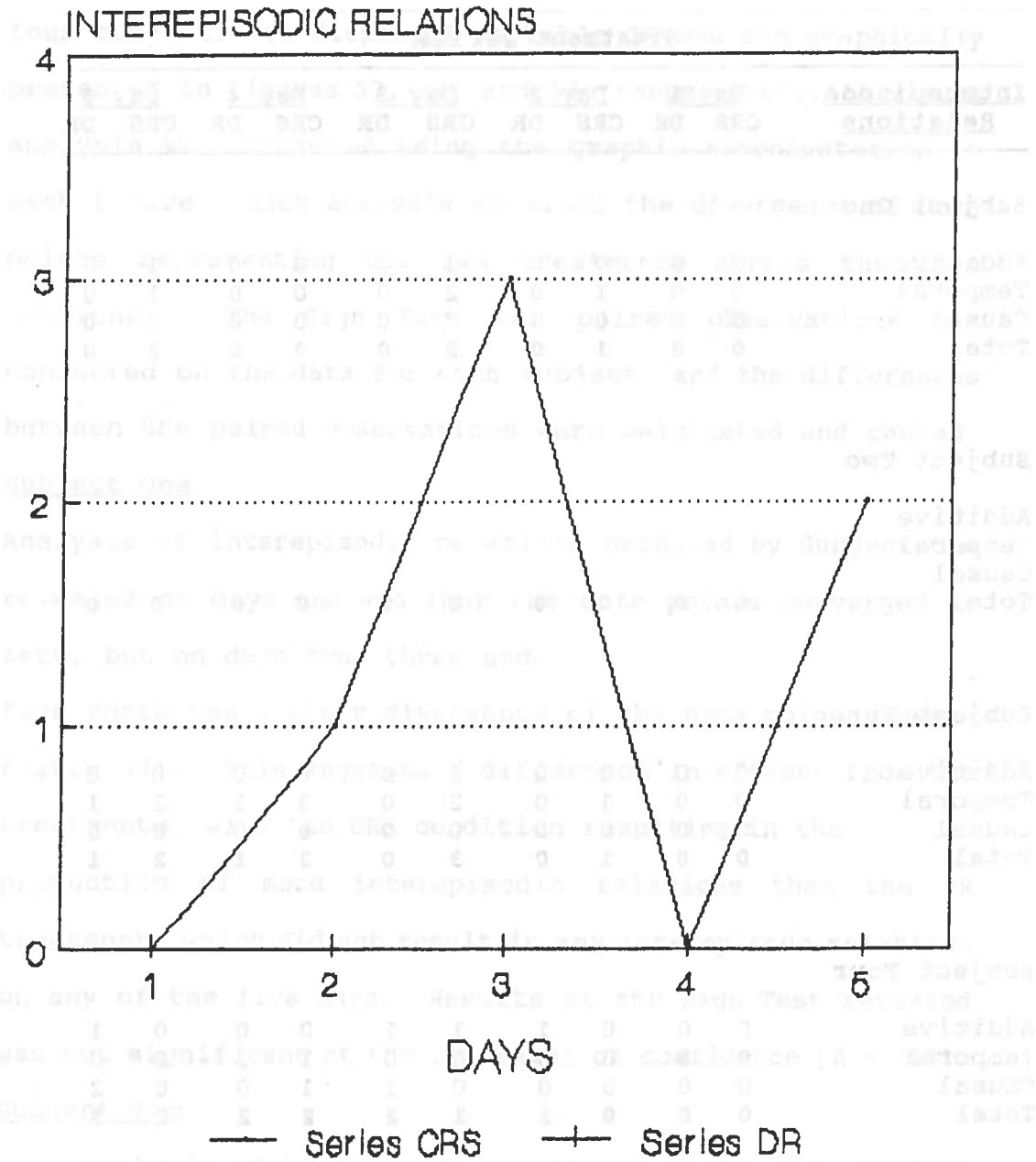


Figure 37. Number of Interepisodic relations produced during a story retelling by Subject One

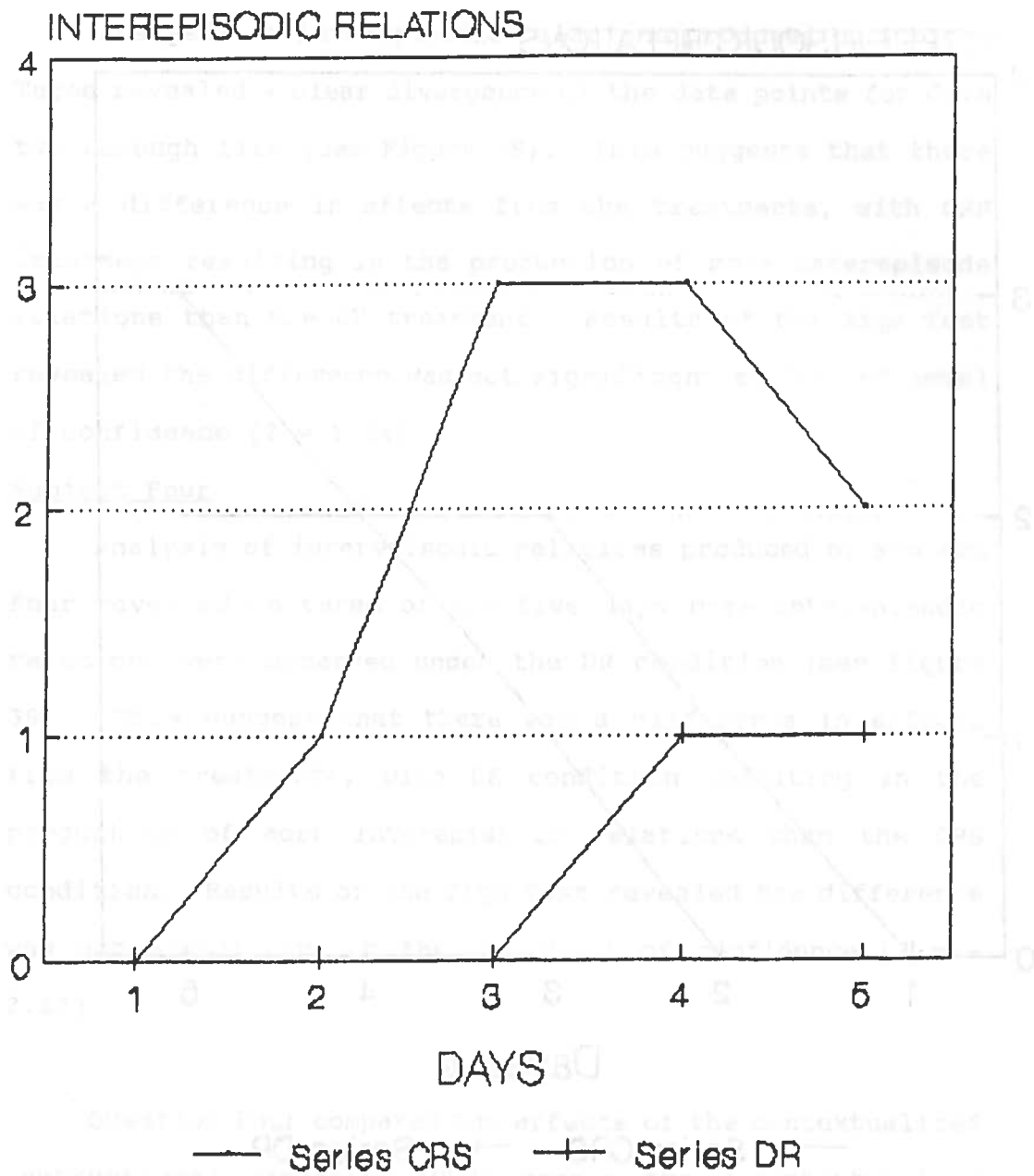


Figure 38. Number of Interepisodic relations produced during a story retelling by Subject Three

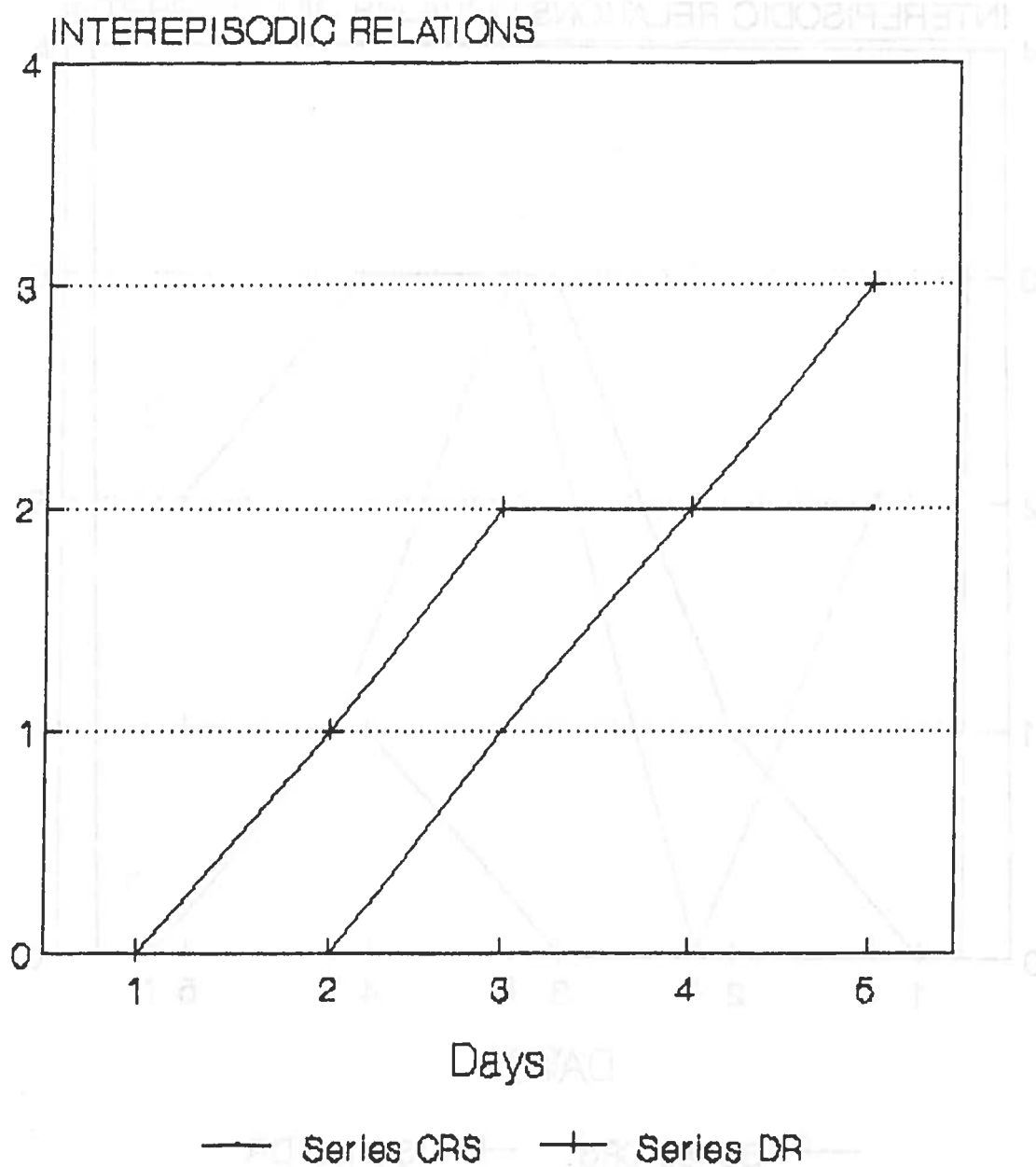


Figure 39. Number of Interepisodic relations produced during a story retelling by Subject Four

statistical analysis were not applicable. Table 7 does display the scores for this variable.

Subject Three

Analysis of interepisodic relations produced by Subject Three revealed a clear divergence of the data points for days two through five (see Figure 38). This suggests that there was a difference in effects from the treatments, with CRS treatment resulting in the production of more interepisode relations than the DR treatment. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$Z = 1.34$].

Subject Four

Analysis of interepisodic relations produced by Subject Four revealed on three of the five days more interepisodic relations were observed under the DR condition (see Figure 39). This suggest that there was a difference in effects from the treatments, with DR condition resulting in the production of more interepisodic relations than the CRS condition. Results of the Sign Test revealed the difference was not significant at the .05 level of confidence [$Z = -2.23$].

Summary

Question Four compared the effects of the contextualized instructional condition (CRS) versus the decontextualized instructional condition (DR) on the complexity of the story retelling. Hypothesis Ten was used to test this question,

including the comprehension of the causal, temporal and additive relations of the story, as evidenced by the use of these relations in the subjects' story retellings. These analyses showed trends that favored the CRS condition for subjects One and Three, while Subject Four showed trends that favored the DR condition. Subject Two did not produce any multi-episodic story retellings, therefore this analysis was not applicable.

DISCUSSION

Children from different socioeconomic and ethnic groups arrive at school with different experiences (e.g., being told stories, being read to, receiving help in constructing descriptions of past events, being asked tutorial questions) which serve as preparatory sets for literacy. The academic problems experienced by low SES children have been hypothesized to be related, in part, to these different experiences. The academic problems are not the result of a disorder, but rather to a lack of opportunities for the sociocognitive processes to refine language sufficiently for maximal displacement of symbols from their referents to occur. Without experiences using language to create the "then and there" it remains bound to the "here and now".

The transition from the contextualized use of language characteristic of the language phase of development, to the decontextualized or literate style of the linguistic phase occurs partially in response to the qualitative changes in cognitive functioning described by Piaget (1952). These periods of rapid neurological growth and change (Parkins, 1990). But semantic complexity and sign usage also are integrally related to social development, or the ability to share knowledge via symbols within social situations external to the child.

Researchers have examined the relationship between children's use of narrative features valued by the mainstream

society and literacy achievement in schools. The literature has documented differences in language performances among various cultural, ethnic and socio-linguistic groups. Many minority cultures have been identified as users of an oral language style, which is the product of language found at the contextual end of the continuum of language development. Regardless of the increasing cultural and linguistic diversity of the school-age population, schools pedagogical methods employ language styles that are characteristic of the decontextual end of the language continuum. This study questioned whether the strategy of using contextualized activities (i.e., Communicative Reading Strategies) to facilitate language processing (i.e., vocabulary acquisition and recognition, grammatical understanding, narrative structure and passage comprehension) during the process of reading would result in better internalization of a written story than would decontextualized activities (i.e., Directed Reading) targeting the same behaviors immediately preceding or following oral reading.

Accuracy and Fluency of Rereading

The first three hypotheses investigated the immediate effects of the contextualized (CRS) and decontextualized (DR) treatment conditions on word recognition and reading fluency. A positive effect of the treatment should be reflected in a more accurate and fluent rereading of the passage introduced

during the treatment session. Both the significant results and the trends in the data favored the CRS condition. Subject One improved to the greatest extent, demonstrating significantly fewer miscues in less reading time under the CRS condition across all five sessions, and with more appropriate phrasing and intonation on all but one session. The remaining three subjects showed no differences in appropriate phrasing and intonation across the five sessions.

Two subjects produced statistically significantly fewer miscues under the CRS condition, and completed the passage in less time (both at a level of significance). The trends in the data for the remaining two subjects reflected similar patterns of miscues under the CRS and DR conditions, and similar profiles of reading rate.

There was an interaction between direct word recognition instruction and treatment conditions. That is, even though the subjects received direct word recognition instruction (direct vocabulary practice) under the decontextualized condition (DR), they recognized an equal number or more words under the contextualized condition (CRS) where word recognition was facilitated in context based on meaning.

There also was an interaction observed between the reduction of miscues and an increase in rate of word recognition under the contextualized condition (CRS). That is, as the subjects recognized more words, their rate of recognition increased.

The results suggest that intervention that treats reading as a contextualized communicative process is as effective for some subjects as DR, and more effective for other subjects at improving recognition of written language. The improvement in word recognition directly impacted the rate of word recognition for low achieving students.

Narrative Structure of Story Retellings

Hypotheses four, five, six, and seven investigated the immediate effects of the contextualized (CRS) and decontextualized (DR) treatment conditions on story retelling. A positive effect of the treatment should be reflected in a retelling consisting of more story grammar components, total story episodes, complete episodes, and a higher percentage of episodic integrity.

Results suggested that the story read had a greater effect than the treatment condition. Both the significant results and the trends in the data favored the condition that used the story The Kick-a-lot Shoes. Subject One improved to the greatest extent, producing more story grammar components, total episodes, complete episodes, and a higher episodic integrity of the story retelling under the CRS/KS condition across all five sessions. Subjects One and Three showed a significant difference in the inclusion of story grammar components, producing a greater number of components in their story retellings under the CRS condition. Subject Four

produced a greater number of story grammar components under the CRS condition, however this difference was not statistically significant. The use of the story grammar components and the total episodes produced are an indication of what children know about the organization of stories and how they are mentally organizing the stories.

Differences in the results were seen in the percentage of complete episodes included in the story retelling. Two of the four subjects, Subjects One and Four, showed a minimal difference in the use of episodes to organize their story retelling under the CRS condition. Subject Two showed a minimal difference in the use of episodes to organize her story retelling under the DR condition. Subject Three's use of episodes to organize her story retelling was similar under the two conditions.

The number of complete episodes and the episode integrity were examined for the purpose of determining the completeness of the story retelling. Subject One's story retellings consisted of a greater percentage of complete episodes and episode integrity under the CRS condition. Three of the four subjects, Subjects Two, Three, and Four, showed no difference in the percentage of complete episodes or the episode integrity of their story retellings. These results are consistent with the results of the pretest narrative. A similar lack of story grammar and episodic organization was observed in the pretest narrative. Although

Subject One's narratives were longer, none of the subjects produced narratives that could be subjected to a story grammar or episode analysis. Their narratives did not have a goal and they were action based. It supports the theoretical position that if children are unable to manipulate symbols at the linguistic level, then children will be unable to tell a story, and will have difficulty manipulating symbols during reading. Subjects two, three, and four had more difficulty on the rereading tasks than subject one, who performed better on the rereading and story retelling tasks.

Accuracy and Complexity of Story Retellings

Story retelling has been used as a measure of comprehension ability for populations of children with language delays or disorders (i.e., deaf, mentally retarded children, and learning-disabled students). These investigations have shown these populations routinely retell less story information (Merritt & Liles, 1987). Little is known about the story retelling abilities of culturally different children. Hypotheses eight, nine, and ten investigated the immediate effects of the contextualized (CRS) and decontextualized (DR) treatment conditions on comprehension of the story read and the accuracy of the story retellings.

Story length was used as a measure of comprehension. A positive effect of the treatment should be reflected in a retelling consisting of a greater number of T-units not included in a maze and a lower percentage of T-units included in a maze. Both the significant results and the trends in the data favored the contextualized (CRS) condition. Subjects one and three produced significantly more T-units that were not included in a maze under the CRS condition. Subjects two and four produced more T-units that were not included in a maze under the CRS condition.

Comprehension of the story also was measured by a reduction in maze behavior (i.e., message inaccuracies, perceptual details, and repeated propositions) during story retelling under the contextualized (CRS) and decontextualized (DR) treatment conditions. The number of T-units in a maze was tallied. A positive effect of the treatment should be reflected in a retelling consisting of a lower percentage of the total T-units included in a maze. The story retellings of the four subjects reflected trends of reduction in the percentage of T-units included in a maze under the contextualized (CRS) condition. These results suggest that through the use of contextualized instruction, narrative differences may be amenable to rapid change.

Children begin to demonstrate the capacity for producing structurally complete narratives by five or six years of age (Applebee, 1978; Botvin & Sutton-Smith, 1977; Roth & Spekman,

1986). The early stages of narrative development are characterized by the emergence of story themes (macrostructures) and cohesive devices that specify the relationship and organization among story elements and multiple episodes (microstructures), which emerge around age seven (Botivin and Sutton-Smith, 1977; Westby, 1992). Westby (1992) posited that in emerging multiple-episodic stories, each episode may be shorter and less elaborate than a single, complete-episode story. Specifically, many first multiple-episode stories are chains of reactions, sequences, or goal-directed episodes. It is not until children reach the ages of nine to ten years that they include considerable detail in each episode of a multiple-episode story, and that each episode is complete (Westby, 1992). In the normal sequence of narrative development, multiple-episode stories emerge after the acquisition of complete single-episode stories. Westby (1992) noted that this sequence of development may not be followed by Learning Disabled students, because they may progress from reactive or goal-directed episodes directly to simple multiple-episode stories without the ability to produce a complete-episode story.

The results of this study were consistent with those research findings. Hypothesis ten investigated the immediate effects of the contextualized (CRS) and decontextualized (DR) treatment conditions on the use of relational concepts during story retellings. A positive effect of the treatment should

be reflected in a retelling consisting of more relational concepts (i.e., temporal, causal, additive ties). The results of Subjects One and Three reflected trends of more relational concepts used in the story retellings under the contextualized (CRS) condition. Subject Four used more relational concepts during the story retelling under the decontextualized (DR) condition, which used the story The Kick-a-lot Shoes as a stimulus. Subject Two did not retell multiple episodic stories, therefore this variable did not apply.

Limitations of Study

This study investigated the relative effects of two types of reading approaches on story rereading and retelling. In many cases, no clear advantage was accrued to either condition. The significant findings and trends that were obtained favored the contextualized (CRS) treatment condition, and suggest that this approach was advantageous, at least for some subjects. Several factors restrict the generalization of the results at this time. Only four female subjects participated in this study. This number is small and the population was homogeneous in many dimensions. Further replications with a broader range of children differing in age, gender, ability level, and geographic locale are needed to adequately evaluate the effects of the treatment.

The study was conducted over a five day period, evaluating only immediate and not long-term effects. Because of the short period of the study, few data points were collected, which directly impacted on the number of significant differences and trends of differences observed. An extended study, with a longer observation period, would allow more time to determine if stability in the trends would be achieved.

The Sign Test for paired observations was used to determine the significance of differences observed. Two weaknesses of this test are that it does not consider zeroes or negative differences in its calculation, and that significance is based on an "all or none" criterion (i.e., 4/5 times favored CRS is insignificant; 5/5 times favored CRS is significant). A larger population or an extended period of treatment would allow for a more sensitive statistical measure to be applied to measure differences in the treatment.

The two stories employed in the study were matched for equal story grammar, vocabulary, length, and sentence structure. Although on the surface the stories appeared to be equal, differences in structure and familiarity with the story script existed. These differences presented difficulty for the subjects and affected their response to the different variables of the study.

The majority of the analytical frameworks currently used to evaluate narratives suggest that the structure of stories is universal and that the same approach can be used to assess any narrative regardless of individual differences or context (Gutierrez-Clellen & Quinn, 1993). Researchers have documented differences in narrative information and organization (Clancy, 1980; Gutierrez-Clellen, & Quinn, 1993; Heath, 1983; Iglesias, Gutierrez-Clellen, & Marcano 1986; Labov, 1972; Scollon & Scollon, 1984; Tannen, 1980, 1982, 1984) and paralinguistic conventions (Gee, 1986; Gumperz, Kaltman, & O'Connor, 1984; Gutierrez-Clellen & Quinn, 1993; Michaels, 1986; Scollon & Scollon, 1979, 1982) among various cultural/ethnic/linguistic groups. This study employed a story grammar analysis (Stein & Glenn, 1979) to evaluate the structures of the story retellings. Story grammar analysis could not accommodate the repetitions and paralinguistic conventions used by the subjects, therefore this information had to be deleted. The subjects used repetition of ideas and changes in intonation to convey meaning. This information could not be coded for use in the story grammar analysis. The increasing cultural and linguistic diversity of the school-age population requires a search for unbiased approaches to narrative assessment.

Implications for Instruction

This study predicted that for children with socio-economically related language differences, a contextualized approach to reading instruction, such as Communicative Reading Strategies, would result in positive differences when compared to a decontextualized approach, such as Directed Reading. Though that prediction was substantiated statistically only three times for Subject One, one time for Subject Two, and three times for Subject Three, the Directed Reading approach did not hold any advantages over the CRS instruction on any measures of story rereading or retelling. Moreover, the trends on every measure favored the CRS treatment condition. That is, the subjects showed equal or more improvement, though not significantly more improvement on most measures. The variables that were the least discriminating were intonation, number of complete episodes, and episodic integrity, for which three of the subjects showed no difference between treatments and the fourth showed trends of better performance under the CRS condition. Mixed results were obtained for the interepisodic relations, where two subjects performed better under the CRS condition, one subject performed better under the DR condition, and the fourth did not produce any multi-episodic story retellings, therefore the variable did not apply.

If the ability to create and refer to concepts semantically is hierarchically arranged in complexity along

a continuum ranging from contextualized to decontextualized reference, and a child's narrative indicates that the child is functioning at the contextualized end of the language continuum, then reading approaches that require the use of decontextualized language would place the child at-risk for academic failure. A contextualized approach, such as CRS, systematically adds complexity to the child's language along the dimension of the literate language continuum. CRS presents the language within a context of use that is relevant to the child's classroom environment, and provides opportunities for the child to practice the language. These goals are accomplished without splintering language into discrete, decontextualized skills, as in the Directed Reading approach. With the increasing cultural and linguistic diversity, these results suggest that a semantic based contextualized approach to instruction, such as CRS, may be a more appropriate method for culturally and linguistically different children.

CRS was shown to be effective in reducing miscues without the use of isolated phonic drills. This suggests that increased word recognition can be achieved without direct isolated phonic instructions, and that greater benefits may accrue from an emphasis on meaning. An integrated approach to learning will assist the child with a less flexible language system to internally organize the language for use in a variety of contexts.

CRS also was shown to be effective in facilitating the retelling of longer stories, as measured by T-units that were not included in a maze. Retelling a story is indicative of what is understood about the event. The emphasis on establishing the meaning of the words, sentences, and events as a shared process between the adult and child presents advantages over an approach where less time is devoted to the meaning-making process. The CRS approach provides the child with information while giving the child repeated opportunities to express that information using language (Norris & Hoffman, 1993). This sharing of information and communication about the events in the story increases the child's ability to talk about the story with greater specificity and refinement. This was reflected in the number of T-units in a maze. Three out of four subjects showed a reduction in the production of maze behaviors under the CRS treatment condition.

Without direct vocabulary instructions, word recognition improved under the CRS treatment condition, as evidenced by the reduction of miscues. All four subjects showed a reduction in miscues under the CRS condition, in most cases to a greater extent than when they were provided direct vocabulary instruction in the DR condition. This suggests that direct isolated vocabulary instruction may be less beneficial than vocabulary learning that occurs in context.

Future Research

The results of this study yielded several suggestions for future research. First, because the study was replicated only four times, future studies using subjects from various age, cultural, and ability groups may provide more insights into the relative benefits of direct versus indirect instruction.

Secondly, future studies using a statistical measure that considers both positive and negative effects of the treatment and a longer period of observation should be conducted to test the stability of the trends in the nonsignificant findings and provide more conclusive answers to the questions posed in this study.

Third, because this is the first study examining the efficacy of CRS with children exhibiting cultural language differences (earlier studies employed CRS with adult aphasic and language disordered third grade children), future research conducted with populations of socio-economically at-risk children at a variety of age and grade levels would lend further insights into the efficacy of contextualized instruction with this population.

Fourth, because two treatments were manipulated for one subject and it was difficult to control for carryover effects, future research conducted with two comparative subjects administered one treatment may provide more

conclusive information about the effects of the two instructional approaches.

Fifth, because story grammar analysis could not accommodate all of the information elicited from the subjects, future research should consider other narrative analysis procedures that would address additional information about the narrative development of culturally and linguistically different children.

REFERENCES

- Adams, M.J. & Collins, A. (1979). A schema-theoretic view of reading. In R. Freedle, New directions in discourse processing. Norwood, NJ: Ablex.
- Anastasiou, N., Hanes, M.L., & Hanes, M. (1982). Language and reading strategies for poverty children. Baltimore: University Park Press.
- Anderson, R.C., Scott, J.A., Hiebert, E.H., & Wilkinson, I.A. (1985). Becoming a nation of readers: The report of the Commission on Reading. The report of the Commission on Reading. Washington, D.C: The National Institute of Education.
- Applebee, A.N. (1978). A child's concept of story: Ages 2-17. Chicago: University of Chicago Press.
- Aram, D.M., & Nation, J.E. (1980). Preschool language disorders and subsequent language and academic difficulties. Journal of Communication Disorders, 13, 159-170.
- Arwood, E. (1983). Pragmaticism: Theory and Application. Rockville, MD: Aspen.
- Arwood, E. (1991). Semantic and Pragmatic Language Disorders (2nd ed.). Rockville, MD: Aspen.
- Barlow, D.H., & Hayes, S.C. (1979). Comparing the effects of two treatments in a single subject. Journal of Applied Behavior Analysis, 12, 199-210.
- Barlow, D., & Hersen, M. (1984). Single Case Experimental Designs (2nd ed.). New York: Pergamon Press.
- Beck, I.L., McKeown, M.G., & Omanson, R.C. (1984, April). The fertility of some types of vocabulary instruction. Paper presented at the meeting of the American Educational Research Association, New Orleans.
- Beck, I.L., Perfetti, C.A., & McKeown, M.G. (1982). Effects of long-term vocabulary instruction on lexical access and reading comprehension. Journal of Educational Psychology, 74, 506-521.

- Becker, W.C. & Gersten, R. (1982). A follow-up of follow through: The later effects of the direct instruction model on children in fifth and sixth grades. American Educational Research Journal, 19, 75-92.
- Berieter, C., & Englemann, S. (1966). Teaching disadvantaged children in the preschool. Englewood Cliffs, NJ: Prentice-Hall.
- Berstein, B. (1971). On the classification and framing of educational knowledge. In M.F.D. Young (Ed.), Knowledge and Control (pp. 96-97). London: Collier-MacMillan.
- Blank, M. (1982). Moving beyond the difference-deficit debate. In L. Feagans & D.C. Farran (Eds.), The language of children reared in poverty (pp. 245-250). New York: Academic Press.
- Blank, M., Rose, S. A., and Berlin, L.J. (1978). The language of learning: The preschool years. New York: Grune & Stratton.
- Bloom, Lois & Lahey, Margaret. (1978). Language development and language disorders. New York: John Wiley & Sons.
- Bloome, D., & Knott, G. (1985). Teacher-student discourse. In D.N. Ripich & F.M. Spinelli (Eds.), School discourse problems (pp. 53-76). San Diego: College-Hill press.
- Brinton, B., & Fujiki, M. (1984). Development of topic manipulation skills in discourse. Journal of Speech and Hearing Research, 27, 241-256.
- Britton, J. (1982). Writing to learn and learning to write. In G.M. Pradl (Ed.), Prospect and retrospect: Selected essays of James Britton (pp. 94-111). Montclair, NJ: Boynton/Cook.
- Broman, S.H., Nicholas, P.L., and Kennedy, W.A. (1975). Preschool IQ. Hillsdale, NJ: Erlbaum Associates.
- Brown, R. (1973). A first language: The early stages. Cambridge, MA: Harvard University Press.
- Brown, V.L., Hammill, D.D., & Wiederholt, J.L. (1986). Test of Reading Comprehension. Treatments design: One strategy for Austin, TX: Pro-Ed.
- Bruce, B. (1981). A social interaction model of reading. In R. Freedle (Ed.), Discourse Processes (pp. 273-311).

- Bruner, J. (1978). The role of dialogue in language acquisition. In A. Sinclair, R.J. Jarvella, & W.J.M. Levelt (Eds.), The child's conception of language: Springer series in language and communication (pp. 242-256). New York: Springer-Verlag.
- Bruner, J. (1983). Child's talk. New York: W.W. Norton.
- Bruner, J. (1985). Narrative and paradigmatic modes of thought. In E. Eisner (Ed.), Learning and Teaching the Ways of Knowing Chicago: University of Chicago Press.
- Cazden, C. (1986). Classroom discourse. In M.C. Wittrock (Ed), Handbook of research on teaching (3rd ed.) (pp. 432-463). New York: Macmillan.
- Cazden, C.B., John, V.P., & Hymes, D. (Eds). (1973). The function of language in the classroom. New York: Teachers College Press.
- Christenbury, L. & Kelly, P.P. (1983). Questioning: A Path to critical thinking. Urbana IL: Clearinghouse on Reading and Communication Skills. National Council of Teachers of English.
- Coles, G. (1987). The learning mystique: A critical look at "learning disabilities". New York: Pantheon.
- Cole, M., Gay, J., Glick, J.A., and Sharp, D.W. (1971). The cultural context of learning and thinking. NY: Basic Books.
- Collins, J., & Michaels, S. (1986). Speaking and writing: Discourse strategies and the acquisition of literacy. In J. Cook-Gumperz (Ed.), The social construction of literacy (pp. 207-222). New York: Cambridge University Press.
- Collins, J., & Michaels, S. The importance of conversational discourse strategies in the acquisition of literacy. Proceeding of the Sixth Annual Meeting of the Berkeley Linguistics Society, Berkeley, Ca.
- Cook-Gumperz, J. (1986). Literacy and schooling: An unchanging equation? In J. Cook-Gumperz (Ed.), The social construction of literacy (pp. 16-44). Cambridge: Cambridge University Press.
- Cook-Gumperz, J. & Gumperz, J. (1981). From oral to written: The transition to literacy. In M.F. Whiteman, Variation in Writing (p.). Hillsdale, NJ: Lawrence Erlbaum.

- Craig, H.K. (1983). Application of pragmatic language models for intervention. In T.M. Gallagher & C.A. Prutting (Eds.), Pragmatic assessment and intervention issues in language. (pp. 101-127. San Diego: College-Hill Press.
- Craig, H.K. (1991). Pragmatic characteristics of the child with specific language impairment: An interactionist perspective. In T. Gallagher, Pragmatics of Language: Clinical Practice Issues (pp. 163-198). San Diego, CA: Singular.
- Cross, T.G. (1984). Habilitating the language-impaired child: Ideas from studies of parent-child interaction. Topics in Language Disorders, 4, 1-14.
- Cummins, J.P. (1984). Bilingualism and special education: Issues in assessment and pedagogy. San Diego: College Hill Press.
- Decker, C.A. & Decker, J.R. (1992). Planning and Administering Early Childhood Programs. (5th ed.) New York: Macmillan Publishing Company.
- Durkin, D. (1979). What classroom observations reveal about reading comprehension instruction. Reading Research Quarterly, 14, 481-533.
- Edwards, A.D. (1976). Speech codes and speech variants: Social class and task differences in children's speech. Journal of Child Language, 3, 247-265.
- Edwards, A.L. (1973). Statistical Methods (3rd ed.). New York: Holt, Rinehart and Winston, INC.
- Farran, D.C. (1982). Mother-child interaction, language development and the school performance of poverty children. In L.R. Feagans & D.C. Farran (Eds.), The language of children reared in poverty (pp. 15-52). New York: Academic Press.
- Feagans, L. (1982). The development and importance of narratives for school adaptation. In L. Feagans & D.C. Farran (Eds.), The language of children reared in poverty (pp. 95-116). New York: Academic Press.
- Feuerstein, R., Rand, Y., & Rynders, J. (1988). Don't accept me as I am: Helping "retarded" people to excel. New York: Plenum Press.

- Fitzgerald, J., Speigel, D.L. & Teasley, A.B. (1987). Story structure and writing. Academic Therapy, 22, 255-263.
- Flood, J., Jensen, J.M., Lapp, D., and Squire, J.R. (1991). Handbook of research on teaching the english language arts. New York: Macmillan Publishing Company.
- Gee, J.P. (1985). The narrativization of experience in the oral style. Journal of Education, 167, 9-35.
- Gee, J.P. (1986). Literate America on illiterate America: An essay review of *Illiterate America* by Jonathan Kozol. Journal of Education, 168, 126-140.
- Gee, J.P. (1989). Literacy, Discourse, and Linguistic: Introduction. Journal of Education, 171, 5-25.
- Gersten, R. Carnine, D., & Williams, P. (1981). Measuring implementation of a structured educational model in an urban school district. Educational Evaluation and Policy Analysis, 4, 56-63.
- Gersten, R. & Keating, T. (1987). Long term benefits from direct instruction. Educational Leadership, 44, 28-31.
- Gibbs, D., & Cooper, E. (1989). Prevalence of communication disorders in students with learning disabilities. Journal of Learning Disabilities, 22, 60-63.
- Goodman, K. (1986). What's whole in whole language? Portsmouth: Heinemann.
- Goodman, K., & Goodman, Y. (1979). Learning to read is natural. In L. Resnick & P. Weaver (Eds.), Theory and practice of early reading. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Goody, J. (1977). The domestication of the savage mind. Cambridge: Cambridge University Press.
- Gumperz, J.J. (1986). Interactional social construction of literacy. In J. Cook-Gumperz (ED.), The social construction of literacy (pp. 45-68). Cambridge: Cambridge University Press.
- Gursky, D. (1991). After the reign of Dick and Jane. Teacher Magazine, 22-29.
- Gutierrez-Clellen, V.F., & Quinn, R. (1993). Assessing narratives of children from diverse cultural/linguistic groups. Language, Speech, and Hearing Services in Schools. 24, 2-9.

- Hall, W.S., Cole, M., Reder, S., & Dowley, G. (1977). Variations in young children's use of language: Some effects of setting and dialect. In R. O. Freedle (ED), Discourse production and comprehension. Norwood, NJ: Ablex.
- Halliday, M.A.K. (1985). Learning to mean: Explorations in the development of language. London: Arnold.
- Halliday, M.A.K., & Hasan, R. (1976). Cohesion in English. London: Longman.
- Heath, S.B. (1982). What no bedtime story means: Narrative skills at home and school. Language in Society, 2, 49-76.
- Heath, S.B. (1983). Ways with words: Language, life, and work in communities and classrooms. Cambridge: Cambridge University Press.
- Hedberg, N.L. & Stoel-Gammon, C. (1986). Narrative analysis: Clinical procedures. Topics in Language Disorders, 1, 58-69.
- Hernandez, S.N. (1989). Effects of Communicative Reading Strategies on the literacy behaviors of third grade poor readers. Unpublished doctoral dissertation, Louisiana State University.
- Hill, C., & Varenne, H. (1981). Family language and education: The sociolinguistic model of restricted and elaborated codes. Social Science Information, 20, 187-227.
- Hunt, K.W. (1977). Early blooming and late blooming syntactic structures. In C.R. Cooper & L. Odell (Eds), Evaluating writing: Describing, measuring, judging (pp. 91-104). Buffalo, NY: National Council of Teachers of English.
- Johnston, J.R. (1982). Narrative: A new look at communication problems in older language-disorder children. Language, Speech, and Hearing Services in Schools, 13, 144-155.
- Jorm, A.F. (1983). The psychology of reading and spelling disabilities. Boston: Routledge & Kegan Paul.
- Knobloch, H., & Pasamanick, B. (1953). Further observation of the behavioral development of Negro children. Journal of Genetic Psychology, 83, 137-157.
- Kozol, J. (1985). Illiterate America. Garden City, NY: Anchor.

- Labov, W. (1970). The logic of nonstandard English. In F. Williams (ED), Language and poverty. Chicago: Markham.
- Labov, W. (1972). Language in the inner city. Philadelphia: University of Pennsylvania Press.
- Langer, J.A. & Applebee, N. (1986). Reading and writing instruction: Toward a theory of teaching and learning. In Review of Research on Education. Washington, DC: American Educational Research Association.
- Lazar, I., & Darlington, R. (1982). Lasting effects of early education: A report from the consortium for longitudinal studies [Monograph]. Monographs of the Society for Research in Child Development, 47, (2-3, serial No. 195).
- Liles, B.Z. (1987). Episode organization and cohesive conjunctives in narratives of children with and without language disorder. Journal of Speech and Hearing Research, 30, 185-196.
- Loban, W. (1976). Language development: Kindergarten through grade twelve. Champaign-Urgana, IL: National Council of Teachers of English.
- Luria, A.R. (Ed.). (1976). Cognitive Development, Its Cultural and Social Foundations. Cambridge: Harvard University Press.
- MacDonald, J.D. (1982). Communication strategies for language intervention. In D.P. McCloskey, A.M. Guilford, & S.O. Richardson (Eds.), Infant communication: Development, assessment, and intervention, pp. 83-146. New York: Grune & Stratton.
- MacLachlan, B. & Chapman, R. (1988). Communication Breakdown in normal and language learning disabled children conversation and narration. Journal of Speech and Hearing Disorders, 53, 2-7.
- Mandler, J.M., & Johnson, N.S. (1977). Remembrance of things parsed: Story structure and recall. Cognitive Psychology, 9, 111-151.
- Maxwell, S.E., & Wallach, G.P. (1984). The language-learning disabilities connection: Symptoms of early language disability over time. In G. Wallach & K. Butler (Eds.), Language learning disabilities in school-age children (pp. 15-34). Baltimore: Williams and Wilkins.
- McTear, M. (1985). Children's conversation. New York: Basil Blackwell.

- Meek, M. (1982). What counts as evidence in theories of children's literature. Theory into Practice, 21, 284-292.
- Mehan, H. (1979). Learning lessons. Cambridge, Mass: Harvard University Press.
- Merritt, D., & Liles, B. (1989). Narrative Analysis: Clinical Applications of Story Generation and Story Retelling. Journal of Speech and Hearing Disorders, 54, 429-437.
- Meyer, L., Gersten, R. & Gutkin, J. (1983). Direct instruction: A Project Follow Through success. Elementary School Journal, 84, 380-394.
- Michaels, S. (1981). Sharing time": Children's narrative styles and differential access to literacy. Society, 10, 423-442.
- Michaels, S., & Collins, J. (1984). Oral discourse styles: Classroom interaction and the acquisition of literacy. In D. Tannen (Ed.), Coherence in spoken and written discourse (pp. 219-244). Norwood, NJ: Ablex.
- Michaels, S., & Cook-Gumperz, J. (1979). A study of sharing time with first-grade students: Discourse narratives in the classroom [Summary]. Proceedings of the fifth annual meeting of the Berkeley Linguistics Society.
- Miller, p. (1982). Wendy and Beth: Learning language in South Baltimore. Austin: University of Texas Press.
- Moffett, J., & Wagner, B.J. (1983). Student-centered language arts and reading, K-13: A handbook for teachers (3rd ed.). Boston: Houghton-Mifflin.
- Moore, D. (1971). Language research and pre-school language training. In C.E. Lavatelli (ed.), Language Training in Early Childhood Education (pp. 3-49). Urbana: University of Illinois Press.
- Nagy, W.E., Herman, P.A. & Anderson, R.C. (1985). Learning words from context. Reading Research Quarterly, 20, 233-253.
- Nelson, K. (1973). Structure and strategy in learning to talk. Monogr. Soc. Res. Child Dev, 38 (1-2, Serial No. 149): 135.

- Nelson, K. (1985). Making sense: The acquisition of shared meaning. New York: Academic Press.
- Neter, J., Wasserman, W., & Whitmore, G.A. (1979). Applied Statistics. Boston: Allyn and Bacon, Inc.
- Ninio, A. (1983). Joint book reading as a multiple vocabulary acquisition device. Developmental Psychology, 19(3), 445-451.
- Norris, J.A. (1985). Communicative reading strategies: Treating language as a communication process. Nebraska Speech-Language and Hearing Association Journal, 23, 6-9.
- Norris, J.A. (1988). Using communication strategies to enhance reading acquisition. the Reading Teacher, 41, 21-26.
- Norris, J.A. (1989). Providing language remediation in the classroom: An integrated language-to-reading intervention method. Language Speech & Hearing Services in Schools, 20, 205-219.
- Norris, J.A. (1991). From frog to prince: Using written language as a context for language learning. Topics in Language Disorders, 12, 66-81.
- Norris, J.A., & Bruning, R.H. (1988). Cohesion in the narratives of good and poor readers. Journal of Speech and Hearing Disorders, 53, 416-424.
- Norris, J. & Hoffman, P. (1993). Whole language intervention for school-age children. San Diego: Singular Publishing Group, Inc.
- Ong, W.J., S.J. (1982). Orality and literacy: The technologizing of the word. London: Methuen.
- Page, J.L., & Stewart, S.R. (1985). Story grammar skills in school-age children. Topics in Language Disorders, 5, 16-30.
- Parkins, E.J. (1990). Equilibration, mind, and brain: Toward an integrated psychology. NY: Prager.
- Piaget, J. (1952). The language and thought of the child. London: Routledge and Kegan Paul.

- Ramey, C.T., Stedman, D.J., Borders-Patterson, A., & Mengel, W. (1978). Predicting school failure from information available at birth. American Journal of Mental Deficiency, 82, 525-534.
- Reed, C.E. (1981). Teaching teachers about teaching writing to students from varied linguistic, social and cultural groups. In M.F. Whiteman (Ed.), Variation in writing (pp. 139-152). Hillsdale, NJ: Lawrence Erlbaum.
- Ripich, D.N., & Griffith, P.L. (1988). Narrative abilities of children with learning disabilities and nondisabled children: Story structure, cohesion, and propositions. Journal of Learning Disabilities, 21, 165-173.
- Ripich, D.N., & Spinelli, F.M. (1985). School discourse problems. San Diego: College Hill.
- Roberts, J., Burchinal, M., Rabinowitch, S., Koch, M., Bryant, D., & Ramey, C. (1989). Language skills of children with different preschool experiences. Journal of Speech and Hearing Research, 32, 773-786.
- Rosenshine, B.V. (1976). Recent research on teaching behaviors and student achievement. Journal of Teacher Education, 27, 61-64.
- Rosenshine, B.V. (1986). Synthesis of research on explicit teaching. Educational Leadership, 43, 60-69.
- Roth, F., & Spekman, N. (1986). Narrative Discourse: Spontaneously Generated Stories of Learning-Disabled and Normally Achieving Students. Journal of Speech and Hearing Disorders, 51, 8-23.
- Rupley, W.H. & Blair, T.R. (1981). Specification of reading instructional practices associated with pupil achievement gains. Educational and Psychological Research, 1, 161-169.
- Rumelhart, D.E. (1977). Notes on a schema for stories. In D.G. BoBrow & A.M. Collins (Eds.), Representation and understanding: Studies in cognitive science (pp. 211-236). New York: Academic Press.
- Rumelhart, D.E. (1977). Understanding and summarizing brief stories. In D. LaBerge & J. Samuels (Eds.), Basic process in reading: Perception and comprehension (pp. 265-303). Hillsdale, NJ: Lawrence Erlbaum Associates.
- SAS Institute Inc. (1988). SAS/STAT user's guide: Release 6.03. Cary, NC: SAS.

- Schachter, F. (1979). Everyday Mother Talk to Toddlers. New York: Academic Press.
- Schmitt, M.C. & O'Brien, D. (1986). Story grammars: Some caution about the translation of research into practice. Reading Research and Instruction, 26, 1-8.
- Scollon, R., & Scollon, S. (1979). Linguistic convergence: An ethnography of speaking at Fort Chipewyan. Alberta, New York: Academic Press.
- Scollon, R., & Scollon, S. (1981). Narrative, literacy, and face in interethnic communication. Norwood, NJ: Ablex.
- Scollon, R., & Scollon, S. (1982). Narrative, literacy and face in interethnic communications. Norwood, N.J: Ablex.
- Scollon, R., & Scollon, S. (1984). Cooking it up and boiling it down: Abstracts in Athabaskan children's story retellings. In D. Tannen (Ed.), Coherence in spoken and written discourse (pp. 173-200). Norwood, NJ: Ablex.
- Scribner, S. (1979). Modes of thinking and ways of speaking: Culture and logic reconsidered. In R.O. Freeble (Ed.), New directions in discourse processing (Vol. 2). Norwood, NJ: Ablex.
- Sinclair, J. McH., and R.M. Coulthard. (1975). Towards an analysis of discourse: The English used by teachers and pupils. London: Oxford University Press.
- Smith, F. (1985). Reading without nonsense. NY: Teacher College Press.
- Smith, F. (1990). To Think. NY: Teacher College Press.
- Snow, C.E. (1972). Mothers' speech to children learning language. Child Language, 43, 549-565.
- Snow, C.E. (1983). Literacy and language: Relationships during the preschool years. Harvard Education Review, 53, 165-189.
- Spekman, N.J. (1983). Discourse and pragmatics. In C.T. Wren (Ed.), Language learning disabilities: Diagnosis and remediation. (pp. 157-216. Rockville, MD: Aspen.

- Stallings, J. (1975). Implementation and child effects of teaching practices in follow through classrooms. Monograph of the Society for Research in Child Development, 40(163), 7-8.
- Stallings, J. (1976). How instructional processes relate to child outcomes in a national study of follow through. Journal of Teacher Education, 27, 43-47.
- Stein, N., & Glenn, C. (1979). An analysis of story comprehension in elementary school children. In R. Freedle (Ed.), New directions in discourse processing (2nd ed.) (pp. 53-102). Norwood, NJ: Ablex.
- Strominger, A., & Bashir, A. (1977). A nine-year follow-up of language-delayed children. Paper presented at the annual convention of the American Speech-Language-Hearing Association, Chicago, IL.
- Tannen, D. (1982a). Oral and literate strategies in spoken and written narratives. Language, 58, 1-21.
- Tannen, D. (Ed.). (1982b). Spoken and written language: Exploring orality and literacy. Norwood, NJ: Ablex.
- Terrell, B.Y. (1985). Learning the rules of the game: Discourse skills in early childhood. In D.H. Ripich & F.M. Spinelli (Eds.), School discourse problems (pp. 13-27). San Diego, AS: College Hill Press.
- Tough, J. (1977). The development of meaning. New York: Wiley.
- Van Dijk, T.A., & Kintsch, W. (1983). Strategies of discourse comprehension. San Diego: Academic Press.
- Vygotsky, L.S. (1962). Thought and language. (E. Hanfmann & G. Vakar, Ed. and Trans.). Cambridge, MA: MIT Press.
- Vygotsky, L.S. (1978). Mind in society. Cambridge: Harvard University Press.
- Wachs, T., Uzgiris, I., & Hunt, J. McV. (1971). Cognitive development in infants of different age levels and from different environmental backgrounds: Exploratory Investigation. Merrill-Palmer Quarterly, 17, 283-317.
- Wanksa, S.K., & Bedrosian, J.L. (1985). Conversational structure and topic performance in mother-child interaction. Journal of Speech and Hearing Research, 28, 579-584.

- Weaver, P.A. & Dickinson, D.K. (1979). Story Comprehension and recall in dyslexic students. Bulletin of the Orten Society, 29, 157-171.
- Wells, G. (1981). Learning through interaction: The study of language development. Cambridge: Cambridge University Press.
- Wells, G. (1985). The meaning makers: Children learning language and using language to learn. Portsmouth, NH: Heinemann.
- Wells, G. (1986). The meaning makers: Children learning language and using language to learn. Portsmouth, NH: Heinemann.
- Wells, G. & Wells, J. (1983). Learning to talk and talking to learn. Theory Into Practice, 23(3), 190-197.
- Werner, E.E., Bierman, J.M., and French, F.E. (1971). The children of Kauai. Honolulu: University of Hawaii Press.
- Westby, C. (1985). Learning to talk - Talking to learn: Oral-literate language differences. In C. Simon (Ed.), Communication skills and classroom success: Therapy methodologies for language-learning disabled students (pp. 181-213). San Diego: College Hill.
- Westinghouse Learning Corporation. (1969). The impact of Head Start on children's cognitive and affective development. Executive Summary, Ohio University report to the Office of Economic Opportunity. (ED036321). Washington, D.C: Clearinghouse for Federal Scientific and Technical Information.
- Wiederholt, J.L., & Bryant, B.R. (1986). Gray Oral Reading Test Alternating Austin, TX: Pro-Ed.
- Yost, M., Avila, L., & Vexler, E.B. (1977). Effects of learning of post-instructional responses to questions of differing degrees of complexity. Journal of Educational Psychology, 69, 398-401.
- Zigler, E., & Valentine, E. (Eds.). (1979). Project Head Start: A legacy of the war on poverty. New York: The Free Press.

APPENDIX A

Communicative Reading Strategies: Steps and optional strategies that can be used to simultaneously facilitate language and literacy development

Step 1

Provide the child with a Preparatory Set. This should activate very specific background information that suggests to the child what the meaning of the text will be. Any level of Preparatory Set can be provided, depending on the needs of the child and the purposes for the reading event.

Sentence to be read; **An old woman found a big toe**

The Preparatory Set can refer to a sentence

Prep Set: I wonder what she noticed?

OR

The Preparatory Set can be used to parse a difficult sentence into shorter phrases or ideas.

Prep Set: This person (pointing to the old woman) noticed something

Prep Set: and this is what she saw.

OR

The Preparatory Set can be used to unify larger units of meaning, such as a paragraph, particularly when the text is familiar or easy for the child to read.

Prep Set: Find out why it's not smart to take things that don't belong to you

Extend the idea by linking the next phrase or sentence with an additional Preparatory Set.

Extension: I wonder what that old found?

OR

Add Semantic Displacement by modeling an Interpretation, Inference, or Evaluation, including Erudite meanings.

Semantic Displacement: She should have left that toe where she found it!

OR

Associate the information presented in the text with previously read or discussed information.

Association: Oh, the old woman who was riding the motorcycle.

OR

Generalize the information to relevant situations of events that are familiar to the child or that would model an appropriate generalization.

Generalization: She's just like the adventurous older lady that lives in our town!

BUT
IF

the child miscues when reading the text

THEN

Provide a Semantic Cue, such as a synonym or defining characteristics to assist the child to retrieve the word.

Semantic Cue: An old "lady", older than a girl...

OR

Model a Fluent Reading so that the child can hear and see the word as it is used in context. Point to the miscues word as it is read.

Fluent Reading: An old woman found a big toe

OR

Divide the segment read into smaller units, such as phrases or words if the child's reading showed poor fluency inappropriate phrasing, or drops in volume.

Smaller Units: This is what was found (a big toe)
And this is who found it (an old woman)

OR

Paraphrase the text to make the meaning clearer or more evident to the child, followed by reading it using the author's wording.

Paraphrase: This old woman saw a big toe in the garden and so she picked it up. "An old woman..."

OR

The Preparatory Set can be used to become Metalinguistically aware of the structure of the discourse.

Prep Set: Read about the initiating event,
or the thing that changed the old
woman's ordinary existence.

Step 2

The child should be given the opportunity to read a unit of text that roughly corresponds to the Preparatory Set, or slightly more if the child maintains fluency and success.

Step 3

IF

the child reads the text fluently

THEN

Acknowledge the communicative value of what was read by responding as if the child had orally told the information in conversation.

Acknowledgement: She really is old!

OR

Expand the complexity of the sentence to include more markers of time, location, state, or attributions.

Expansion: There was a very old woman!

OR

Expatiate by adding information that elaborates on the information communicated by the text.

Expatiation: An old woman with wrinkles and warts!

Remind the child of some previously read, discussed, or relevant "Old Information" that will help the child associate the print with meaning.

Old Information: Remember - How did we describe the person on the motorcycle?

OR

Reinforce the word, building a Network of information related to it using Expansion, Extension, Expatiation, Semantic Displacement, Association, Generalization, and so forth.

Step 4

Following the reading of the passage, Metalinguistically Analyze the words that were difficult for the child, beginning with information already known by the child about its orthographic structure.

Analysis: As a writer, how would you spell the word "woman"?

APPENDIX B

Direct Instruction Worksheets

Day 1: Conjunctions.....	200
Day 2: Prepositional Phrases.....	201
Day 3: Verb Phrases.....	202
Day 4: Describing Words/Adjectives.....	203
Day 5: Story Grammar.....	204

Name _____ Date _____

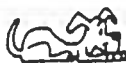


Use the word **and** to combine the sentences.
Write the new sentence on the lines.

Example: I like cereal. I like milk.
I like cereal and milk.

1.

I like dogs.



I like cats.



2.

We have candy.



We have gum.



3.

I will eat ham.



I will eat eggs.



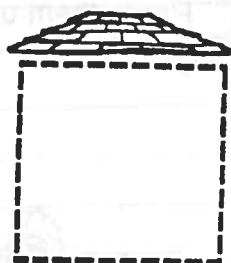
Name _____

201
Skill: Inferences

Where Do I Go?

Write words from the Word Box on the lines. Cut and paste the pictures in the correct boxes.

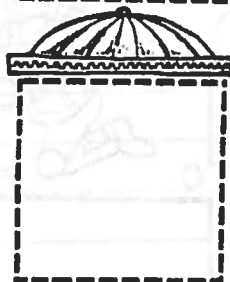
1. Todd broke his leg. Dad and I took him to the



Word Box

bank
bakery
library
hospital

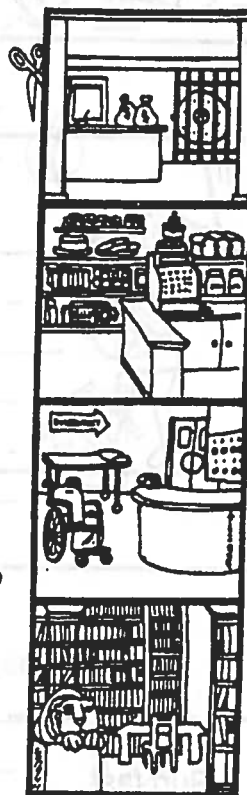
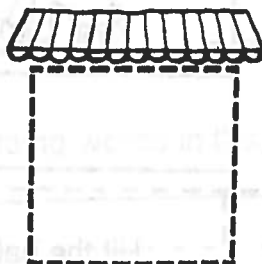
2. Jill likes books about pandas. She can check out books at the



3. Mom is buying a car. She will borrow money from the



4. My family buys donuts on Saturday at the



Brainwork! Draw a picture of a place where you like to go.
Write a sentence about your picture.

Name _____

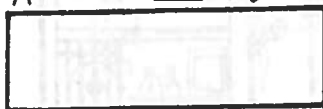
Date _____



Circle the **verb** in each sentence.
Cut out the sentence strips.
Paste them under the correct pictures.



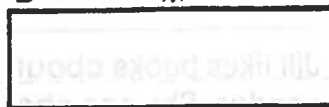
A



C



B



D



F



E



Run fast.

Hit the ball.

Throw it to me.

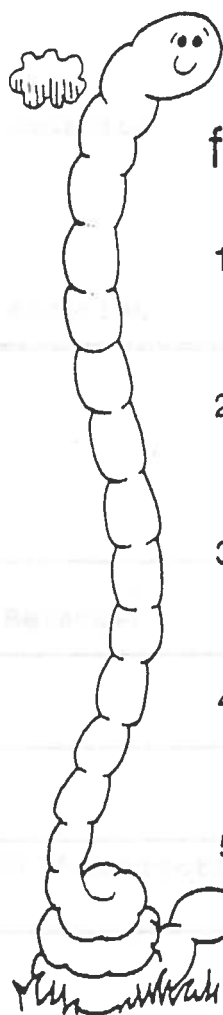
Sit on it.

Jump rope.

Slide down.

Verbs

Name _____ Date _____



Write a **describing word** in each sentence to make it longer.

funny big little good red

1. Here is a - - - - -



2. I see - - - - - on it.



3. I will get a - - - - -



4. I will make a - - - - -



5. It will be a - - - - - for me.



Write two of your own describing words in this sentence.

This is a - - - - -



Telling About Books
Title
Setting
Main Characters
Problem
Attempt to solve the problem
How the problem was solved
How characters felt at the end
How did you like the story?

APPENDIX C

Coding Miscues

1. Omission Circle the word omitted.
Example: The people looked up.
2. Addition Place a caret at the point of addition and write the word.
Example: The ^{mean}witch went after the mail carrier.
3. Reversal Indicate the change in word sequence as shown in the example.
Example: What can I do?
4. Self-Correction Draw a slash across the word.
Write the incorrect word and an arrow pointing to the text word that was corrected.
Example: "Very, very ~~mean~~^{men},"....
5. Word Provided A slash is placed on the word if the child pauses for "word providing". That is, if a five second pause occurs in which the student makes no audible attempt to

read a word and the word is provided. If the student attempts to "sound out" the word, she is given 10 seconds to decode; then the word is provided. The deviations are marked with a slash and the word is circled.

Example: A police officer came up to the witch.

6. Substitution Write the substituted word directly

above the correct word.

Example: ^{Wish}
~~witch~~

APPENDIX D

Analysis of the CRS and DR Sessions

Directions: Read and answer the questions as they relate to the equality of the two treatments, Contextualized and Decontextualized treatments, shown in the three randomly selected video taped treatment sessions.

1. Was equal enthusiasm for the treatment conditions communicated to the subjects?
Yes ____ No ____
2. Were the procedural objectives clear for both conditions?
Yes ____ No ____
3. Did the examiner target the same objectives under both conditions?
Yes ____ No ____
4. Were the directions and explanations related to the lesson content and/or learning tasks effective?
Yes ____ No ____
5. Was equal time allotted for both treatments?
Yes ____ No ____
6. Were methods used appropriate to enhance learning?
Yes ____ No ____
7. Were activities logically sequenced?
Yes ____ No ____

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Linda C. Badon

Major Field: Communication Disorders

Title of Dissertation: Comparison of Word Recognition and Story Retelling
under the Conditions of Contextualized Versus
Decontextulized Reading Events in At-Risk Poor Readers

Approved:



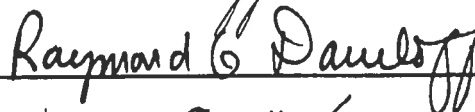
Major Professor and Chairman




Dean of the Graduate School

EXAMINING COMMITTEE:











Date of Examination:

7/13/93