Children with language delays often manifest low rates of self-initiated expressive language, particularly in school settings. Children with mild to moderate language delays appear to develop this pattern as a means of coping with situations in which they believe they are unable to perform or may perform poorly. Interactive language training procedures are now being used to successfully increase syntactic complexity, develop morphology, and train transformational rules in language delayed or disordered children. The linguistic and nonlinguistic strategies used in interactive language training not only foster language acquisition, but are useful in increasing spontaneous language as well. Linguistic strategies entail use of repeats, imitation and modeling, indirect commands, questions, paraphrases, sentence completion, and development of feedback skills while nonlinguistic strategies include violation of routine events, withholding objects or turns, and violation of object function. These techniques can be used effectively by both parents and educators who now share the responsibility of language intervention with speech clinicians. By increasing the child’s rates of self-initiated speech, it becomes more probable that improvements in the content, use, and form of language will follow. (Author/VW)
Linguistic and Nonlinguistic Procedures for Increasing Spontaneous Language in Preschool Handicapped Children

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Abstract

Children with language delays often manifest low rates of self-initiated expressive language, particularly in school settings. This pattern appears to develop as a means of coping with situations children, with mild to moderate language delays, believe they are unable to perform or may perform poorly.

Interactive language training procedures are now being used to successfully increase syntactic complexity, develop morphology, and train transformational rules in language delayed/disordered children. This presentation discusses several linguistic and nonlinguistic strategies used in interactive language training which not only foster language acquisition, but are useful in increasing spontaneous language as well.

An overview of these techniques is helpful for both parents and educators who now share the responsibility of language intervention with speech clinicians. As rates of self-initiated speech increase, it is more probable that improvements in the content, use and form of language will follow.
Linguistic and Non-Linguistic Procedures for Increasing Spontaneous Language in Preschool Handicapped Children

As national priorities shift toward early intervention, the instructional needs of handicapped preschool children with language delays become the shared responsibility of educators, speech clinicians, and parents. Since significant expressive language delays cannot be remediated solely by speech therapy a few hours a week, this movement increases language training demands placed on preschool educators. Simultaneously, parents find their roles expanded to include "language change agents" in early intervention partnerships (Alpert & Rogers-Warren, 1983; Bricker & Bricker, 1976; Cross, 1984; Shearer & Shearer, 1977). To achieve optimal results, language training requires continuous intervention in all naturally occurring activities and settings. For this reason, it is essential that basic language intervention procedures are shared with concerned parents and professionals so language skills of handicapped young children are enhanced.

Language Intervention Techniques

Historically, speech and language interventionists required verbal responses from children by relying heavily on pictured stimuli to improve syntactic structures, often in highly structured training sessions. This technique placed little attention on the communicative usefulness of the linguistic structures taught (Snow, Midkiff-Borunda, Small &
Although training in highly structured environments produced successful skill acquisition, generalization to everyday situations was often limited (Cooke (Raver), Cooke, & Apolloni, 1976). Consequently, language training procedures have shifted toward teaching language through social interaction and naturally occurring events (Hart & Risley, 1980; McLean & Synder-McLean, 1978). Using an interactive communicative approach, language interventionists satisfy linguistic objectives by arranging activities or focusing on ongoing activities by talking in short sentences, and repeating frequently (Cochrane, 1983). Procedures similar in form to those used in an interactive communicative approach have been referred to as incidental language teaching, natural environmental procedures, or milieu training (Halle, Alpert, & Anderson, 1984).

Researchers report variations in situations, particularly in opportunities and consequences for language, are involved in the disappointing transfer of language skills taught in clinical settings to other functional environments (Hart & Rogers-Warren, 1978; Rogers-Warren & Warren, 1984). Limited generalization appears especially true for severely handicapped children. Interactive communicative approaches rely on any activity to train several linguistic elements in one setting. For example, goals for increasing syntactic complexity (e.g. increasing the length of sentences; mean length of utterances (MLU), developing morphology (e.g. present progressive), and
transformational rules (e.g. negation, passive, and question formation) are taught through communicatively useful language during a planned or spontaneously occurring activity (Snow et al., 1984).

An underlying assumption of the interactive communicative approach is that language generalizes more efficiently than other approaches because training closely resembles standard social interaction. The reciprocal nature of social interplays in training language continues to be a central emphasis in working with more severely handicapped preschoolers (Rogers-Warren & Warren, 1980; Rogers-Warren & Warren, 1984).

**Linguistic Training Strategies**

One goal of language training is to develop a child's communicative abilities so that every conversational partner can serve as a potential therapist (Snow et al., 1984). Another significant goal is to increase the frequency of spontaneous language so mean length of utterances (MLU) may be extended. This is, a child with primarily 2-word utterances, may have a goal of increasing utterances to 3-word strings whenever appropriate. Increasing syntactic complexity of handicapped children's productions and, consequently, the frequency of expressive language, seems correlated with creating realistic conversational atmospheres, focusing on children's interests, and using real objects (Cochrane, 1983; McLean & Synder-McLean, 1978). Real situations—making playdoh rather than looking at a picture of someone making
playdoh—automatically increase needs for spontaneous language. Real situations are easily modified so requests for necessary items and comments about the task become structured components of the activity, making self-initiated speech a structure of the activity. In addition, stress associated with predetermined verbal responses characteristic of some language training procedures is avoided.

Eliciting procedures for increasing spontaneous language in language handicapped children are easily incorporated into traditional home and school activities (Concrane, 1983; Rudder, Bunce & Rudder, 1984). A brief discussion of seven of the more commonly used linguistic techniques may assist interventionists in promoting expressive language at more predictable levels.

Repeats. Restatement or rehearsal of appropriate language assists a child in learning new vocabulary or linguistic forms, and reinforces emerging forms. For example, a request for restatement might occur after a child correctly states, "He went out." If irregular past tense verbs had been inconsistently produced in the past, asking a child to repeat the sentence increases chances the form will be used properly again. A teacher or parent may comment, "Great, you said that correctly. Please say, 'He went out,' again."

Imitation/Modeling. This "tried and true" technique is the backbone of most language programs. Learning to speak is similar to learning a "new" language. Consequently, imitating
what is said assists learning appropriate forms, and expands sentence length. With a reluctant speaker, an adult may provide a model of an appropriate response and tell the child to imitate it. Before giving a material a complete model (Reed, 1986) is given if a child does not request it: "Say, 'I want puzzle.'" This procedure also increases opportunities to reward appropriate language usage. An awareness that language is a prerequisite for receiving desired actions and objects tends to increase spontaneous productions.

Clearly, initial efforts to increase spontaneous language in language delayed children may be associated with imitation. However, sound training must move a child from language situations supported by imitation and modeling, to unsupported situations without models. One way to achieve this is to systematically decrease the number and/or complexity of models by providing reduced models (Reed, 1986). Using the example cited earlier, an adult may reduce the model to: "I want ....", and later, "I..." Another means of moving from supported language environments is accomplished in small group instruction. Asking questions of non-language delayed classmates or higher functioning language delayed classmates makes some children more willing to respond since they perceive the attention to be on their classmates, not themselves.

Indirect Commands. Language delayed children are adept at recruiting adults to handle situations in which they are aware their language skills may be an obstacle. Nonetheless, it
better serves a child's language needs to require the child to first handle the situation alone by commenting, "Tell him what is bothering you." Increasing opportunities to produce language will lead to more self-initiated productions.

Questions. Most preschool educators and parents regularly use this technique to improve expressive language. However, it is possible to overuse this approach. A principal weakness of questioning is that many questions result in single word replies. A language delayed child requires sustained practice with selected language forms. For this reason, when questioning is used it should elicit maximal participation. For instance, an adult may ask, "Could you tell Sarah all the things we are going to need to make this cake?"

Paraphrases. Paraphrasing sends an abbreviated form of a child's language back to the child to encourage reciprocal language usage. Paraphrasing is also used to clarify or expand language. Asking, "Did you say you wanted it?," allows desires to be restated, using more appropriate forms when necessary.

Sentence Completion. A nonthreatening way to elicit expressive language is requesting only one or two-word responses. This technique is useful in rehearsing vocabulary and increasing spontaneous language in resistant speakers. An adult may say: "Mark, you are drinking -------." The amount of language required with incomplete sentences systematically increases as language skills expand.

Feedback Skills. As language skills increase in
complexity, some advocate encouraging a child to become a critical listener of his/her language and the language of others (Cochrane, 1983). This strategy is used frequently in articulation therapy. After an obvious error in a trained linguistic structure or phoneme (sound), a trainer asks a child to determine if it was said correctly. This allows a child to correct errors immediately, reducing opportunities to practice incorrect forms. Such self-evaluation is appropriate only after a child has had repeated exposure to a linguistic form and the interventionist believes the procedure will improve language acquisition. Using feedback techniques too early in language training may inhibit spontaneous usage.

Nonlinguistic Training Strategies

In addition to linguistic strategies, several nonlinguistic strategies may be employed at home and in school to increase spontaneous language in language delayed children. The following nonlinguistic strategies are often effective with children with some functional speech.

Violation of Routine Events. Intentional violation of routine events can be used to promote a protest and/or direct a child's attention to particular features of language (Constable, 1983). Intentionally changing a routine schedule, route to the lunchroom, or calling a child by another child's name frequently prompts self-initiated language. The objective is to wait until a child tells someone about the "mistake" that has occurred. By employing some of the linguistic strategies
previously discussed, spontaneous responses are corrected and reinforced as they occur. Beginning the school day with "closing group" or greeting children with "Good-bye" in the morning provides simple means of increasing spontaneous language as well as creating opportunities for language expansion.

Language expansion is defined as the procedure for "retaining the words given by the child in the order given, and adding those functions that will result in a well-formed simple sentence that is appropriate to the circumstances" (Brown & Bellugi, 1964, p. 142). The following scene between a parent and a 4-year old, language-delayed child presents a good example of language expansion procedures:

Child: "Go." (points to door).
Mother: "Go home?"
Child: "Go home." (shakes head affirmatively)
Mother: "You want to go home now? Home now?"
Child: "Home."
Mother: "Go home now?" (gets keys out of purse).
Child: "Go home now."

Language expansion demands little extra time or effort (McLean & Vincent, 1984) and can be used in all situations.

Withholding Objects or Turns. Withholding objects a child wants creates opportunities for self-initiated language. In a
similar way, purposely omitting a child from a turn is an effective means of encouraging spontaneous language to gain attention, make requests, or indicate desires. Educators note this technique can be especially useful in group instruction because classmates of an excluded child are often eager to report the exclusion.

Similarly, time delay procedures are useful devices for increasing spontaneous speech. With this procedure, an adult waits and does not offer assistance or materials for 3 to 5 seconds to encourage a child to verbalize desires or needs (Halle, Alpert, & Anderson, 1984). The time delay procedure relies on natural environmental stimuli, not direct requests for language, to increase spontaneous language. Verbal initiations of severely retarded children have been increased with time delay procedures (Halle, Baer, & Spradlin, 1981; Halle, Marshall, & Spradlin, 1979).

**Violation of Object Functions.** The ability to discriminate among specific characteristics of objects is an important basic learning strategy. Turton (1983) states an over-emphasis has been placed on auditory discrimination while the ability to discriminate characteristics of objects and form have been seriously neglected. In language training, a continual emphasis must be placed on the functional use of objects and actions. Once children are familiar with particular objects or object functions, willful violation or of functionality can initiate protests and/or
information regarding the object or action. For instance, using a toothbrush for washing your face, putting your hat on your shoulder, or combing a book may prompt the most hesitant speaker to identify the misunderstandings.

This tactic may also assist humor development in developmentally delayed children. In one classroom where this procedure was used regularly, a child was observed placing her coat on her feet to initiate a conversation and get a laugh from other language delayed classmates.

Summary

Language acquisition is facilitated by adult utterances that are on the same topic as a child's utterances, and utterances that continue and expand an observation made by a child (Rogers-Warren & Warren, 1984; Snow et al., 1984). One fundamental objective of language training with language delayed, preschoolers is to increase spontaneous expressions: about relevant objects, functions, actions, while employing appropriate syntactical structures. Predictable rates of spontaneous language are necessary for true expressive communication interplays. Because of this, numerous direct and indirect language elicitation procedures used by speech clinicians and special educators with language delayed and/or disordered children have been explained. These linguistic and nonlinguistic language shaping and language promoting techniques are easily translated into enjoyable rituals for any activity in home and school settings.
Inevitably, language training distributed throughout the day is more successful than structured language training conducted for brief periods of time. Interactive/environmental language training approaches are compatible procedures for producing multiple skill development at the preschool level. Using interactive language training procedures mildly handicapped, language delayed preschoolers have been trained to sight read as the lengths of utterances (MLU) were simultaneously increased (Raver & Dwyer, 1986). To integrate language and other domain instruction requires a functional analysis of the various ways in which routine events, paralinguistic cues, and language naturally interact. An integrated philosophy of language acquisition is reflected in the commercial curriculum, Teacher Organized Training of the Acquisition of Language (TOTAL) (Witt & Boose, 1984), which provides language training embedded in traditional preschool concept development.

The purpose of language training is not merely to produce children who express appropriate linguistic utterances, but to produce children who participate in social exchanges with language that is spontaneous, as well as accurate. Re-integrating speech and language training into natural environmental situations encourages relaxation in training. The most powerful linguistic and nonlinguistic techniques cannot avoid productions of misarticulations or immature syntax. Nonetheless, these procedures offer a decisive
undercurrent of structure and purpose for educators, speech clinicians, and parents while simultaneously encouraging self-initiated language.

As language delayed and/or disordered preschoolers increase rates of spontaneous language, the quality of the content, form and use of their language often follows.
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