The dynamics of speech communication are discussed. The point is made that a growing child learns what aspects of communication situations make demands upon what can be said. There are at least five aspects of situations to which he must pay particular attention in order to learn these things. These are (1) the people present on the scene, (2) what has been said before, (3) the topic of conversation, (4) the task which is being accomplished, and (5) the physical time-place dimensions in which interaction occurs. Recommendations for helping children to learn these dynamics include: (1) Start simple and move later to complex ideas; (2) Make classroom atmosphere spontaneous; (3) Give the children an opportunity to manipulate situations and see the results of the manipulation; and (4) Have each classroom contain a heterogeneous mix of students. (CK)
FUNCTIONAL ASPECTS OF SPEECH DEVELOPMENT

By

Robert Hopper
Department of Speech
University of Texas

FUNCTIONAL ASPECTS OF SPEECH DEVELOPMENT

Suppose that you are a mother, and your year-old child wobbles into the kitchen saying: "cookie." If you were responding to the grammar of this utterance you might say: "That's right, there are cookies in the cookie jar." But you probably would not say that. You probably would say, "I'm sorry, it's too close to dinner for you to eat a cookie." In this second case, you are responding to the situation, to how the child was using his language--that he is trying to do. The topic of this chapter is how children learn to communicate functionally within the matrix of complex communication situations.

Sociologists and anthropologists tell us that the ways we respond to situations are rule-governed, just as the ways we construct grammatical sentences are rule-governed. In every situation, we are vaguely aware of how the dynamics of what is happening affect us. If we step into a crowded elevator, we ordinarily remain silent and pretend to be interested in the lights telling what floor we are approaching. On a date with a "nice" person, we confine conversation to politics and weather, allowing most important messages to be exchanged nonverbally. If you are lecturing a Sunday-school class, nobody needs to remind you not to tell off-color jokes. All these varieties of situations make demands upon what kinds of language we use. The fact that we consistently follow these rules of social interaction is evidence that we are aware of the functional demands within situations.

ASPECTS OF SITUATIONS

Nobody speaks the same way all the time. A growing child learns how the dynamics of situations make certain kinds of talking more appropriate than others. In other words, he learns what aspects of communication situations make demands upon what can be said. There are at least five aspects of situations to which he must pay particular attention in order to learn these things. These are (1) the people present on the scene, (2) what has been said before, (3) the topic of conversation, (4) the task which is being accomplished, and (5) the physical time-place dimensions in which interaction occurs. We will discuss each of these aspects briefly, and make suggestions about how classroom teachers can nurture better student performance within varied situational contexts. These suggestions are not particularly geared to any particular age of child so that you can adapt them to any grade level.

The People Present: Personal Context

If you hear a spicy dirty joke, which you are dying to tell someone, you have the sense to wait for an appropriate audience. You do not tell it to your mother or the checkout girl at the grocery. If you are furious with your boss, you will express yourself differently to the boss himself than to a co-worker. We make adjustments in our speaking behavior according to our audience hundreds of times a day--almost without ever thinking about it.

When you are analyzing anything a child says, it can be important to ask yourself to whom the child was speaking. Conversely, when looking at how a child responds to someone else's speech, it is wise to ask who the speaker is--for that may be as much the cause of the child's response as what is said.

Further, if you are in charge of a classroom, the kind of person you are has great effects on the behavior of your students. Teachers who stress dir-"nine often create entire classrooms of sullen, hostile, uncommunicative children. On the other hand, teachers who openly encourage an atmosphere free from fear may find students more responsive.
Beyond these general suggestions, here are some techniques you might try to sharpen the child's awareness of personal context:

1. **Student practice in "audience analysis."** Run off on ditto or write on the blackboard some brief messages. (Keep them interesting to students—don't ask a first grader to argue international politics.) Ask students to discuss how they would present this message to varied audiences. Alternatively, students could prepare speeches, make posters, break into groups and prepare persuasive campaigns for each of the different audiences. This works best when the message can really be presented by children to some of the audiences. Such instant effectiveness feedback teaches well. Finally, such exercises should be accompanied by liberal sprinklings of discussions of tactics employed, effectiveness, possible side-effects, etc.

2. **Communication with unusual people.** This odd subtitle refers to placing children in real-life encounters which necessitate wide shifts in communication behavior. This can be accomplished during field trips, if children are encouraged to talk with guides, policemen, or children enrolled in schools for the blind. Also try trips to various places of business in which people are extremely formal (department store or high-priced shoe store), or less formal (neighborhood delicatessen or ice-cream parlor). Little or no instruction is usually needed. Children quickly adapt their behavior of how the behavior of single children varied according to the people present can be fruitful—not to point out "principles," but to facilitate future adaptations.

3. **Role-Playing or Dramatics.** This can be effective either structured or unstructured—with story-lines, or open-ended. The important item here is to change the nature of the situation by entering and exiting characters—showing how behavior varies according to communication. With younger, more self-conscious children, many of the same functions can be accomplished through the use of puppets.

4. **Telephoning.** Split children into "teams" of two, and have them pretend to talk to each other by telephone. Then instruct one of the team to be a parent, and talk to the other. Then switch. Then have both be parents. Other possibilities: storekeepers, businessmen, teachers, preachers, the President.

5. **Be a Model.** Keep tuned to how the composition of classes or discussion groups varies with absences or new faces. Such changes can also be grist for discussion. After the principal visits and sits in the back of the room for a half hour, start a discussion of how you and the children behaved differently.

What Has Been Said Before:  **Conversational Context**

Consider these two examples:

1. Your principal calls you into his office, his face is red, his eyes flashing. In his hand, he holds your lesson plan for this month. "You can't use these books," he sputters. "The board of education would have my job. You are really a stupid SOB."

2. As you walk by the principal's office, he shouts, "Hey, your shoe-lace is untied!" You stop to look and he chortles "April Fool!" You are mildly embarrassed as he says, "It's four o'clock in the afternoon, and you are still forgetting what day this is. You are really a stupid SOB."

In both of these examples, the same person sits at the same desk and says...
We know little about how and when the child learns the importance of conversational context. But this is one area in which schools could help. Workbooks would be developed in which paragraphs were missing one sentence, and the child could get a feel for conversational context by filling in the missing sentence. Perhaps tapes setting a situation could be played, and children could discuss “what happens next.” Some more specific suggestions:

1. "Out of Context" game. Orally or in writing, expose students to one message, then a short summary or quotes from the first message. Discuss ways the summary or quote is accurate or inaccurate in terms of the first passage. Does it convey the whole meaning of the first passage or only part? If you (student) wrote the first passage and somebody else summarized you with the second passage how would you feel--happy, angry, amused, sad? Why?

2. Passages with gaps. This works much like the "out of context" game. Students are presented with incomplete stories, descriptions or other passages. The beginning middle or end could be omitted. Students compose their own version of missing section, and alternative adaptations to the situation form basis for student discussions. Both these procedures lend themselves to "workbooks" or ditto for older children.

3. Incomplete Dramas or Puppet Shows. Give children partial stories or plays. Let them act out their own endings. A variation, give the initial situation and a required ending and let students construct the show which gets to that ending. Groups of students (3 to 5 in a group) could discuss in advance how to do the show--amount of planning could be varied from much to none. And of course either groups or the entire class can discuss the success of attempts afterward.

4. Be a model. When a student makes a remark which is clearly inappropriate to what was said before and the general drift of discussion, the teacher might inform him (non-humiliatingly) of the inappropriateness or encourage other students to call his attention to it.

The Topic Being Discussed: Content Context

Some children who rarely say a cogent word in response to questions on IQ tests will deliver concise and eloquent statements on the subjects of baseball or anatomical differences between boys and girls. All people of all ages prefer to talk about things they are interested in.

Educational practices often fail to take into account which sorts of topics for discussion would motivate students. Teaching methods designed without appreciation of this situational dimension often fall upon deaf student ears. In How Children Learn, John Holt describes how schools would probably teach children to talk if given that assignment: first the children would be taught to make all the phoneme-sounds of the language, then taught how to combine these sounds into words, then taught to combine the words into syntactic patterns--all of this by sheer memory. Only after the child had mastered all this would teachers tell children some ways speech can be used, or what some words mean. This example may sound far-fetched, but many of our teaching methods have no tie-in with matters of interest to the students. In a sense, this is what the modern call for "relevance" in education is all about--
children want to discuss matters that touch on their interests in some way, that fit into their content context.

There is, of course, little need to teach children to be interested in something—all children turn their natural curiosity in some direction. What children do need to have this aspect of their communication skills is room to operate—to do things that matter without too much interference. The best way to do this is to allow children to choose a project of their own to work upon. Teachers should of course aid selections of projects to avoid capriciousness and boondoggling, but once the project area and objectives have been worked out, children should be given free rein to experiment and innovate. Teachers can guide and listen critically, and sometimes make procedural suggestions. But avoid steering conversations around to old "educational truisms" to "help the children learn." These projects are not recess or "enrichment exercises—they are a vital heart of the communication curriculum. A final caution: make initial projects small and allow children time to work out their self-motivated learning procedures. The first few attempts are likely to be confusing, but later students move with surprising speed. The suggestions which follow can all be used by individual students or by discussion groups. Particularly with younger children, group projects should probably be used more often. Suggestions:

1. **Writing shows or plays.** Children can and will do surprising things with this activity if teachers do not make the act of composition formidable with excessive warnings and frequent corrections of details of grammar and style. This can also be done in groups—provided all group members have some interest in the subject. Finally, small projects should be completed before more complex ones are attempted.

2. **Pursue interests of hobbies.** Such projects as growing plants, keeping pets, doing small experiments in physics or chemistry can provide a forum for activity. Here the teacher teads a fine line between things which can be done in school (growing plants, experiments, etc.) and other activities too grandiose for the classroom (-raising pets, produce, sending up weather balloons). In many cases, however, this dilemma can be solved by doing many activities outside the schoolroom during class hours. Four walls do not an education make. And it should be restated that this is not "enrichment crafts hour," but a vital part of your communication curriculum. A child is better off talking, reading, and writing about a cow then being sullen during a chemistry lesson.

3. **Act on problems.** This is group activity of tremendous potential. Within the school, neighborhood and city there are dozens of problems which catch the student's fancy and capture their concern. Petty theft, littering, abuse of a vacant lot, pollution from a nearby plant. Students should be encouraged (mainly in groups) to tackle these problems, to plot persuasive strategies, attempt fund raising, and generally try to make things better. The fact that he helped get few linoleum in the cafeteria may be the greatest source of pride in a child's school year. Consider the mine of communication practice in writing leaflets of business letters, or letters of outrage, or telephoning a radio station to ask for time on the air—let alone writing and executing a script to fill that time.

4. **Be a model.** Allow yourself your own interests, of course, but be genuinely open and probing as you try to focus students to communicate about their interests. And when the class seems very interested in discussing a topic which is not what you wanted to "cover" that day, you should consider being flexible—and covering your material later. This is not an invitation to be wishy-washy, simply to be open, willing-to-learn, and stronger than those who only know how to ask one set of questions.
The Goal Which Communication is Being Used to Accomplish: Task Context

When you say to your child: "Would you please take out the garbage?"

It is important to realize that, in spite of the grammatical structure of the sentence, you are not asking a question. You are giving an order. If the child's response is not proper, (obedience) you realize that he has broken a rule.

In looking at children's speech it can often be helpful to ask the question: What is the child trying to do? To answer this question, you must examine the situation from the child's point of view. To show how this can be helpful, suppose a young child said

"Daddy shirt."

It is tempting to suppose that he is pointing to a shirt belonging to Daddy. ("Daddy's shirt.") But suppose also that the child is holding a shirt of his own. Then you might think he is saying "Daddy, here's my shirt." But suppose that he is holding the shirt up with an impelling look on his face and that he is wearing no shirt. Then you know he is saying "Daddy, put on my shirt."

How do you know all this? By intuition, the same way you know about grammar rules. If you are often around children, you can usually tell what they are talking about. It is especially easy to interpret what a child says because it is usually directly related to what he is doing. Children often accompany actions with descriptions:

"I'm gonna go outside now."

These facts all make it easier to interpret child speech from the viewpoint of what task the child is doing. If parents and teachers force themselves to examine children's speech in the light of content context, many misunderstandings can be avoided.

This focus on what the child is doing can also help us avoid what might be called the "grammar fetish." We are guilty of the grammar fetish when we correct a child's grammar even though we can understand him perfectly well:

Johnny: Hitler were a great man.

Teacher: No, Johnny, Hitler was a great man.

Obviously this teacher has missed the boat. Yet there is a bit of this teacher in all of us—an instinctive urge to correct grammar. If we are careful to examine children's speech in terms of task context, we often are less concerned with details of grammar, more concerned with sane and decent content.

Some suggestions:

1. Grammar games. Play games in which children are put in verbal situations where responses using specific grammatical structures are required. For young children this can be quite simple: for example a question starting with "why" requires an answer a clause using "because." Other ideas include: a) Having one child say a simple sentence, and subsequent players must add a thought to it while still using only one sentence, and b) Having children "play" with complex embedding structures by expanding fun sentences. Such games could also be used to teach situational demands of function.

2. Question-asking. Children naturally ask questions; teachers
should help them develop their questioning ability into a sensitive probing instrument. Games such as "20 questions" which systematically attack and solve problems of identification can be helpful in this regard. Without ever using formidable words like "scientific method" we can teach children how to ask questions and obtain their own answers. All these sorts of procedures can be undertaken by students in small groups, and the teacher needs only to consult with those having trouble. If this results in a classroom atmosphere that is loud and chaotic, do not be shocked, children can work very well in such an atmosphere with some supervision and some inviting learning tasks. Also encourage playing with riddles.

3. Rhythm and Rhyme games. A favorite nursery school game is to give children a pair of long sticks which they bang together in time to music. This might have some interesting carryovers to elementary school with more complex rhythms and perhaps use with spoken language as well as with songs. The rhythm of a ballad, for example could provide some interesting vocal and rhythm games. Allow children to make up rhythms of their own and then invite them (and aid them when necessary) in setting the rhythms to words. Rhyme games can be an equally strong source for games: "Make a word that rhymes with _______." Or one child can say a word and each child around a circle tries to rhyme it. Or a pair of children take turns saying words and rhyming words said by the partner.

4. Verbal Mediation. Sometimes both language and ability to do something can be aided if we talk about what we are doing as we do it. Sometimes practice in such verbal mediation can aid problem-solving ability. One way to practice this would be to talk (to yourself or others) about a picture as you draw it. Another would be to manipulate puppets, and describe what each is doing.

5. Be a Model. The main aspect of teacher-as-model with these ideas is to exhibit an enthusiasm for the esthetics of language use--a sense of joy about the way the parts of the code fit together and provide almost endless play opportunities. It is only when children see language use as a dry academic activity that games such as those described above will seem "silly" to them.

Time and Place: Surrounding Physical Context

Labov (1970) suspected that black children were not performing well on language tasks out of fear of the interviewer, so he undertook a study using a black fieldworker who knew the children being tested. Results were still bad. So the fieldworker dressed more sloppily, sat on the floor with the children, and opened a bag of potato chips. The children talked the fieldworker half to death.

This example accents the importance of the physical context where communication takes place. It is obvious that some people are more comfortable and talkative in some circumstances than in others.

Children are even more sensitive to physical context than adults are--they also use it more in their communication. A child of about 14 months can indicate objects and food he wants by pointing and grunting--without saying a word. Even after they learn to talk, children still make heavy use of context--showing things, pointing, etc. in communication situations.

Children also use context in understanding sentences. Try saying to a child the sentence:

"The elephant was kissed by the bear?"
Then ask him who is doing the kissing, and he will be confused. Usually the actor in a sentence is the first noun, so he may guess the elephant--yet he will know there is something queer about this sentence. He will act unsure. If you present the same sentence and ask the same question while showing the child a picture of a bear kissing an elephant on the cheek, he can answer easily.

If you want to see how heavily the child depends on surrounding physical context, try this trick: Provide the same sentence, ask the same question, but show the child a picture of an elephant kissing a bear. He will be more confused than ever, and will probably give a response agreeing with the picture.

These examples show how often young children use visual context as a "crutch" to help them interpret sentences using hard-to-understand grammar rules. This suggests the use of teaching strategies which use context help children master grammar rules. Playing with dolls and describing their actions, for example, could provide an almost endless source of contexts to aid comprehension of difficult sentences. Some suggestions:

1. Context conflict games. The experimental finding that asking a question about one item (say a glass) while holding before him a picture of a different item (a spoon) causes confusion leads to several game possibilities. There could be games in which pictures could be used to trip up answerers. This game, if not tied to deep feelings of failure-fear, could be fun. It could also provide evidence that visual communication cues are less dependable than linguistic ones.

2. Context-as-aid. This is the more constructive side of the same coin. Here, use of pictures, dolls, or even role-plays, could aid children in understanding structures that are difficult for them. Such cues could be used to help students see that in sentences like

"The elephant is kissed by the bear."

it is the bear who kisses. After some practice with the context items has made children more aware of the linguistic structures, they may be able to interpret them better. But we should be careful not to ask here what Piaget calls "the American question." "Can we make them do it younger?" Techniques like these will probably be helpful if the child is "ready" to learn a distinction. If he is not, they will probably make little difference.

3. Role-plays with varied scenes. Have children construct stories, act out plays, etc., based on being in exotic and ordinary places. Discussions could bring out the importance of scene to communication. Some sample places: a country store, a department store, a gas station, at home alone, in church, in a haunted house, in an old castle, in a crowded modern skyscraper, in a barnyard.

GENERAL RECOMMENDATIONS

Aside from these fairly specific suggestions for a function-based communication curriculum, there are a few policies which might aid teachers particularly interested in communication.

First of all, start simple and move later to complex ideas. With young children especially, do not attempt to move too fast. Rather, let children generate their own enthusiasm--and let that set the pace. With young children
you will also desire to emphasize manipulation of objects, rhythm play, overcoming "stage fright" and shyness—and fear of failure. Using puppets and having children talk through them often helps in this regard, as does breaking the class into groups of three or fours, so there are few listeners.

As children grow up, they always manipulate things, but the nature of the manipulation changes from physical (hitting sticks together) to cognitive (how can we best make this plant grow?). Continued opportunities to make such manipulations and see the results—and compare results with predictions, are valuable scientific and linguistic training. Such situations offer linguistic training because they provide a need for structures such as "If I do A then I would expect B to happen."

These suggestions cannot be actualized in any set of pre-planned textbooks or pre-written lesson plans. We do not think it ever will be—what we are asking is that each teacher plan his communication curriculum on the basis of where the students are and what they need to learn.

Classroom atmosphere should not be pre-planned either, but rather should be spontaneous and exciting, even if occasionally chaotic. The class should be used to working individually, in groups of 2-3, groups of 5-6, and as an entire class. Much of the teacher's work should be oriented toward solving individual problems and toward making students more able to learn from each other. The teacher should be more of a consultant and decision-maker—and less of an information machine.

Within all this, each class should contain, so far as possible, a heterogeneous mix of students. Varieties of speakers provide the best possible laboratory for increasing speech and comprehension. Not only should classes be integrated in terms of sex, ethnicity, and social class according to the full spirit of the law, but also there should be more mixing of children varying in intelligence. Even age segregation is in some ways detrimental to learning—children should have ample communication opportunities with people of all ages.

Finally, development of communication skill comes not through study of and memorization of principles of any aspect of communication. Rather it emerges through using (exercising) our communicating "muscles" in encounters with important problems. We argued in detail against teaching principles of grammar. We argue now equally strongly against teaching principles of rhetoric, usage, extralinguistic expression, or reading. Children learn to communicate only by communication. To foster such learning, children must communicate more than they usually do in today's classrooms. Emphasizes upon an orderly calm and "keeping quiet" have to go. They must be replaced by discussion as an everyday educational staple. Communicating is the curriculum, not enrichment. Do not introduce a topic for discussion with "Well let's have a discussion about snow." In addition to being boring, this procedure sets no goals worth obtaining. The result will be a lot of "talk going no places. What we should do instead is set goals and let students attain them through discussion. Emphasis then is not on the discussion as a phase of school, but as a tool for getting things done.

And don't teach principles of discussion. In fact, teach as few principles as possible. If you are worried that without principles, you will have nothing to test over, eliminate your tests. They don't help learning. All kids hate tests, right? But there is a steady diet of them at each stage of learning. Psychologists would say that such a constant unpleasant stimulus...
would cause unpleasant associations with the rest of learning even if the rest were fun. And the rest is not always fun—but it usually should be. Who ever said learning had to be dull?