The capacity to give clear directions and to understand those of others is one of our culture’s most widely valued language competencies. The fact that this chapter is short does not imply that directions are less important than other kinds of discourse. It’s rather that they’re a part of almost every other kind of discourse and of each of the basic processes of this curriculum and thus cannot easily be separated out.

Directions tell us how to do and make things. The mode is typically imperative, of course. Directions are usually utilitarian and most often occur as operating instructions affixed to or accompanying objects, as procedure manuals or memoranda, or how-to-do-it books and articles. Recipes are a notable form. Many directions are oral, such as instructions on how to get to a certain place or coaching during sports or music lessons. To establish a sequence of actions, directions are often put in chronological order like the events in a narrative, but the practical needs of the operation that’s being directed may well require overlaying another ordering onto time sequence.

Senders and receivers of directions can find out more readily than with most other discourse whether they’re getting across or receiving the message. They quickly discover problems of communication, many of which originate in egocentricity. Directions serve as a mirror for the sender because they’re translated into actions and provide immediate feedback to her about the effectiveness of her communication. Receiving directions develops the ability to convert language into actions. The ability to follow written directions is perhaps the most direct index of reading comprehension (see page 243). There’s less chance for misreading to remain unnoticed than in other kinds of discourse.

STAGE DIRECTIONS

A good example of direction-giving being a part of other kinds of discourse are the stage directions in a script. As a blueprint for producing a particular play, a script contains not just dialogue but directions to the actors for how to move and gesture and directions to production people about how to make the costumes and the set. A film script must contain camera directions (see page 335). Sometimes script directions may be cast somewhat indirectly, in the form of description, which turns out to be closely related to direction-writing.
Oral directions to move bodily such as those in *Informal Classroom Drama* are a good way, like other game directions, to translate word to act. Following is an activity that makes directions themselves a game. It is good for the years of middle school.

### BACK TO BACK

Each of two players takes the same number of paper shapes. Or each one takes identical sets of solid-color triangles, squares, and circles (from math or attribute materials). The game goes like this:

- Sit back to back with your materials on a flat surface in front of you. One of you is the sender; the other, the receiver. A few others can watch, but they’re not to talk or otherwise help.
- If you’re the sender, assemble your pieces into a certain pattern, telling the person behind you what you’re doing.
- If you’re the receiver, listen to the other person and assemble your pieces into the same pattern. You can’t look around or ask questions.
- Compare what you’ve done and ask the observers how it went and what you might have done to make the directions clearer.

The point of not letting the two players see each other is to enforce a total reliance on words. For the first time or two, the communication is restricted to one-way talk. The players may decide to role-play a boss giving a worker directions over a one-way intercom. Then the “worker” is finally allowed to ask questions. Withholding conversation for a while demonstrates its great advantage, which is the receiver’s feedback in the form of questions of clarification and requests for omitted information.

The onlookers of the groups may need to be reminded that kibitzing spoils the game and that they should watch silently so that they can observe the causes of miscommunication and try to avoid these mistakes when their turns come to give directions. Depending on the difficulty of the puzzle, a number of students may have to act as sender before the receiver can assemble it successfully. Sets of puzzles are exchanged and players rotate roles.

Using common geometrical shapes gives students an opportunity to put into play the vocabulary of geometry. However, if odd shapes rather than conventional ones are cut out and used, players have to stretch their imaginations for ways of describing. A graded difficulty in puzzles can be achieved by gradually increasing the number of pieces (starting with three) and by making the component shapes harder to describe and to position.

It’s good to have the completed puzzle sometimes form a familiar figure in order that the sender, if she thinks of doing so, may state at the outset, “We’re going to put the pieces together so that they look like a house.” This way, if she omits this general framework, she can create the same kind of communication problems that can be created in a piece of written exposition, since in either case the receiver lacks a framework for relating particulars to each other.
VARIATIONS

After students have become aware of at least some of the factors that make for success and failure in the game, variations are introduced. The goal is still to match senders' and receivers' materials by means of verbal directions, but, to vary and generalize the communication issues, puzzles are replaced by other things. Here are some possibilities:

- Someone who has learned how to do some origami creations (paper-folding) talks a partner, or perhaps her group, through the procedure, still back-to-back or with a barrier between. Compare success giving directions from memory with giving directions while folding at the same time.
- The sender looks at an abstract picture composed especially for this purpose and tells the receiver how to draw it.
- The sender draws a simple picture or cuts out a shape with scissors as she tells the receiver how to do it.

■ DRAW IT LIKE IT IS

Older youngsters might respond well to a game for two teams of five or so members. Each team chooses a “describer” who looks at a pattern, puzzle shape, picture, or whatever and tells about it to the rest of her team, each member of which will draw the design as best she can from the description. Drawers cannot look at the model that the two describers can look at. Finished drawings are shown to a team member appointed to act as judge. She chooses the diagram most like the one described, which everyone can now look at, and gives it to you or a student to judge against her opponent’s. The team with the most accurate drawing wins.

■ BUILDING BLITZ

- The game leader builds a simple model out of construction material such as Tinker Toys or Lego and doesn’t show it to the other players. She puts it into another classroom or a closet. Then she puts out on two separate tables exactly the same number and type of building pieces that she used to build the model.
- Each team divides itself into three groups—observers, runners, and builders. The leader tells each team that they will have a certain amount of time to build a model out of the materials set out on each table. Only builders may touch the materials. The runners run from the building table to a spot where they can meet the observers but not see the model. The observers must run to meet the runners at that spot, but they can’t see the tables where the builders are working. The observers are the only ones who can see the model built by the game leader. They describe it to the runners, who relay the message to the builders. Any observer who goes beyond her designated spot and sees the builders, or any runner who sees the model or touches the building materials is out of the game.
- The two groups of builders may copy each other, but they don’t know if the other builders are doing the right thing, of course.
- When the leader calls, “Time,” the team which has built a model most like the original one wins.
FOLLOWING WRITTEN DIRECTIONS

Other direction-giving games can be written:

- Each child writes out on a tagboard strip, approximately three inches by twelve inches, three directions, such as:
  1. Walk to the door.
  2. Open and close it twice, leaving it open.
  3. Hop back to your chair.

Or:
  1. Walk backward to the blackboard.
  2. Turn and write on it “4 x 4 = 16.”
  3. Erase what you have written and clap your hands four times.

- Divide into two teams.
- The first player of team one gives the first player of team two a card. That player reads the directions aloud and then puts the card down. She must follow the directions exactly; if she cannot do so, she’s out of the game. If she does follow correctly, her team has a point.
- Then the player who has just had a turn calls on any player on the other team and asks her to tell her exactly what her directions said. If that player can do so, her team gets a point.
- Then it’s the first player of team one’s turn to do what the directions of the first member of team two say to do. The game is played as before.
- The team with the most points after all directions have been followed wins.

READING DIRECTIONS

In the activities above, direction-giving is itself the game. Most other games are run by directions or rules. These may be orally transmitted from old to new players or conveyed in print on the game materials or in game booklets if no special materials are required. Children who know how to play certain games as part of their oral culture can teach these to others. Questions that newcomers ask push the leader to revise misleading directions. Some game directions are in the form of jump-rope jingles and songs, like the “calling” for square dances. Try to have such collections around.

Most board, card, and computer games call for reading directions at the start and for consulting them occasionally later to settle uncertainties or disputes. Some games, like “Monopoly” and “Talk and Take” (described in the footnote on page 243), require not only reading initial rules but also reading and listening to individual instructions as they crop up throughout the game on cards or other materials.

WRITING GAME DIRECTIONS

Youngsters can take turns inventing a board or card game for their small group to play and then watch them play it. They can make the materials for the game and put onto a tape or write out the goal, procedure, and rules, specifying the number of players, any penalties, how a person wins, and directions for scoring. An interesting feature of this activity is the likelihood that unforeseen situations will arise.
that the directions don’t allow for. This fact builds in a frequent need for revision of the directions. Revised, these instructions can be affixed to the game, and the games exchanged and taken home, added to the classroom game collection, or exchanged with youngsters in another class or school. Generally, it’s important that a direction writer either get back written comments or have a chance to talk with whoever played her game; sometimes both would be in order.

HOW TO DO AND MAKE

Students who have learned how to do something can pass this know-how on by giving directions for it to others. Even if they can show how, they usually have to verbalize directions as they demonstrate. Directions may be how to construct some object, how to operate some kind of apparatus, or how to perform a procedure like the Heimlich maneuver.

• SHOW-AND-TELL

An excellent way to focus on directions is to specialize show-and-tell (page 77) by stipulating that the item brought to one’s group should be something one made or knows how to operate. In this case show-and-tell takes on the specific purpose of explaining to others how to proceed. As group members ask questions, the speaker can revise and refine her directions. Afterward, she can tape or write these directions and include them in a how-to booklet.

• EXCHANGING SKILLS

Older elementary school and junior high youngsters can engage in this process in a variety of ways. They might set up an “I’ll Tell You How” service whereby they share skills. They can advertise on a poster or on a dittoed handout, telling what they know how to do and are willing to teach—for example, how to make a God’s-eye, to type, to play chess, to write a computer program, to work a camera, to do square roots, to baby-sit. They can set up a “teaching center” where they demonstrate to anyone interested how they do what they are skilled in doing. After some classmates have followed her oral instructions, the “teacher” can write up these as directions, taking account of the questions the “learners” had, perhaps adding diagrams or drawings, and placing them wherever appropriate for use.

Group partners can each think of something they know how to make from common materials, write the directions as clearly as they can, and exchange them. They all try to follow out the directions and bring back what they have made. Any problems or uncertainties about the directions are noted down on the paper, which is returned to the author. The performer and author can then discuss where the directions might need to be changed. Revised directions might be compiled into a class “Things to Do and Make” booklet with a table of contents, or made into illustrated activity cards and placed into a special file or box.

Elementary school children can read and follow directions for making a wide range of art products—specialized card decks with pictures, mobiles, models and dioramas, dollhouse furniture, sculptures including those of papier-mâché, puppets, paper foldings, toothpick constructions, rubbings, soap carvings, collages,
stitching, greeting cards, kites, and so on. Some of these directions can be for making math props—clocks, graphs, and play money.

Some students might enjoy imagining that they’re writing an explanation to someone on another planet or in a very different culture who has never been here to see how we do things. They can write out in detail the steps involved in tying a shoe for someone who has never seen a shoe, for example, or how we use a knife and fork, put on a coat, use a pen to write, and so on. Then they exchange papers and follow the set of directions exactly as written, pretending to know no more about the process described than what’s on the paper.

ACTIVITY CARDS

Consider that every activity card of any sort in the classroom poses a useful direction-receiving task. So the more you decentralize directions for individualization, the more practice you afford students in reading and following directions. They’ll also become so accustomed to this mode of operating that making and contributing activity cards to the communal repertory will seem very natural.

COMPUTER MENUS

For activities to be carried out on computers, directions can be written in the familiar menu format for filing on disk according to whatever categories of activities students develop. Some students, for example, are instructing each other how to use certain software programs better or how to modify them. Other directions might concern how to go about searching and collating data for investigative projects or how to correspond through electronic mailing. In any case, the menu format may both facilitate and influence the creating of activity cards for students used to computers.

MANUALS

To accommodate extended directions, as for long projects or long-range maintenance, groups or individuals might write craft or hobby manuals, illustrated perhaps with captioned photos or diagrams. Manuals are booklets of directions specialized for a certain activity or apparatus—care of pets or plants, maintenance of machines, customizing automobiles, part-time ways of making money, applying to colleges for admission or companies for a job, and so on. Veterans of a certain school often write manuals to incoming students about how to make their way. These can allay a lot of anxiety, especially for youngsters first shifting from the self-contained classroom to multiple classes. Students who have contributed shorter sets of directions to activity cards or how-to booklets or magazine departments might try their hand at a manual on something they know a lot about. In writing extended directions they’ll probably find themselves feeding into them considerable factual information about the animal or machine or activity necessary for understanding the directions. Writing a manual can give students excellent practice in expository writing.

READING

Manuals can join a special section of the classroom library devoted to books that tell how to do and make things, some published by professionals. Our society is so flooded with how-to books and magazines that examples and reading fodder
should be no problem. Even many general publications include how-to columns
or departments from chess to cooking. Add to this the manuals, labels, plates, and
other forms of operating instructions accompanying equipment and the environ-
mental signs telling us what to do. This body of reading matter, often difficult and
important, exceeds manyfold the attention schools have been inclined to give to it.

RECIPES

Recipes constitute a special case of directions for how to make something. Book-
lets of recipes that contain lists of ingredients in prescribed quantities and direc-
tions for cooking generally appeal to children. You don't have to sponsor this
cooking in school, but youngsters can either take the books home or copy recipes
they like to use at home with a parent or each other. It's a widespread form of
directions found easily in newspapers, magazines, and books. Students can make
collections of recipes they like in scrapbooks or files to exchange, read, and take
home to use. This way they have another opportunity to read action sequences
and at the same time learn vocabulary for food, utensils, and units of measure.
They also need to do arithmetical calculations, especially if they make plans to do
some cooking for a group. Relating cooking to health food, ethnic traditions, and
consumer shopping gives it a depth that will no doubt increase interest. Discourage
sex-role stereotypes about cooking.

Youngsters can write their own recipes, illustrating each step in the process
with a drawing, and post them on a recipe board or make them into a booklet.
They can transcribe dictated recipes from other people or try out and write down
an original of their own.

An activity for fun is to make up “recipes for life,” usually humorous and
aimed at particular things, such as “a recipe for getting along with girls.”

TRAVELING DIRECTIONS

This is a kind of direction-giving most people use frequently to guide a person to
a place she has never been before. Because this discourse demands allowing for
the receiver in an especially perceptive way, making up directions for getting
from one place to another is an excellent project.

As a game very young children can make a plan for a walk around the class-
room that calls for touching, say, five different places. This plan can either be pre-
sented in a drawing or written in words and given to a friend. The friend follows
the directions, and if she doesn’t do as the writer had planned, the directions may
be revised. Then the two reverse roles.

Older children can write more detailed step-by-step directions, such as:

1. Start at . . .
2. Go right along the . . . ten steps.
3. Go left three squares on the floor tile to . . .
4. Turn right and take two steps . . . and so on.

The children can direct each other to destinations outside the classroom, inside
the school, and, later, out in the community. By this time, they can eliminate maps
or diagrams by pretending that the directions are coming over the telephone. In small towns, perhaps, where distances are short and children not bused to school, they might exchange directions and go to each other’s houses.

Directing each other to specific places on the playground or to places within the school block might be a next best possibility. The final destination should not be stated but rather discovered by the person who’s following the directions. A “treasure” might be buried at that spot, or a small piece of masking tape with a message for the finder might be pasted under a ledge or in a hidden area. If the traveler doesn’t get to where the writer intended, the two can go over the route together and find out whether the problem is in the way the directions were written or the way they were followed. Older youngsters might give identical directions to two people instead of one, and the two race to see who reaches the destination first.

Some directions should be projected and discussed. One of us sat in once on a lively and interesting fifth-grade discussion of directions to one another’s homes. In every paper there were some directions the class felt sure it could not follow. For example, “then turn up Linden Street” indicated only a turn, not the direction of the turn, since up expressed nothing but the writer’s subjective mental picture of aiming herself where she wanted to go. (This kind of egocentricity is equivalent to the puzzle-director’s saying, “Now pick up the next piece,” or “Put the funny-looking piece against it.”)

Since the children frequently didn’t know the names of streets, locations were often identified by ambiguous descriptions that more accurate word choice or better vocabulary would have cleared up. “Store,” for example, could have been one of several retail places, but there was only one supermarket on the street. Since improving directions often requires replacing some words by others, this is another important place to work on vocabulary. Then, later in the discussion, a paper referred to the “Western Building,” at which point it occurred to some of the children that only someone familiar with the town would know that landmark. Whom were these directions written for anyway? Suppose a stranger had to follow them? So they themselves brought up the issue of adapting directions to different receivers—which suggests another activity.

For another occasion a story situation based on the problem could be imagined: an out-of-town visitor is staying overnight at such and such hotel, and the next day she is coming out to the school to talk with the students. What directions should the principal give when she telephones her that evening? Will the visitor be walking or driving? These directions are read and discussed in a small group. Ask them to look at their papers, check for directions that a stranger would not understand, and change them so that she would.

Working with directions pays off secondarily in rich personal benefits, because when schools give students plenty of opportunity to pass around skills, everybody learns how to do more things. Young people encourage and inspire each other by showing what they can do. If you make your classroom a central how-to exchange, you’ll be gratified to find your students teaching each other a lot of practical skills at the same time they are learning to master an important kind of discourse.