of management and discipline is provided in chapter 7. What follows are some actions that teachers can take during the time students are working on a task that will usually solve most problems.

EXAMPLE: The student knows what is expected but has made the decision not to respond appropriately. The teacher has the following alternatives:

- Move the student to another location.
- Redirect the student to the task.
- Inform the student that the conditions of participation are that the student respond with appropriate behavior.
- Remove the student from the situation on the condition that the student may return when ready to accept responsibility for proper behavior.

Sometimes, despite all efforts to keep students productive, teachers have a few students who make the decision not to respond appropriately. If this type of behavior involves more than a few students, the cause of this lack of appropriate response should be looked for in teacher behavior.

OBSERVING AND ANALYZING STUDENT RESPONSES

Observation of student responses is an essential skill for teachers. You cannot provide students with feedback, assess their performance, or make decisions about what to do unless you can observe and accurately determine what it is students are doing. In recent years physical educators have begun to look at the processes of observation and analysis as separate learned skills that do not come naturally to most teachers.

Your skill in observing depends on many factors, including your knowledge of what you are teaching, who you are teaching, and the context of the specific class you are teaching, as well as the complexity of the environment and the content you are observing. Teachers who have many students, who are observing unfamiliar skills, or who are not comfortable in the teaching role will not be as good at observation of movement responses as teachers who have smaller classes, who are dealing with familiar content, and who are comfortable in a teaching role. Problems with some skills are also more difficult to see. Skills like the overhand throw pattern or the long jump occur so quickly that it is difficult to do an accurate analysis of problems without being able to slow down the skill.

The following key points from the work of Barrett (1979, 1983), Biscan and Hoffman (1976), and Craft (1977) provide some guidelines for teachers who want to improve their observation of student responses:

- The position that the teacher observes from is critical.
- Teachers do better if they know in advance specifically what they will be looking for.
- Observation of large groups of learners seems to be enhanced if teachers have a strategy for observing a large group.

The following section considers the implications of each of these statements for the teacher during activity time.

Positioning of the Teacher

The position of the teacher during activity time is critical from three perspectives. First, teachers responsible for a whole group of learners should never remove themselves entirely from a position that allows them to constantly view the whole group. Second, teachers may need to change positions to get a new observation perspective when looking for different aspects of performance. Third, where teachers stand affects the performance of students.

Teachers of large groups learn early that moving throughout the group and getting to all parts of the available space increases on-task behavior and tends to keep students more productive. Teachers should try not to get caught in the center for any length of time. The center does not allow the teacher to remain visually in contact with the whole group. Furthermore, students will not use the space a teacher has reserved for the teaching position. Teachers who do not make any place in the work area a home base avoid these problems.

Where teachers position themselves is critical to their ability to judge particular aspects of performance. Different motor skills and different parts of a motor skill require different views of performance. For example, teachers cannot discriminate lateral movement in the run if they are observing from the side. Similarly,

teachers are probably in a better position to judge some aspects of the overhand throw pattern from the front and others from the side. All teachers, but particularly inexperienced teachers, need to consciously select an observation position based on the specific aspect of the skill they are trying to observe. When teachers send students off to work in groups for any length of time they continue to have a responsibility to observe and work with the students in these groups. They will need to continually check what is going on in all the groups when they decide to spend time with one group.

Determining a Plan for Observing Large Groups

In studying observation skills, Barrett (1979, 1983) found that if teachers of large groups have a plan for observing individuals, they are more likely to use their observation time effectively. The observation plan may be (1) to scan the whole group for one particular movement aspect, (2) to select a few individuals known to be of different skill levels, or (3) to observe only a few students at one time, selecting different students at another time. A plan for observation helps the teacher avoid the problem of looking but not really seeing. This problem can occur easily when the teacher is confronted with a sea of performers.

Closely related to the idea of who to observe and what to look for is the decision of how long to stay with one student or one group. The length of time a teacher observes one student or one group depends largely on what the teacher is looking for. Although some judgments about performance and on-task behavior can be made quickly, many cannot, thus requiring the teacher to see more than one trial of the same skill or spend time observing what a group is doing. The teacher must determine how many students to observe and what is most important to observe. In observing a skill such as the tennis forehand, critical aspects such as arm extension can probably be observed rather quickly with a scanning strategy. If the important cues are determined before instruction using a developmental analysis of the content, the teacher's selection is easier. However, the teacher still must order sequentially what the initial focuses of observation will be and what can be delayed.

Knowing What to Look For

If a teacher presents the following tennis task to a group of learners, what should be looked for?

> EXAMPLE: The student and a partner should send the ball back and forth to each other with forehand strokes, concentrating on getting the arm extended.

The first observation cue in this task is an obvious one: The teacher should be looking for arm extension. Where should the teacher stand to observe arm extension? What levels of feedback statements would be congruent with this task? Arm extension can probably be observed best from the front. To be congruent, teacher feedback should be related to arm extension. What is most important to remember in this example is that the teacher has to make a decision about what to look for.

Deciding what to look for is complicated by tasks that ask students to focus on many aspects of performance at the same time and by tasks that have no specific focus. If students are asked to focus on so many specifics that the teacher cannot determine an observation focus, it can probably be assumed that students are being overloaded with cues on which to focus their work.

At times a task has no specific stated focus that provides the teacher with a clear cue of what to focus on. An example of this situation is when students, primarily beginners, are simply given the idea of a movement and then asked to try it. As previously stated, the teacher in this case should first observe to make sure students are trying to perform in a way consistent with how the skill is grossly performed. For example, if the teacher has asked students (1) to support their weight on their hands by raising their feet in the air and (2) to bring their feet down softly and close to their hands, the teacher probably should be assessing their intent to come down softly and close to their hands. Knowing that students who do not initiate their movement by raising their hips will have difficulty bringing their feet down close to their

hands helps the teacher to assess causes of feet not landing close to the hands. Next, the teacher probably should assess the gross aspects of performance and mentally note them to provide further cues after students have had an opportunity to practice.

In the case of the handstand task, the gross aspects might be the position of the head and hips and the push off the floor with the foot. There probably are critical features of movements more important to observe than others. It is not enough to be able to analyze a movement. Teachers must be able to select cues according to their objectives and the stage of the learner.

If the tennis forehand is being presented for the first time, what gross observation cues are most important for the teacher to observe? There is no set answer to this question, but rather a range of correct answers that experienced and successful teachers have discovered through trial and error and much educated guessing. When presenting tasks to beginning learners, teachers should select a limited number of critical features of the task to communicate. The cues the teacher gives to the learner should also serve as the observation cues for the teacher. For the tennis forehand, a teacher of beginners would probably want to observe first whether the student's side is toward the net and then the path of the racket head through space.

Perhaps there will be a time when the study of teaching physical education will involve learning critical observation cues for teaching different skills at different levels. Until such time, teachers will need to do much skill analysis and put much effort into consciously and deliberately selecting observation cues for the tasks they give. Many of these decisions should be made in planning and should be identified specifically on the lesson plan for beginning teachers.

Physical educators will find themselves giving tasks to groups of students and having to observe what groups are doing because of the recent emphasis in education on the value of students working together in cooperative learning environments. Examples of learning tasks that are partner- and group-centered are as follows:

> With your partner develop a dance that uses at least three of the skills that we have been working on during this week. A list of those skills is on the wall. Your movements and transitions must be smooth. You may choose to synchronize the movements with your partner or to establish a lead/follow relationship with your partner. Work on your dance until you can do it two times in a row in the same way.
>
> Your team will have ten minutes today to practice the skill you identified in the last lesson as needing the most work. Each captain was asked to go home and work on a good way to practice the skill from the team skill practice handbook. After that practice you will have two things to do. The first thing you must do is to decide who from your team is going to be the referee and the scorekeeper for today's game and who is going to be in charge of equipment for the rest of this week. You must write down these decisions in your team folder. You will then have about seven minutes to plan your strategy for today's game and to get your team ready to play. I have been really pleased with the responsibility that each captain has taken to make these practices go well and all of the teams for the last class period were ready to go when their games were supposed to start.

We can use the same strategy for observation with groups of learners, as we discussed, for individual performance. Our first task as an observer is to make sure that students understand the expectations for the learning experiences and are working productively on the task given to them. In the case of the partner task, are the students working cooperatively and with a strategy that would allow them to complete the task as defined by the teacher? The cues for the partner task were that the dance as designed uses three of the skills specified by the teacher, the relationship between the partners is either to produce synchronized movements or a lead/follow relationship, and the dance is repeatable. We want to make sure that students are using the cues in their work. Likewise, the learning experience for the team example is equally explicit in expectations for students. Students are expected to be productively engaged in the practice of a skill identified by them in the last class period. They are expected to choose referee, scorekeeper and someone to be responsible for equipment and to write these things in

their team folder for the day. They are also expected to get themselves ready for their game on time. An assumption of group learning experiences is that the interaction between members of the group will be positive and inclusive. All members of the group must have a part in the decision making and completion of the tasks assigned to a group. The teacher will want to observe the interactive process in each group and make sure that this is occurring and to intervene to suggest ways in which it may occur if it is not. The teacher would need to observe to make sure that the group process was not only positive and inclusive but also that the work of the group was focused on the tasks that they were given. Sometimes this means that the teacher may need to be a silent observer of the process for periods longer than would be required to observe motor skill performance.

PROVIDING FEEDBACK TO LEARNERS

The teacher functions and behaviors that have been discussed so far are necessary to maintain an on-task, safe, and productive learning environment. However, none of the behaviors communicates the content of the task to students. Instead, the behaviors establish and maintain the conditions for learning.

Feedback is information learners receive about their performance. The teacher of motor skills does not have permanent products of student motor performance (unless they videotape), such as examinations or written assignments, that can be taken home and carefully evaluated. A large percentage of feedback students get on motor performance occurs during or immediately after performance. Although the specific relationship between teacher feedback and student learning in physical education classes has not been demonstrated, teacher feedback plays many other roles in group instruction, other than just providing individual students with information on their performance.

Teacher feedback maintains student focus on the learning task and serves to motivate and monitor student responses. When the teacher gives attention to the student, that student (and others as well) is likely to be more motivated and also to remain on task. Specifically content-related feedback communicates the teacher's intent to help students improve the quality of their responses and therefore is likely to contribute to a task-oriented and productive learning environment.

The need to react immediately to student responses places a heavy burden on the observation and analysis skills of the teacher. Providing appropriate feedback is perhaps the behavior that most taxes a teacher's knowledge and observational skills.

Types of feedback can be classified in many ways. Each type of feedback serves a different purpose in the instructional setting and therefore should be used with a specific intent. Table 8.1 illustrates the classifications of feedback discussed in this chapter.

Evaluative and Corrective Feedback

Evaluative feedback occurs when a value judgment concerning how well or poorly a task was performed is directly communicated to the learner. Evaluative feedback is a judgment made about the past performance of the student. **Corrective feedback** gives the learner information on what to do or what not to do in future performances. Teachers will often couple evaluative and corrective feedback together, such as, "You really got your feet into position that time; now let's try and follow through on your stroke." In the first part of the feedback, the teacher was making a judgment about previous performance, and in the second part of the feedback statement, the teacher was giving the student information on how to correct future performance.

Evaluative and corrective feedback can be (1) congruent with the focus of the task or incongruent with the focus of the task; (2) general or specific; (3) negative or positive; and (4) directed to the class, a group within the class, or an individual.

Congruency of Feedback

Congruency refers to the relationships between the content of feedback, the focus of the task, and the cues that teachers give for the task. Congruent feedback gives information on performance or results *directly related* to what the learners have been asked to

focus on. Some examples of congruent feedback for the task of dribbling a soccer ball while concentrating on using the inside of the foot are the following:

- "You're still using the outside of your foot occasionally."
- "Not the front of your toes, John."
- "That's it, Betty, the inside of the foot each time."
- "Stay with the inside of your foot, Susan."

Each of these feedback statements refers directly to the inside characteristic of the foot dribble.

Incongruent feedback gives information to the learner that may be important to the skill but is not specifically related to the task focus. Some examples of incongruent feedback for the task just described are the following:

- "Keep the ball closer to you."
- "Watch where you're going."
- "Get those feet around when you're changing direction."

When teachers give a high percentage of congruent feedback, their teaching becomes more narrow and more focused. Student effort can also become more narrow and more focused. Congruent feedback reinforces the task focus. The usual approach to feedback is to use what is called the *shotgun approach*. The shotgun approach involves asking the learner to focus on a task and then giving feedback on everything the teacher knows or observes related to that skill. Physical education teaching would be more effective if teachers narrowed the number of cues they give students related to a movement task and tried to keep their feedback related to those cues. Students can focus on only a limited number of cues. These

TABLE 8.1

Evaluative and corrective examples of the different classifications of feedback

Classification	Evaluative	Corrective
General	"Good job."	"Don't do it that way."
Specific	"You really got your legs extended that time."	"Point your toes."
Negative	"First graders play better than you."	"Try not to bend your knees."
Positive	"Tommy has got his ball in the target every time."	"Keep your knees locked."
Class	"This class has improved 100%."	"Don't forget to get back to home base position after you hit the ball."
Group	"This group is not working as well as I know you can."	"Play your own position."
Individual	"You're not stepping into the ball."	"Step into the ball."
Congruent*	"Your pass made the receiver stop."	"Lead the receiver a little more."
Incongruent*	"Don't dribble the ball until you look to see if someone is open."	"You are not passing to everyone in your group."

*Assuming the task is to work on getting the pass ahead of the receiver so that the receiver does not have to stop to receive it.

cues should be carefully selected by the teacher, and the feedback the teacher gives should reinforce the cues given. Student focuses are hard to maintain when the teacher continuously uses feedback to switch focuses within short periods. This is particularly true in situations using an interactive strategy, where all students are working on the same task.

Teacher feedback is a powerful agent in focusing student responses. It is a great help when it reinforces the desired intent of the task, but it can be just as powerful in changing the intent of students' work. Consider the situation where a teacher asks students to balance on a variety of body parts. The teacher observes a student doing a headstand and cries out, "Johnny is doing a headstand." Within seconds the entire class is doing headstands. The headstand, however, was not the intent of the task—the intent was a variety of ways of balancing on three parts. The teacher in this instance has changed the intent through the feedback provided. A better approach would be either to positively praise the idea of the headstand and challenge students to seek other responses as well or to make sure that a variety of student responses is praised.

The teacher who asks students to focus on the quality of performance and then does nothing but reinforce winning, losing, or scoring in games probably will not see quality. A competitive situation is a student focus difficult to orient in another direction. The more that competition becomes part of the feedback structure of the teacher, the more intense the focus becomes in the minds and work of the students. All feedback cannot always be congruent. Students need individual help, and sometimes this means asking for higher or lower levels of refinement from individuals within a class. The first observation cue the teacher should use, however, is to look at performance in relation to the focus of the task. The teacher should then provide appropriate congruent feedback before moving on to other cues.

General versus Specific Feedback

The use of **general feedback** versus **specific feedback** has been the subject of much research in motor learning and in teaching. Theoretically, specific information should be more valuable to the learner. Specific feedback has the potential to contribute to student learning a great deal more than general feedback. Specific feedback also serves a major role in maintaining student attention to the task and in developing accountability for tasks. Most teachers are trained to be specific in their feedback.

For specific feedback to be helpful to the learner, it must be related to an aspect or a result of performance that is fairly consistent. At the beginning stages, learners who do not make the same response consistently probably cannot use feedback related to inconsistent errors. Young children and beginners probably should be given general information that clarifies the *intent* of the performance rather than the details of the performance. Experienced teachers who work with students with low self-concepts probably will agree also that sometimes more general positive feedback that helps to increase student motivation is more critical than specific feedback on incorrect performance. In any case, the concepts used in verbal feedback should be those understood by the learner.

There are many levels of general and specific feedback. Consider the following statements:

- "Good."
- "Good hit."
- "Good follow-through on the hit."

The word *good* is the most general of the three statements. Teachers use general feedback statements like "good" primarily to increase student motivation. What is being evaluated with the word *good* is sometimes difficult to determine. Teachers may use "good" to mean "good effort," "good, you're on task," or "good hit" in the content of a hitting task. The learner will probably be confused. The word *good* should be used to reinforce good performance by helping students understand *what* was good about performance.

The ability to give accurate and appropriate specific feedback depends on clear skill goals, knowledge of how skills are performed, and good observation and analysis skills. When teachers realize that they are giving mostly general feedback on performance, they should train themselves to follow up the feedback by questioning *what* was good about the performance.

Some real differences appear to occur in the frequency with which teachers give feedback on skill

and other student behaviors at different age levels (Rink, 1979). Elementary teachers give more feedback, college teachers rank second, and secondary teachers provide the least feedback to their students. A great percentage of that feedback is general, however, which seems to indicate that the teachers are using the feedback more as a motivating and monitoring tool than as specific information to learners on their performance.

Negative versus Positive Feedback

Descriptive studies in physical education have shown that feedback in gymnasiums tends to be more negative than positive. This is unfortunate but probably attributable to the notion that the physical educator's job is to correct errors. Actually, students can be helped to correct errors in positive ways. Information about what is good in a performance is as valuable as information about what is wrong. Consider the following statements:

- "You're putting too much force on the ball."
- "Use less force on the ball."

The difference between these two statements is a subtle one. The first is a perspective on past performance (evaluative) and the second a perspective on future performance (corrective). Teachers often assume that students know what to do when told what not to do. This may be a false assumption.

Clarity of feedback can be enhanced by helping students to understand the difference between their performance and the desired performance. For example, this can be achieved if both of the statements just given are used in conjunction with each other when the teacher feels the need to provide corrective feedback. The student then benefits from examples of both what to do and what not to do. This type of feedback becomes even more effective if the teacher can spend time with the student (or group) until the student has had an opportunity to use the information provided. The student's understanding of the feedback then can be checked. Teachers not needed by the whole class can afford to do this.

Some recent interpretations of research have overemphasized the idea of negative versus positive feedback and implied that teachers should not even tell students when the students are doing something wrong. This research has been misinterpreted. What is implied in the research is that negative criticism is to be avoided, particularly criticism attached to the person rather than the behavior. Information on performance that tells the students the response is not correct is valuable and does not need to be harsh or critical in its delivery. Teachers can correct errors without appraising the individual and should make the distinction between the *behavior* of the person and the *person* when providing feedback (e.g., the teacher should say "Get the snap in the wrist quicker" rather than "You're not doing it right, John"). Teachers who are sensitive to the student's need to be successful, particularly in the eyes of the teacher, will sensitively communicate error to students and give students information on how to perform correctly.

The Target of Feedback

Teachers will want to direct their responses to different units of learners at different times during a lesson.

For individual feedback to be effective, teachers must have time to work with students. *(Courtesy SIUE Photo.)*

The following categories describe the targets of teachers' feedback:

- *Class*: Feedback is directed to all the learners in the class.
- *Group*: Feedback is directed to a part of the learners in a class.
- *Individual (Class)*: Feedback is directed to one individual so that the whole class benefits from the comment.
- *Individual (Private)*: Feedback is directed to one individual in a private way.

A typical model of instruction in physical education describes the teacher giving a task and then frantically running from student to student to correct errors. If students can work independently and productively for long periods, individual private communications may allow the teacher opportunities to be more specific and to individualize. However, one problem with this model is that there usually is not time to get to every student. Teachers who try earnestly to get to every student at least once during the class period frequently fail. Better ways exist to provide more information on performance to more learners.

Many times in physical education classes, particularly with beginners, the majority of learners can profit from the same feedback. In these instances teachers should consider directing their comments to the whole class. Comments directed to an individual so that the whole class can hear or comments directed to the class as a whole also serve a strong monitoring function in group instruction. Where active monitoring is necessary, such as in elementary schools, feedback directed in this way can be especially helpful. However, singling out a secondary school student for public feedback may have strong social consequences for this age student and should be avoided.

The following examples of feedback directed to the class and feedback directed to an individual, so that the whole class can hear, illustrate the use of these types of feedback:

- **Feedback directed to the class**
  Situation: The teacher has given high school tennis students the task of tossing the ball in the air continuously until it consistently falls in front of the toe. The teacher observes that many of the students are gripping the ball incorrectly for the toss.
  Feedback: The teacher stops the whole class and says, "Many of you are tossing the ball from the palm of your hand. Toss the ball from the pads of your fingers." The teacher then demonstrates the proper toss and sends students off to practice.
- **Feedback directed to a student so that the whole class can hear**
  Situation: The teacher has asked a class of second-grade students to jump off benches softly so that their landing cannot be heard. The teacher notices that a few students continue to land hard from these jumps.
  Feedback: The teacher selects a student who is landing quietly and says so that the whole class can hear, "Johnny's landings are so soft that I can't even hear them."

Timing of Feedback

The sooner feedback is given after performance, the more potential it has to help the learner. Feedback can immediately follow performance, or it can be delayed. A teacher moving from student to student most often provides feedback immediately after performance, as does a teacher who stops a group of students who have similar problems.

Teachers who give students time to practice and then provide evaluative and corrective feedback as a task focus delay feedback but provide a future focus that is valuable. Delayed feedback with a new task focused on improvement may increase the quality of performance in large instructional groups, particularly beginners. Delayed feedback with no opportunity to improve performance does little to help students improve performance.

Use of Feedback to Promote Student Understanding

Teacher feedback is a useful tool to help students understand cognitively what they are doing, what they should be doing, and why adjustments should be made. If teachers have time to spend with individuals,

they can promote cognitive understanding of movement information on why it is important to perform in particular ways. The National Content Standards in physical education (NASPE, 1995) put a great deal of emphasis on students understanding how to improve performance. Consider the following episode:

> EXAMPLE: Teacher A observes a student not transferring weight to the forward foot on a tennis backhand. Teacher A goes up to the student and says, "Where is your weight when you finish your stroke?" The student replies, "I don't know." Teacher A tells the student, "Do it again and tell me." The student follows the teacher's instructions and replies, "On my back foot." Teacher A asks, "Where should it be?" and the student replies, "On my forward foot." Asked "Why?" the student says, "Because I can hit harder." Teacher A confirms the student's discovery and says, "Yes, because you are then using the momentum of your body weight to help you get more power, and you're able to hit the ball harder."

The problem of weight transfer could have been handled easily with a simple "Step forward into your swing as you come through." The teacher might have been successful in correcting student error in this case. The teacher chose to take a less efficient route to change, hoping more understanding would develop on the part of the student.

Understanding is largely a cognitive goal. Its influence on skill development is not clear. Like movement concepts, the intent is not only immediate change in the single skill, but also transfer to other skills.

■ CHANGING AND MODIFYING TASKS FOR INDIVIDUALS AND SMALL GROUPS

Another major role of the teacher during activity is to change and modify tasks to make them more appropriate for individuals. No matter how much effort a teacher has put into individualizing tasks, there always seems to be a need to make tasks more appropriate for individuals or small groups within a class. Increased opportunities for participation outside the school setting have increased, not decreased, the range of abilities within physical education classes. Teachers can modify tasks to make them more appropriate for individual learners in much the same way that they develop tasks for an entire class. They can do the following:

- Change the content of the task entirely by asking individual students to work on something the whole class is not working on.
- Extend the task for individuals by reducing the complexity, expanding the complexity, or seeking a variety of responses from the same individual or group.
- Move students into or out of competitive situations.
- Extend the task laterally (another way to practice the same task at the same level of difficulty) for individual students.
- Prescribe levels of refinement or correct errors on an individual basis.

For example, if the task is for partners to strike a ball back and forth across the net continuously without losing control, the task can be modified in numerous ways for individuals or small groups of learners. (It is assumed that each student has a paddle or racket and that each set of partners has a whiffle ball, sponge ball, or tennis ball and a net or some other barrier to send the ball over.) Using the example, the following discussion explores the possibilities for making the task appropriate for different individuals within the class. These possibilities are described in the constructs of extending, refining, and applying/assessments that are used for the analysis and development of content.

Extending the Task for Individuals

The first modification considered is how the teacher may have to change the conditions of the task. Based on individual needs, the teacher in this example may need to do the following:

- Move students having difficulty controlling the ball closer to each other.
- Move students back who are not getting a powerful enough hit on the ball and are just tapping it.
- Create boundaries for students not controlling the direction of the hit.
- Ask students to start placing the ball away from their partners when the students have