CRITERIA FOR A LEARNING EXPERIENCE

Four criteria for a learning experience were presented in chapter 1 as a guide for teachers to use to determine the educational value of the experiences they provide learners. These criteria are:

- *Criterion One:* The learning experience must have the potential to improve the motor performance/activity skills of students.
- *Criterion Two:* The learning experience must provide maximal activity or practice time for all students at an appropriate level of ability.
- *Criterion Three:* The learning experience must be appropriate for the experiential level of all students.
- *Criterion Four:* The learning experience should have the potential to integrate the psychomotor, affective, and cognitive educational goals whenever possible.

From the previous chapter on the research base for teaching you should begin to see the importance and support for these criteria. Opportunity to learn and experiences designed at an appropriate level for all students are critical ideas if students are to profit from physical education. The teacher who designs experiences that include both cognitive and affective concerns of an educational program recognizes the integrated nature of learning. The focus of this chapter is to help you design learning experiences that meet these criteria, as it is not always easy to do.

DESIGNING THE MOVEMENT TASK

At the heart of each learning experience is the movement task. *Movement tasks* are the specific movement experiences that constitute learning experiences in physical education. When the teacher says, "Practice giving with the ball until you can't hear the ball hit your foot," the teacher is giving a movement task. Movement tasks are what students do that are related to the content. When students are involved in a movement task, they are involved in content in some way to engage in the task. There is always a what, a why, and a how to a movement task. Teachers should not just say, "Go practice basketball dribbling." If the teacher does not describe how dribbling will be practiced in a group instructional setting and the intent of that practice, the experience lacks focus.

Movement tasks have a content dimension, a goal orientation, and an organizational dimension that provide the needed focus:

- The *content of the task* is the movement content with which the students are asked to work.
- The *goal orientation of the task* describes the qualitative, or goal, aspect of the movement experience.
- The *organization of the task* is concerned with arrangements of time, space, people, and equipment, all designed to facilitate work on the task.

Consider the examples of movement tasks presented in box 4.1.

In some lesson situations, organizational arrangements for tasks are implicit in a situation because of previous experiences or established procedures. They are always present in some form, whether they are implicit or made explicit by the teacher. Each of these dimensions of the task is a critical aspect of task design. As important parts of the task, they can be manipulated by the teacher to achieve different goals and different objectives.

Content Dimension of Movement Tasks

The content dimension of the movement task describes for the learner the substance of the task (e.g., pass the ball to a partner, play softball, or self-assess your performance). The choice of content is primarily a curricular decision based on the unit of study and lesson objectives. Teachers decide on a progression of experiences that lead the learners from where they are to where the teachers want them to be with the content. Once these decisions are made, however, teachers must further decide (1) the amount of decision making students will have in the choice of content and (2) the affective and cognitive involvement of the learner in each task. Teachers rarely make these decisions for a whole lesson. Each task is a unique decision for the teacher.

Teachers select the content of a task because they think that having students experience that content is important to a learning goal. As stated in chapter 1, if the teacher has no goals, it does not matter what tasks are provided to learners. The selection of the content of a task is easier if the teacher's goals are clear. As a beginning teacher, the content you are to teach will probably be selected for you. In this case, you will have to determine the best task to use to develop that content with a given set of learners.

Most of the learning experiences teachers present will be related to learning motor skills. The teacher will select a skill to teach and then will develop a learning experience to improve learner performance in that skill. Sequencing content is discussed in chapter 6 on content development. Designing learning experiences to meet other goals is also discussed in chapter 6.

Checking the value of the content you have selected. The content the teacher selects can contribute or can diminish the value of the learning experience. When you select the content, ask yourself the following questions:

- If students are engaged in this content, will this experience contribute to an objective I have for learning in my program?
- Is the experience valuable for all of these students? Are there some students for whom this experience is not challenging? Are there some students for whom this experience is too difficult for them to experience success?
- Would the experience have more value if I redesigned the task to include both cognitive and affective involvement on the part of the learner?

Box 4.2 illustrates examples of content that is redesigned to include a concern for the appropriateness of the task for individuals as well as a concern for more inclusive involvement of the learner.

Goal-Setting Dimension of the Task

Goal setting involves communicating to the learner the intent of a task and student practice. Most teachers assume the intent, or purpose, is to "learn" a skill or concept, but the perceptions of students about what the intent might be and the intent of the teacher may be different. When learning motor skills, for instance, most teachers assume that the goal is to improve "form" or how the skill is done. Most of the time students are not working toward this goal; they are more interested in what the skill accomplishes rather than how the skill is performed. *The students and the teacher are more likely to have the same goal for a movement task if that goal is shared with the students at the beginning of the lesson.*
EXAMPLE: "I am more interested in whether you can use each of these cues in your performance than I am in how hard you can hit the ball."

BOX 4.1

Examples of Movement Tasks

Example 1

Practice the overhead set with your partner to see how long you can keep the ball going with your partner at a high level. If the ball falls to a low level, catch it and start again.
Content: Practice overhead set.
Goal orientation: Number of consecutive passes without losing control.
Organization: Practice with a partner (no other arrangements explicit).

Example 2

We are going to play basketball three on three but will not be using the baskets. To score you must catch the ball across the end line after three passes are completed. Your group of six will have half the court in which to play your game and you will use the red lines at either end of that space as the end line.
Content: Play three-on-three game with no baskets; pass and move to receive a pass.
Goal orientation: Use quick passes and move into a space to receive a pass.
Organization: Play in groups of six on one fourth of a basketball court using one ball per group.

B O X 4 . 2

Making the Content Dimension of the Task More Appropriate

Original content	Revised content
When I say go, everyone skip.	When I give the signal, everyone do either a skip or a gallop. Who can tell me what the difference is between these two skills?

The teacher has decided that not everyone in the class is able to skip yet, but everyone in the class is able to either skip or gallop. When students choose a gallop, they will be working on a skill that will help them to eventually skip.

I have posted the warm-up drill on the wall.	We will spend the first few minutes warming up for today's lesson. Each of our groups for today will be responsible for designing a warm-up exercise for a particular part of the body. We will put each part together and that will be the warm-up drill we will use for this unit.

The teacher has decided to give students a richer experience by having cooperative groups design exercises that they will bring to the whole class as a group contribution. Students will have to use their knowledge of warm-up exercises and will have to work with each other in cooperative ways to contribute to the whole.

The teacher has explained how to do the overhand volleyball serve and then sends the students off to practice at the service line.	The teacher has explained how to do the overhand volleyball serve and then says, "Some of you may want to start your practice close to the net until you are more successful. You can then move back closer to the service line."

The teacher in this instance recognizes that although students should all be able to do the skill at some level, some of the students may not be able to produce the force necessary to get the ball over the net from the service line. Giving the students the option to make that choice helps the teacher individualize for skill level. Giving students the choice also gives students experience with decision making.

Most teachers want students to become more proficient at motor skills, but learners cannot acquire proficiency in short periods of practice for one task. Instead, they acquire proficiency in stages. For instance, an initial goal for students in learning to field a ball might be to get their body situated in the proper fielding position. Later goals might involve the position of the glove or what to do after the ball is in the glove. In chapter 2 the importance of making tasks achievable for students was identified as an important aspect of learning. *Teachers can manipulate the goal orientation of tasks to ensure success by setting short-term goals en route to proficiency.*

Examples:
- "I don't care where the ball goes right now I just want you to get the feel of the movement."
- "Walk through your sequence until you know what the transitions are going to be. You don't have to do each move until you have it all figured out."

Teachers often explain a skill and then have the students start to practice or work on a task without the benefit of a goal for practice. For example, assume that the teacher has worked on the toss in a tennis serve and has explained the critical cues involved in the tennis toss. To set a useful goal for practice, the

tion, and evaluation of student responses in preparation for a new task focus.

The goal orientation of the task cannot be assumed unless stated by the teacher. Teacher responsibilities include not only telling students what task to do but also informing them how to do the task and indicating the goal toward which the task contributes. Statements such as the following help by giving the learner a goal and a qualitative emphasis in practice:

- "Work to get the transitions smooth."
- "Stay at the dribble until you can bounce the ball five times without looking at it."
- "Don't worry about accuracy yet, but work toward getting a full swing and hard hit."
- "Stay with the toss until you get the ball to fall consistently in one spot."
- "Choose a specific goal for your practice today so that you can evaluate your work at the end of the period."

An intent for good performance is communicated in these tasks. The teacher is sharing the purposes for which the tasks are designed, which gives the learners a focus in their practice.

More specific and narrower focuses of tasks will make the goal orientation clearer. Follow-up tasks that focus the learner on the quality of the response (e.g., "Make your body shape much clearer") provides a clear goal for students when efficiency of performance is what the teacher has identified as most important. These types of tasks are called refining tasks. More specific and narrower focuses of this type also sequence learning cues for students one at a time. Students, particularly beginning learners, cannot assimilate a lot of information about movement at one time. The teacher can sequence goals for performance so that major ideas of good performance can be handled first and then performance can be polished.

When students are ready to test the effectiveness of their performance, a task with an application/assessment focus provides a clear goal. Application/assessment tasks take the focus of the learner off how to execute the movement and put it on the product of the performance. Application/assessment tasks can be designed as self-testing, assessment experiences or competitive experiences against others. The following examples have been reworded from previous

The goal of this task is for the student to receive the teacher's toss and direct it to a partner so that it can be returned.

teacher might say, "Toss the ball until you can get it to land in the same spot consistently." The practice then has purpose. Teacher goals can also be set for practice involving skills that do not have easily identifiable results or that do not result in movement responses that are the same for all students. For example, the teacher can say, "Practice the backward roll until you don't have to stop the movement to let your head come through" or "Find all the ways you can think of to balance using three parts of the body as a base." These tasks provide a goal rather than just an intent to move.

It is also possible for goals to be both individualized and personalized for the student. When teachers individualize or personalize goals, they are accommodating individual differences in students (e.g., "Some of you may want to work to get ten in a row and some of you may want to choose to get your pattern smoother"). Goal setting helps learners focus their work and realistically evaluate their progress. Goal setting also helps the teacher with analysis, observa-

examples to illustrate the design of an application task and to clarify the goal orientation:

- "See how long it takes you before you can get your roll so smooth that you don't have to stop to let your head through."
- "Work until you can hit the ball seven out of ten times in the same spot without losing control."
- "Count how many ways you can find to balance on three parts of your body."
- "When you are ready, ask your partner to assess your form using the checklist."

A warning: There is a danger in designing tasks focused on application/assessment too soon. The student focus is taken off the quality of movement in highly competitive tasks, even those of a self-testing nature. Beginning tasks should help the learner focus on the intent of the whole movement and not just on the effectiveness.

Tasks that involve group responses, such as "Design an aerobic dance sequence in groups of four students," also should have a clear goal. In this instance the teacher should establish how students are to work, what a good sequence would look like, and what good group work would look like.

Organizational Arrangements for Tasks

In group instruction, teachers must make decisions about the following:

- Whether students will work on a task alone or with a partner or group (people)
- How long they will practice (time)
- Where students will work on the task (space)
- What equipment they will use (equipment)

These decisions are organizational. They arrange the environment for the content of the task. How the teacher arranges the environment is important, not only to the content of the movement task itself, but also to the potential of that experience to contribute positively to other program goals and objectives. Environmental arrangements are instructional arrangements for people, time, space, and equipment. Sometimes these arrangements are explicit in a task, and sometimes they are implicit. They should always

be purposefully designed. The teacher arranges people, time, space, and equipment to accomplish specific objectives. Teachers should not underestimate the importance of environmental arrangements in the facilitation of learning. Hough et al. (1975) define instruction as "the process of arranging human, material, and temporal resources with the intent of facilitating one's own learning and the learning of others." Arranging environments for learning and instruction is part of if not the same process.

Arranging people. In physical education, arrangements for people include decisions concerned with the number of students in a group, the number of students active within each group, and the criteria the teacher uses to group the students.

Group size. Group size and opportunity for learning are integrally related. It is often useful to consider the following categories when determining how students are functioning within a class:

- Individual
- Partner
- Small group (three to six)
- Large group (seven or more)
- Whole class

In each of the units mentioned, one student or all students within a single group can be active. For example, relays are usually a small-group activity, but only one student is active at a time. The game of "keep-it-up" in volleyball is a small-group activity with all students active.

Teachers should base the decision of how many students to include in a group primarily on the answer to the question, "How many students are necessary to engage in this task?" Some skills or experiences require more than one or two people to a group (e.g., offensive and defensive game experience cannot be gained by working alone). However, many teachers group students into larger units than necessary to practice a task. As a result, students are forced to share equipment and wait for turns. Sometimes limited space or equipment forces less than total activity. Sometimes students who cannot respond productively in a total activity environment need to be arranged in organizational formats that allow for greater teacher monitoring. And sometimes teachers will want to give

students roles in a group other than being physically active, such as observing, assessing each other, or working on a task together in a cooperative way. Again, it should be stressed that teachers should seek out alternatives to inactivity and work toward an environment that permits all students to be active.

Criteria for grouping. Criteria for grouping determine the basis on which students are put in groups. Unfortunately, most physical educators group randomly, using no criteria. Grouping is a powerful tool that a teacher can use to influence the learning process, yet many times teachers fail to take advantage of it. One of the most destructive ways of grouping students is legendary in our profession. We still have teachers choosing captains and having captains battling it out for the best and worst players.

Consider the situation in which twenty-five students are in class at five different levels of ability in a particular activity. Assume that the unit is a basketball unit and that the students at levels one and two are ready for a five-on-five game using regulation rules. The students at levels four and five are able to handle only modified situations. The class is coed, with no more than the usual number of social antagonists in the group. How would you handle this situation?

The immediate response of most beginning teachers to this situation is to create five teams with one student from each ability level. The first criterion for a learning experience, as described at the beginning of this chapter, is that the experience be appropriate for the student. Grouping five different ability levels on one team, regardless of game design, makes the experience inappropriate for a majority of students. The rationale given for such a decision is usually that the less-skilled players will learn from the more-skilled players. The students most likely will learn, but probably not much about basketball. It is sometimes desirable for students with greater skill to be placed in situations where they have to adapt to the abilities of less-skilled students. And in some situations, students with less ability profit from being with students with more ability. There is a new approach to teaching physical education, called sport education, which deliberately places students with different abilities on the same team. The teacher then works with

THE REAL WORLD

Use of Grouping Strategies in a Real-Life Setting

Elementary

Ms. T noticed that when she gave students the opportunity to choose their own partner there was always one student who no one ever picked, even if it meant that there were two people without partners after the "choosing" was finished. Ms. T thought about not letting students choose to avoid this issue but decided instead to talk to one of the more popular students before class and ask that student to choose the unpopular child for partner work when it came to that part of the lesson. The popular student was proud to be picked for the job.

Secondary

SP middle school was located in a racially mixed location. The teachers acknowledged that there was little racial tension between the students, but if left to form their own groups, students would group themselves by gender and by race. The teachers created a rule for physical education that all groups had to have at least one member of a different race and at least one member of a different gender than the other members. At first it took the students some time to work this out for their groups. The teachers made it a rule that they would not begin until the groups were organized in this way. Within a short time students were in compliance and it was not uncommon to hear several boys say that they would join the "girls group" that had formed or several African-American students volunteer to join the "white" group.

these teams in a deliberate way to make sure that the needs of all students placed on a team are being met. In the basketball situation just described you do not want to put students in a situation where they are continuously criticized for not passing the ball to someone who loses possession every time. What are the alternatives? How can this situation be handled?

Although research findings are mixed on the value of ability grouping, this criterion remains one of the

st desirable for skill acquisition. Teachers can ability group for the same or different tasks. Teachers can make it themselves the choice to students, or they can make it themselves. Students will tend to ability group themselves even given the choice. Unless the students' choice is cially nonproductive, teachers should strongly consider this alternative. Heterogeneous (mixed ability rel) grouping can work well, especially in peer aching situations and cooperative learning (see apter 9). However, teachers should avoid as much possible the continuous use of heterogeneous oups for competitive situations in which the range different skill abilities is great. Other alternative *ria for grouping may include the following:

- **Gender.** Grouping by gender is not a desirable choice in today's culture and should be avoided under most circumstances unless contact activities are involved.

- **Ethnicity.** If ethnic problems or an ethnic imbalance occurs in a class, serious consideration should be given to having ethnically balanced groups preestablished by the teacher or are an expectation for students who are asked to group themselves.

- **Interest.** When alternative tasks are to be presented, teachers should seriously consider allowing students to choose tasks by interest.

- **Social compatibility.** Many times teachers have to separate students who cannot work together productively and regroup them for productive social relationships.

- **Size.** It is sometimes important for students to work with others of equal or unequal size. Support activities and combative activities are examples of when consideration should be given to size. It is sometimes advisable to use size as a criterion for grouping when height is a decided advantage or disadvantage.

- **Chance.** Sometimes it makes no difference how students are grouped. Clever teachers have found many ways to create random groups other than the time-consuming "count-off" method. Some of these include grouping by colors of clothing, birthdays, or colors of eyes. If teachers want to produce an experience that allows students to work with others with

whom they ordinarily might not choose to work, chance may provide a good criterion for grouping. The Real World box (on page 77) describes the efforts of an elementary and a secondary teacher to group students using several criteria.

Arranging time. The time aspect of task design concerns the length of time students will spend in practicing a task and the responsibility for pacing responses to the task. Time is an important aspect of structure and can be used by the teacher to create more productive learning environments.

Task time. Few teachers, even experienced ones, can predict beforehand exactly how much time students will need to work on a movement task before shifting the focus of the task. In some teaching strategies (e.g., station teaching, see chapter 9), the teacher must make this decision ahead of time. Having to make this decision in advance makes time allocation more difficult, particularly because there is no good way to anticipate how much time students will need or can spend productively before the teacher must refocus students.

The decision of when to refocus students on a new task or when to change the task is based largely on what the teacher sees happening with student responses. *Teachers should not let practice deteriorate into unproductive responses.* There is a limit to both the physical capabilities permitting continued practice and the interest of even the most motivated student. However, sufficient time must be provided for a student to gain some consistency of response. Many effective teachers will stop work short of deteriorating responses and provide a short transition period to focus on evaluation. This evaluation may result in continuing the same task or switching to a new focus using the same material.

Pacing responses to tasks. When tasks are student paced, the teacher gives a task, and the students begin and end a task in their own time. When tasks are teacher paced, students begin and usually end each movement on a teacher signal. Sometimes signals are verbal, and sometimes a whistle, drum, or clap of the hands is used. Teachers who count out exercises or cue or walk students through the practice of a skill are presenting tasks in a teacher-paced manner. When a task is

teacher paced, all students are performing the task at the same time and in the same rhythm. Deciding whether a task is to be student paced or teacher paced should be determined by the type of skill the teacher wants the student to develop (open or closed) and the level of difficulty of the task. Teacher pacing of tasks may be more appropriate to skills that are more closed.

When teachers pace the task, they can select appropriate cues, and students are more likely to be "with" the teacher and not off task. Teacher pacing allows the teacher to attend to the speed and other dynamics of the movement. For many years, teachers of dance have practiced the use of teacher voice and rhythm instruments to ensure proper dynamics in a response such as "Forward-two-three, Back-two-three, Turn-two-three." Teachers of bowling who walk students through the cues "push out, swing back, bend, and release" are teacher pacing the initial practice of the skill. Some excellent teachers of sports skills have helped students' first attempts at skills by communicating the rhythm and dynamics of the skill through teacher voice and pacing.

Teacher pacing can help the student remember the sequence of cues used for a skill, because the student is using the cues immediately and not waiting until all the information has been given. Because the first stage in learning a motor skill is cognitive (see chapter 2), retention of cues can help the student form an accurate motor plan when teacher pacing is removed. Teacher pacing at the early stages of a complex skill may be of some benefit, particularly if the skill is a closed skill. However, teacher pacing for open skills destroys the desirable quality of unpredictability and should be removed quickly if used at all (Singer, 1980).

Arranging space. The arrangements teachers make for the use of space are important and can determine whether the intent and potential of a task can be fulfilled. These arrangements are determined in part by the answers to the following questions:

- What area is going to be defined as the practice area?
- How is the practice area to be partitioned for students?
- What organization of people in the space will be used?

Defining the practice area. Teachers must initially define the area of the field or gymnasium that will be considered the practice area. Teachers who neglect to establish clear practice areas probably will need to recall students from remote areas of a playing field or from the side of the gymnasiums, where the students are leaning against walls or hanging on apparatus. Practice areas can be defined with natural boundaries or with the help of markers.

The selection of a work area is dictated largely by the nature of the movement content. Some skills need a great deal of space, and some need less space. Striking activities, when control is a problem, are better practiced against a wall when inside, because ball retrieval and safety are strong considerations: How much space teachers allow for tasks in many cases determines the way in which the task can be performed and its safety. In manipulative skills, the skill requirements for force production and absorption are determined largely by the size of the space. If a student and a partner have one quarter of a tennis court for their striking work with paddles, their practice of forehand striking skills will be far different from their practice if they have a whole court. Volleyball is a different game when played on a regulation court than when played on a smaller, modified court.

Experienced teachers of young children learn another space consideration, but they somehow forget to share it with beginning teachers; that is, large open spaces are disconcerting to the very young child. Sometimes a large gymnasium is scary. Partitioning that space into smaller spaces until children feel secure in that environment is sometimes necessary. Psychologically, the smaller space makes the individual feel more secure. It also helps the teacher establish a more productive group learning environment, because group membership is more keenly felt in the smaller space. Chairs, traffic cones, or boxes are useful to divide space when large barriers are not available.

Partitioning practice areas. Partitioning practice areas involves deciding how to break up the play area for the use of students. The teacher's inclination is either to reduce the amount of space available to each student so that all may be active or to reduce the space and minimize the force or speed used in some activities. Sometimes, however, it is necessary to give

students some opportunity to experience the effects of a larger space on their movement. This is particularly true in game areas, where force production and redirection are crucial. It should be considered also in dance and gymnastics tasks. The challenge is to allow some students the opportunity to use larger spaces and at the same time provide meaningful tasks for those who do not have use of the larger space.

The size of the space also is an important organizational decision, because teachers can manipulate the size of the space to reduce or extend the complexity or difficulty of a task, either for the class or for individuals. The need for large space must be balanced with the need for maximal activity. I once observed a high school floor hockey class of forty students in which twelve students were playing and twenty-eight were sitting out. The value of that experience for any of the students was indeed questionable.

Organizing people in space. The organization of people in space concerns the spatial formation of people in the play area. Figure 4.1 describes some of the more popular arrangements for people. The present emphasis on maximal participation in physical education classes has made the use of lines, squads, and circles of people less popular than it once was. Much time is lost getting people into these formations, and many of these formations were used to restrict the number of people active at any one time.

The scattered formation is a useful organizational arrangement of people when all individuals are going to be active at one time and when the task does not require other spatial arrangements. Telling individual students, partners, or small groups to quickly find a place to work readies students for activity without extensive time spent in organization; also, it uses all the play area available. Having other students around them, all working at the same time, is probably less confusing to the students than it is for the teacher. The scattered formation also eliminates the situation where one student watches another perform. This can be an asset when working with all learners, but particularly beginning learners.

The problem with the scattered formation is that the teacher cannot observe students as easily as in formal formations. Students can get "lost" in the scattered formation. Students can circulate and make it a crowd easily unless teachers circulate and
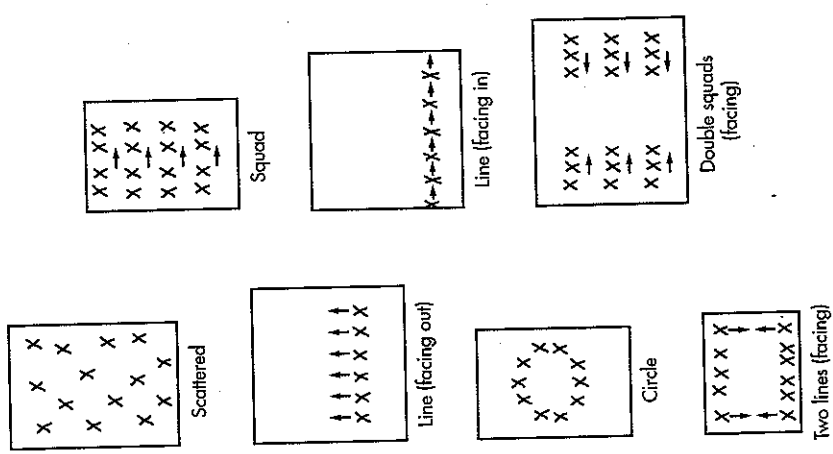
FIGURE 4.1
Organizational arrangements of people in space.

point to be aware of the total group. At times, teachers will want students in more formal organizations. Task presentations that are teacher paced (e.g., initial practice of dance steps) are more successful if everyone is facing the same direction. The practice of striking or throwing skills, either with partners or against a wall, is safer if missed balls do not interfere with other students. Teachers will want to consider front-facing lines for these sort of activities.

should try to avoid a situation where the arrangements for people and space are dictated by the amount of equipment available. Few children in an ordinary classroom share texts, papers, or pencils. They should not be expected to share equipment when one piece of equipment for each learner is appropriate.

Included in decisions about equipment is determining whether to provide all students with exactly the same equipment (e.g., the same ball; the same size, weight, or shape ball; the same rhythm instruments in dance; the same arrangements of apparatus; the same height net). As with decisions regarding space, the arrangement of equipment can change or modify the tasks. Higher nets in volleyball encourage getting under the ball to play it; lower nets make the spike more attainable for shorter or less-skilled players. Some combinations of gymnastics apparatus encourage traveling in one direction, whereas other combinations of equipment encourage a change in direction. The size and weight of manipulative equipment can often determine whether younger and less-skilled students can be successful in performing a skill in an efficient way. Nothing is sacred about regulation-size equipment. If the equipment needs to be modified, teachers should seriously consider modifying it, even on an individual basis. The choice and arrangement of equipment is not just an organizational detail, but a critical factor of task design.

A large part of safety is teaching students how to do a skill or activity correctly.

Group games usually have their own organizational formats. Teachers are cautioned to be alert in selecting games that have high rates of student activity. Highly organized formations for skill practice usually require much time to get students organized and often are unnecessary for the skills practiced. It is not uncommon to see a teacher take seven minutes to get students into a practice situation that lasts three minutes.

Arranging equipment. Procurement and arrangement of equipment are also critical determinants in the potential ability of a motor task to accomplish its objectives. For most situations, particularly in the games and sports areas, it is ideal to have one piece of equipment for each student or, in the case of specialized equipment, for every two students. Teachers

■ DESIGNING LEARNING EXPERIENCES THAT ARE SAFE

One of the essential characteristics of any arrangements made for a task is the safety of that task. The quality of safety overlaps decisions made regarding the content, the goal-setting dimension of the task, and the organizational arrangements of the task. All of these factors contribute to the safety of task.

When a teacher asks students to do something, the teacher must be sure that what the teacher asks the student to do will not harm the student in any way. Although some risk is involved in the content of physical education, that risk can be minimized by the following precautions:

1. *Make sure all students have the prerequisites to do a skill.* It is unsafe to ask students to try a skill they have no chance of being successful with. Not all students are ready to do a gymnastics vault or to catch a hard and fast ball at the same time. If you have students in the class who cannot do what most other students are ready for you must individualize the task (see next section).

2. *Do not let students work "out of control" in any task.* Make control of movement a goal for all experiences. Students who are allowed to swing away recklessly with a bat, stick, or racket or are allowed to fling their bodies at equipment or a mat are dangerous to themselves and others and should not be allowed to function in this manner with any content.

3. *Teach students how to work safely with a task.* Students can be taught to work safely in physical education.
   - They can be helped to be aware of others in their movement and adjust their movement in relation to others.
   - They can be made aware of the danger of flying balls and work with control.
   - They can be taught to return other student's equipment to them without flinging the equipment across the gymnasium.
   - They can be taught what control is on landings from a gymnastic move and taught how to land with control.
   - They can be taught that any kind of "crashing" into students or anything else is not allowed in class.
   - They can be taught not to assist others in their movements unless asked to do so by the teacher.
   - They can be taught to look around and make sure they have enough space before they swing any implement.
   - They can be taught to "rest off equipment not on it" and to not use large equipment unless they have permission so they are not tempted to "fool around" on the equipment.

4. *Arrange the environment for safe participation and practice of the skill.* Each content creates its own potential for being a safety problem and the teacher must think through the potential problems with each task that is given. Some examples follow:
   - Gymnastics must include mats if students are going to land from great heights.
   - Finish lines for races must be placed well before a wall or other obstruction so that students have time to decelerate.
   - Targets for archery must be staggered at different distances rather than where students line up to shoot at the target.
   - Any sport in which the student is swinging an implement must ensure that there is enough space to do so safely.
   - Objects traveling at great speeds should never come "by accident" to another student.
   - When students are all moving in the same space they must be taught how to do this safely.

▪ STUDENT DECISION MAKING IN ENVIRONMENTAL ARRANGEMENTS

A critical concern in the design of movement tasks is the amount of student involvement in the learning process. Students can often be part of the decision-making process when environmental factors are discussed. They may make decisions for themselves or may be helped to make a group decision. Consider the possibilities presented in box 4.3 for student choice relating to environmental arrangements of a task.

When teachers make all the decisions relative to environmental arrangements, task content, and criteria for performance, the task is highly teacher structured and teaching becomes very direct teaching. When teachers begin to share these decisions with students, tasks become less teacher structured, and teaching becomes more indirect. Many beginning teachers assume that task structure is an all-or-nothing proposition. This is

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BOX 4.3

Possibilities for Student Choice Relating to Environmental Arrangements of Tasks

People
Who to work with
How to choose who to work with
How many to work with

Time
When to start a movement
How much time to spend on a selected task before moving to a new task

Space
Where to work
How much space to work in
Where the boundaries are to be placed

Equipment
What kind of equipment to use
How to arrange the equipment
What adjustments to make to the equipment
How much equipment to use

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involving throwing and catching. The students are able to work in this area without the need for long organizational periods during which they get partners or equipment. The teacher finds it unnecessary to use lines or more formal arrangements for the use of space. However, during the next class period, the teacher introduces some work in creative dance. The teacher introduces the idea of pathways in space with different body parts. She explains what a pathway is and sends the students off into their own space to practice. The students do not work productively. Within a few seconds, little work is taking place that can be described as productive.

The teacher's problem in the second class period is one of structure. The task was a new one to the students and different from any experiences the students had encountered before. The students did not have a complete enough idea of appropriate responses to the task to be able to work independently with the content. The students in this situation could have profited from some initial experiences in which the teacher did the following:
- Chose the body part to be used
- Paced the task with verbal cues or instrument support
- Limited movement to personal space

The teacher could have then gradually removed aspects of the structure before encouraging students to work independently with the task.

The question of whether to highly structure tasks or whether to encourage student decision making is again a curricular decision. Students involved in the process are more likely to learn more than just psychomotor skills than those who are uninvolved in the process. When arrangements show some flexibility, they can potentially be made more appropriate for individuals. Some evidence exists that highly structured, teacher-dominated environments may be more efficient in producing more narrowly defined learning (Good, 1979). Highly structured environments will generally involve much time spent in organizational types of behaviors.

Teachers should operate at all points on this continuum, depending on what is appropriate for their objectives. The need for structure depends on the student's competence and confidence with the task

not true. Teachers need to learn to add and remove structure as needed in particular learning experiences.

Although it is true that some students cannot and perhaps will not ever work productively in more-unstructured environments, the concept of structure does not solely depend on the developed independent learning skills of students. Any learners inexperienced in an area of work will need more structure until a repertoire of correct responses for a situation can be developed. Appropriate decision making is a skill with carryover value from one area of work in the gymnasium to another. However, it is not independent of experience with the content.

The following example illustrates the importance of environmental arrangements in task design.

EXAMPLE: A teacher of third-grade students has worked with students extensively in the games area. During one of her class periods, she has students choose their own partners, move to an area of the gymnasium, choose a ball from within a range of choices, and work on a task