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### Psychomotor, Cognitive, and Social Development Spectrum Style

Those who teach physical education have the unique opportunity to enhance student learning in the psychomotor, cognitive, and social domains. Some suggest that physical education is the only subject area in schools where the psychomotor, cognitive, and social domains can be developed simultaneously (Rink, 1998). It is inherently, then, one of the few subjects in schools where the "whole child" is developed.

This view of developing the "whole child" is reflected in the national standards for physical education (NASPE, 1995). The seven national content standards frame what students should attain from a quality physical education program. Standards one, three, and four are related to motor and physical abilities of learners. These three standards address outcomes specific to the psychomotor domain. The psychomotor domain of learning is what makes physical education distinct from the other subject matter areas in schools (Rink, 1998). Standard two is concerned with knowledge acquisition or information processing. This standard addresses outcomes specific to the cognitive domain of learning. Standards five, six, and seven are concerned with students' "feelings, attitudes, values, and social behaviors" (Rink, 1998, p. 6) specific to movement. These three standards address outcomes specific to the social domain. The seven national content standards and the learning domain to which each belongs are presented in Table 1.

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A question that looms large for physical educators is "how do we create a learning environment that meets the physical, cognitive, and social needs of all students?" This question is particularly significant in that one of the challenges facing physical educators today is the amount of time allotted to physical education instruction in schools. The purpose of this article is to describe how the Spectrum of Teaching Styles can help guide physical educators in developing an instructional environment that allows learners to meet the national content standards for physical education, and in turn provides the learners with a quality educational experience.

The Spectrum of Teaching Styles is a framework of instructional models that is based on teacher and learner decision-making (Mosston & Ashworth, 1994). Each teaching style within the Spectrum has a particular structure of decisions that impacts the instructional relationship between the teacher and learner. According to Mosston and Ashworth, "the Spectrum of Teaching Styles defines the available options or styles, their decision structures, the specific roles of the teacher and learner in each style, and the objectives best reached by each style" (p. 3).

#### The Development of the Spectrum

Mosston and Ashworth (1994) identify four reasons for developing the Spectrum of Teaching Styles. The first reason relates to a favorite way of teaching based on individual values and experiences. The authors term this as "teaching from a personal style" (p. 6). The problem associated with teaching from a personal style is that it "limits the teacher's options and potential contributions to the students' learning" (p. 6). Meeting outcomes associated with the physical, cognitive, and social domains of learning requires the use of multiple teaching styles, hence the development of the Spectrum of Teaching Styles.

The second reason relates to students being unique. Students learn in different ways, come from different cultural backgrounds, and enter physical education with different levels of movement experience. This precipitates different learner needs and aspirations. To reach the physical, cognitive, and social needs of the different learners, teachers must employ different teaching styles.

The third reason that lead to the development of the Spectrum relates to the wide array of objectives that are associated with the delivery of physical education activity. The diverse nature of these objectives is best described in the words of the authors (Mosston & Ashworth, 1994):

Physical education encompasses objectives that range from uniformity and synchronization of performance in rowing or precise replication of models in gymnastics to individualized forms in freestyle swimming and in modern dance performance. Objectives range from aesthetics in springboard diving to appreciation of nature during hiking, from individual skills and tactics in fencing to group cooperation and strategy in team ball games. (p. 7)

Psychomotor, cognitive, and social objectives can be reached through physical activity. To meet this wide array of objectives requires different teaching styles, hence the development of the Spectrum of Teaching Styles.

The fourth reason that led to the development of the Spectrum of Teaching Styles was the realization that ideas about teaching were presented in opposition---one idea against another. Realizing the limitations of this versus approach, the authors suggested the need for a "coherent, comprehensive, and integrated framework for teaching" (Mosston & Ashworth, 1994, p. 6). Consequently, a non-versus approach to teaching---The Spectrum of Teaching Styles---was conceived.

#### Using the Spectrum

The Spectrum of Teaching Styles is framed around the idea that learners can reproduce (mirror or replicate) and produce (discover or create) movements and knowledge. All activities presented in physical education have components that can be taught using reproductive teaching styles (A-E) and productive teaching styles (F-K). For example, in volleyball a teacher at some point may want their students to perform the forearm pass according to the model; thus the reproductive teaching styles are called for. Demonstrating and modeling may lead to the use of the Command or Practice Styles; wanting the learner to receive immediate feedback about skill performance may lead to the use of the Reciprocal Style. However, at times the teacher may want the students to discover the principles of force and angles as they apply to the forearm pass. If this is the case, then the Guided Discovery Style would be the most desirable approach. In other situations, the teacher may want to emphasize the flexibility within content and invite the learner to discover different ways of performing a skill. For example (after having taught the basic elements of the service) the teacher may invite students to discover different ways of serving the ball over the net; thus the Divergent Production Style is called for. Objectives from the psychomotor, cognitive, and social learning domains can be reached using both the reproductive and productive teaching styles. The use of the full range of Spectrum styles does connect with the psychomotor, cognitive, and social domains of learning, which in turn reflect the seven national content standards (NASPE, 1995).

#### Spectrum and National Association for Sport and Physical Education (NASPE) Content Standards

Mosston and Ashworth (1994) suggest that the "fundamental issue in teaching is not which [teaching] style is better or best, but rather which style is appropriate for reaching the objectives of a given [lesson] episode" (Mosston & Ashworth, 1994, p. 7). Although each Spectrum teaching style has stated objectives connected to the physical, cognitive, and social domains of learning, each Spectrum style has an emphasis on one or possibly two of the three learning domains. This suggests that one Spectrum teaching style may be more desirable to use than another when working towards a specific learning domain or physical education national content standard. To better understand how teachers can use the Spectrum to facilitate instruction across the psychomotor, cognitive and social learning domains, this article will examine the relationships that exist between the Spectrum teaching styles and the seven NASPE content standards. Teaching styles A-H are included in this discussion. The Individual Program-Learner Design (I), Learner-Initiated (J), and Self-Teaching (K) styles are not included because they are rarely observed in physical education K-6.

Objectives or goals related to the psychomotor domain are represented in national content standards one, three, and four (see Table 1). Demonstrating competencies in movement forms (standard one), exhibiting physically active lifestyles (standard three), and achieving/maintaining physical fitness (standard four) all relate to performance in the physical domain. Motor and/or fitness performance is the underlying focus of all Spectrum teaching styles. Each Spectrum teaching style has associated with it a set of content (subject matter) objectives/outcomes that are aimed at improving physical performance. What differs between Spectrum teaching styles is the degree that each style contributes to the psychomotor domain. In some, physical performance is the primary emphasis while in others physical performance is but one of two areas of emphasis.

#### Reproductive Teaching Styles (A-E).

*Command Style.* In the Command Style (A) students learn to perform a task accurately and quickly, when and as described by the teacher (Mosston & Ashworth, 1994). Within this style, the teacher provides the command signal for the movement and the learner moves according to the signal provided. Students "follow the leader." Examples of this teacher-learner relationship can be observed in classes of aerobics, dance, archery, and martial arts. This relationship is also frequently observed when teachers are introducing a new skill to learners. For example, the Command Style would be desirable to use when introducing the overhand throw to first graders. On the teacher emitted cue "side to the target" (model provided simultaneously), the learners would step to the line and turn sideways to the target. On the cue "arm-way-back," they would extend their throwing arm behind their head. On the cue "step," they would step forward on the foot opposite the throwing arm. And, finally on the cue "follow through," the children would follow their throw (Graham, Holt/Hale, Parker, 2001). The teacher could have the children follow this series of four cues five or six times in succession while providing general or specific, positive or corrective feedback to individual learners or the group between trials. In this example episode the teacher is able to identify, quickly and efficiently, which children can and cannot perform the overhand throw as modeled/cued.

There is a unique set of teacher-student social behaviors associated with the Command Style that promotes responsible personal and social behavior (national content standard five), however, the emphasis of this Spectrum teaching style is on learner psychomotor performance. When psychomotor performance is the emphasis of a teaching style, time allotted for task engagement needs to be high. Time allotted to physical performance is high in Style A. NASPE content standards one, three, and four align with the Command Style. If you are intending to meet content standards associated with the physical domain and the activity calls for uniformity, synchronized performance, or adherence to a particular model, the Command Style of teaching is desirable.

*Practice Style.* In the Practice Style (B) students learn to perform a task individually and privately, as modeled (Mosston & Ashworth, 1994). While the learners are practicing under the above conditions, the teacher is afforded time to give individual and private feedback based on information gathered about the learner's performance. Decisions related to the pace of performance, that is, how quickly one performs a given trial, are shouldered by the learner in Style B.

The Practice Style of teaching would be desirable to use after having introduced the overhand throw to first graders in a style A episode. In the Style A episode described the teacher verified that the children could model the four skill cues on command. Now the children need time to practice the overhand throw individually and privately; thus, the teacher introduces a Style B episode. After having observed the model of the skill drill to be performed, each child throws his/her own foam ball against the wall at his/her own pace while the teacher offers individual learners positive and/or corrective specific feedback related to the cues initially presented (i.e., side to target, arm-way-back, step, and follow through). The Practice Style of teaching (or elements of the Practice Style) is likely familiar to most as it is the most frequently used Spectrum teaching style in everyday physical education class.

As with the Command Style, there is a unique set of teacher-student social behaviors associated with the Practice Style of teaching that promotes responsible personal and social behavior (NASPE content standard five), and, if students are working in pairs, promotes understanding and respect for differences among people (NASPE content standard six). However, the emphasis in Style B is on learner psychomotor performance, as was the case in Style A. Again, time allotted to activity is high in Style B. NASPE content standards one, three, and four align with the Practice Style. If you are intending to meet content standards associated with the physical domain and students are ready to practice individually and privately, the Practice Style of teaching is desirable.

*Reciprocal Style.* In the Reciprocal Style (C) learners are paired. While one learner (doer) performs the task, the other learner (observer) provides specific feedback to the doer based on information provided by the teacher in the form of a criteria sheet (Mosston & Ashworth, 1994). For example, Madelyn observes Ethan striking a foam ball with a paddle against the wall. After observing his performance, she says, "nice job snapping your wrist; for balance, move your left foot forward at the point of contact." When the doer completes the task(s), the doer and the observer switch roles. Besides providing the learners with the tasks to be performed and task sheets which are designed to improve the quality of feedback to be given to the doer, the teacher is responsible for observing the actions of both the doer and observer, but interacting only with the observer.

In the Reciprocal Style of teaching the teacher plans instruction to meet objectives related to social and cognitive, and psychomotor development. Style C is an example of one of those Spectrum teaching styles with multiple emphases. Given the structure of students working in pairs (doer and observer), NASPE content standards five (responsible personal and social behavior) and six (understanding/respecting differences among people) align well with the Reciprocal Style. In the role of observer the learner is required to know the critical cues of the task, compare and contrast the doer's performance with the model, conclude whether the performance was correct, and communicate the findings to the doer. In essence, the learner must critically analyze the doer's performance in Style C. NASPE content standard two (the application of concepts and principles) aligns well with the Reciprocal style given this requirement. And, as in Styles A and B, there is an emphasis on physical performance, so NASPE content standards one, three, and four also align with Style C. However, do remember that each learner will be physically engaged in only half of the task trials performed during activity time in a Style C episode. If you want to emphasize NASPE content standards associated with the social and cognitive learning domains, the Reciprocal Style of teaching is desirable.

*Self-Check Style.* In the Self-Check Style (D) the learner performs the task and checks his/her work against the task sheet (Mosston & Ashworth, 1994). The teacher, who provides the learner with the tasks to be performed and criteria sheet, observes the learner's performance and use of the criteria sheet, and communicates with the learner about his/her actions specific to the self-check process. For example, Emily, a third grader, is batting a ball from a tee. According to the task sheet she is instructed to bat the ball five times from the tee while following three skill cues: step, swing the bat in a horizontal plane, and rotate hips, trunk, and shoulders. Mr. Corbett, the teacher, observes three of Emily's trials, each of which results in missing the ball completely. "How are you doing Emily," Mr. Corbett asks. Emily sadly states that she can't seem to hit the ball and she doesn't know why. Mr. Corbett asks

her to read the three critical skill cues from the criteria sheet. She does. "Do you think you are performing the skill cues as described?" While doing the task again she says, "I'm stepping and rotating my hips, trunk, and shoulders, but, but, my swing isn't level - maybe that's why I'm missing the ball." Mr. Corbett says, "try one more time - think about the horizontal plane." Emily tries again and contacts the ball. "Sure, that must be it, I wasn't swinging level." "Emily, you're beginning to feel your performance and recognize what you are and are not doing. Excellent!" Mr. Corbett moves on to observe Josh.

The Self-Check Style of teaching emphasizes the cognitive and physical learning domains. When self-checking learners compare and contrast their performance with the model/criteria sheet and determine what was correct and incorrect. In a nut shell, the learners critically analyze their own skill performance. NASPE content standard two (the application of concepts and principles) aligns well with the Self-Check Style of teaching. The emphasis on psychomotor performance in Style D is equal to that found in Styles A and B. NASPE content standards one, three, and four align well with the Self-Check Style. If the goal is to emphasize NASPE content standards that are associated with the psychomotor and/or cognitive learning domains, the Self-Check Style of teaching is desirable.

*Inclusion Style.* In the Inclusion Style (E) the teacher accepts individual ability differences amongst the learners (Mosston & Ashworth, 1994). Students are provided with legitimate options for skill practice, options that are based on factors that make the practice of the given skill more or less difficult. As in Style D, the learner uses a teacher designed criteria sheet to self-assess actual performance. The teacher communicates with the learner about his/her accuracy of self-checking performance and appropriate selection of level of task difficulty. An example criteria sheet specific to striking with a bat is presented in Figure 1. This example demonstrates what the learner does in the Inclusion Style of teaching.

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NASPE content standards one, two, three, four, and six align well with the Inclusion Style of teaching. As in Styles A, B, and D, there is an emphasis on psychomotor performance (standards one, three, and four) in Style E. Motor engagement time at an appropriate level is high for learners in Style E given the opportunity to select level of task difficulty. And, as in Style D, cognitive development (standard two) is deliberate in Style E. Comparing, contrasting, and drawing conclusions while self-assessing is fundamental to the Inclusion Style of teaching.

The Inclusion Style of teaching is also an appropriate style choice if the focus of the lesson is on NASPE content standard six, understanding and respecting differences among people in a physical activity setting. The Inclusion Style accommodates individual (skill) differences amongst learners (see Figure 1). It teaches that learners are different and that these differences are to be respected. Inclusion Style of teaching aligns well with all three learning domains.

#### Productive Teaching Styles (F-I).

*Guided Discovery.* In the Guided Discovery Style (F) the learner seeks the answers to a sequence of questions that leads to the discovery of a concept, principle, or reason for doing something a particular way (Mosston & Ashworth, 1994), such as discovering the use of the two-handed overhead throw in long and high passes. The teacher designs the questions, poses them to the students, and guides them through the discovery of the concept sought. Feedback is offered frequently by the teacher after each question. The sequence of questions and anticipated student responses for a Style F episode is provided in Figure 2.

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Guided Discovery Style episodes are usually short relative to the length of episodes in other Spectrum styles. The learners can be active (students "showing" the answer), inactive (students "telling" the answer), or a combination of active and inactive in the Guided Discovery Style. Frequently a Style F episode is followed by a Style B episode during which time the discovery in Style F is practiced.

NASPE content standards one, three, and four (standards associated with the psychomotor domain) are not the emphasis in the Guided Discovery Style. Students may be physically engaged in pursuing the answer to one or more of the questions posed, however, it is usually only for a short period of time (probably no more than 10-seconds per question) and serves the purpose of answering the question. As with each Spectrum teaching style, there is a unique set of teacher-student social behaviors associated with the Guided Discovery Style. These social behaviors link well with NASPE content standard five (responsible personal and social behavior---reflected in the students listening to the answers of others) and six (understanding and respecting differences among classmates---reflected in the students giving different answers to the questions). The emphasis in Style F is on the cognitive learning domain. Learners are expected to engage in the cognitive operations of comparing, contrasting, analyzing,

synthesizing, and concluding when answering the questions posed by the teacher. The teacher must allow "think time" for the students in Style F. An implication of the Guided Discovery Style is "the teacher trusts the cognitive capacity of the student" (Mosston & Ashworth, 1994, p. 177). If the goal is to emphasize the cognitive learning domain, the Guided Discovery Style of teaching is desirable.

*Convergent Discovery.* In the Convergent Discovery Style (G) the learner attempts to discover the single answer to a question or problem using the rules of logic, critical thinking, and trial and error (Mosston & Ashworth, 1994). As in Style F, the teacher designs and poses the question or problem, however, the teacher does not provide any guiding clues (as was the case in Style F). The teacher does offer feedback without providing the solution. Following is an example of a Style G problem:

Subject Matter:	Vertical Jump		
Concept:	Creating Force		
Directions:	Measure how high you can touch on the wall from the following standing positions:		
Task:	a. Bend at the ankles only	_____	inches
	b. Bend at the ankles and knees	_____	inches
	c. Bend at the ankles, knees, and waist	_____	inches
	d. Bend at the ankles, knees, waist, and elbows	_____	inches
Problem:	With which jump were you able to create the most force (jump the highest)? Why?		

Solving this problem involves students "doing" the movement tasks and "processing" information gleaned from doing each task. To determine which jump produced the greatest force, and why, the students will have to compare, contrast, categorize, and draw conclusions about the four different jumps they performed. In solving the problem, the learners should conclude that a relationship exists between linking body segments/joints and creating force in a vertical jump.

In the Convergent Discovery Style the cognitive and psychomotor learning domains are emphasized. Cognitive functions such as analyzing, synthesizing, and concluding are fundamental to the discovery process in Styles G. In a Style G episode the amount of time allotted to cognitive development is similar to the amount of time allotted to physical development. The emphasis on physical performance in Style G is not as great as in Styles A, B, D, and E because of time allotted for thinking.

If the students work in pairs or small groups (3-5), the social learning domain can also be emphasized in Style G. In the example, students could be paired to complete the tasks. If paired, they could be learning how to solve problems in a group. NASPE content standards one, two, and three align well with Style G, in addition to content standard five when students are working in pairs or small groups.

*Divergent Production.* In the Divergent Production Style (H) learners discover alternative solutions to a question or problem. Unlike Styles F and G where the learners are lead to converge on one single solution, in Style H the teacher invites the learners to produce multiple and divergent responses to a question or problem (Mosston & Ashworth, 1994). For example, consider the following teacher posed problem as it might relate to a soccer or basketball lesson with third or fourth graders. Student A has the ball; she/he is attempting to score. Student B is marking/checking student A. What should student A do? Student A may decide to dribble by student B; student A may decide to immediately shoot the ball; or, student A may decide to fake in one direction and attack in the other. These are but a few of the solutions that a class of fourth graders might produce. One problem, multiple solutions.

The Divergent Production Style meets multiple objectives. Objectives related to cognitive development are emphasized in Style H as are objectives related to psychomotor development. Styles G and H are similar in this manner. In the Style H example, student A had to analyze the situation (e.g., location, size, skill level, etc. of student B), synthesize what she/he observed, and then act on the information processed. Time for thinking and acting were required. The amount of time used for thinking in Style H will be influenced by the complexity of the posed problem and the ability levels of the students. As the complexity of the problem increases, so will the amount of time needed to solve it.

If the students are situated in pairs or small groups (3-5), the social learning domain can also be emphasized in Style H. In the example, students were paired. Given this formation, they were able to observe each others' solutions to the problem. Because Style H promotes diversity, students learn that thinking differently is to be respected. In other Style H episodes, students may be asked to solve a problem while working together in a small group. Within this situation, the students learn how to work in a cooperative manner. The Divergent Production Style aligns well with the cognitive, psychomotor, and social learning domains.

The Spectrum of Teaching Styles is a useful instructional framework to use when attempting to infuse content standards associated with the three learning domains into a daily instructional routine. Learner development in the psychomotor domain is heavily emphasized in all but two Spectrum styles, the Reciprocal (C) and Guided Discovery (F). In Style C learner development revolves more around the social and cognitive domains than the physical while in Style F the focus of learner development is primarily situated on the cognitive domain.

Learner development in the cognitive domain is also heavily emphasized in all but two Spectrum styles, the Command (A) and the Practice (B). Assessment of physical performance, which requires a series of cognitive functions such as comparing, contrasting, and drawing conclusions, is managed by the learners to Styles C, D, and E. In Styles A and B, the teacher assesses the learner's physical performance. Discovery is fundamental to Styles F, G, and H. Cognitive functions such as analyzing, synthesizing, and concluding are employed by the learners in the discovery process in Styles F, G, and H.

Learner development in the social domain is heavily emphasized in one style, the Reciprocal. Learners are paired in Style C; as one learner (doer) performs the task, the other learner gives feedback. Style C is specifically designed to promote interaction between students. If learners are organized in pairs or small groups, objectives related to social development can also be emphasized in Styles B, G, and H. The social domain is associated with (but not emphasized in) styles E and F, specifically in regard to learners respecting differences amongst their peers. A summary of how each Spectrum Teaching Style aligns with the physical, cognitive, and social learning domains is presented in Table 2.

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Three of the Spectrum teaching styles are highlighted in the final articles: the Reciprocal (C), Inclusion (E), and Divergent Production (H). The authors discuss how each of these teaching styles can be employed in the elementary physical education setting. In addition, they further emphasize the alignment that exists between each Spectrum style and the national content standards in physical education. Teachers who provide quality programs in physical education allow learners to acquire motor skills, movement concepts, and fitness and wellness concepts, to exhibit a physically active lifestyle, and to develop responsible behaviors, respect differences among people, and understand that opportunities for enjoyment and challenge are available in physical activity (NASPE, 1995).

Table 1  
National Standards for Physical Education as Categorized by Educational Domains of Learning

National Standards	Learning Domains
1. Demonstrates competency in many movement forms and proficiency in a few movement forms.	Psychomotor
2. Applies movement concepts and principles to the learning and development of motor skills.	Cognitive
3. Exhibits a physically active lifestyle.	Psychomotor
4. Achieves and maintains a health-enhancing level of physical fitness.	Psychomotor
5. Demonstrates responsible personal and social behavior in physical activity settings.	Social
6. Demonstrates understanding and respect for differences among people in physical activity settings.	Social
7. Understands that physical activity provides opportunities for enjoyment, challenge, self-expression, and social interaction.	Social

Table 2  
Emphasis of Learning Domains in Spectrum Teaching Styles

Styles	Learning Domains		Style Emphasis	
Command (A)	Physical	min	-----o--	max
	Cognitive	min	--o-----	max
	Social	min	--o-----	max
Practice (B)	Physical	min	-----o--	max
	Cognitive	min	--o-----	max
	Social*	min	--o-----	max
Reciprocal (C)	Physical	min	-----o--	max
	Cognitive	min	-----o--	max
	Social	min	-----o--	max
Self-Check (D)	Physical	min	-----o--	max
	Cognitive	min	-----o--	max
	Social	min	--o-----	max
Inclusion (E)	Physical	min	-----o--	max
	Cognitive	min	-----o--	max
	Social	min	-----o--	max
Guided Discovery (F)	Physical	min	--o-----	max
	Cognitive	min	-----o--	max
	Social	min	-----o--	max
Convergent Discovery (G)	Physical	min	-----o--	max
	Cognitive	min	-----o--	max
	Social*	min	--o-----	max
Divergent Production (H)	Physical	min	-----o--	max
	Cognitive	min	-----o--	max
	Social*	min	--o-----	max

\* If students work with a partner (B, G, or H) or in small groups (G or H), the emphasis on the social learning domain will increase.

Figure 1

Name \_\_\_\_\_ Date \_\_\_\_\_ Class \_\_\_\_\_

<b>TASK</b>		<b>SIZE OF BALL</b>	
<u>Level</u>	<u>Task Description</u>	<u>Level</u>	<u>Size</u>
1	Bat a ball from a tee	1	Large
2	Bat a ball tossed from the side	2	Medium
3	Bat a ball from an underhand toss	3	Small

**DIRECTIONS TO THE STUDENT**

1. Select a task (level 1, 2, or 3) and ball (level 1, 2, or 3) for your first set of 10 trials.
2. Write the level of the task and ball size chosen in the appropriate box below.
3. Write the number of successful hits you think you will make out of 10 trials (prediction).
4. Now do the 10 trials and record the number of successful attempts out of 10 (actual).
5. After completing the first set of 10 trials, decide the task and ball size you wish to use to complete a second set of 10 trials. Follow DIRECTIONS 2, 3, and 4.
6. After completing the second set of 10 trials, decide the task and ball size you wish to use to complete a third set of 10 trials. Follow DIRECTIONS 2, 3, and 4.

Set	Task	Ball	Prediction	Actual	Prediction	Actual
1			/10	/10	/10	/10
2			/10	/10	/10	/10
3			/10	/10	/10	/10

PERFORMANCE CRITERIA

1. Hands touching with dominant hand on top?
2. Bat swing is in a horizontal plane?
3. Taking a step forward?
4. Rotating your hips, trunk, and shoulders?
5. Uncocking your wrists on contact?

ASSESSMENT OF CRITERIA

1. Feel the performance.
2. Compare and contrast the performance with the criteria.
3. Conclude whether the performance was correct.
4. Make the appropriate adjustments for the subsequent trial(s)

Figure 2

Purpose:	To discover the use of a long and high toss/pass, one- or two-handed (i.e., games involving throwing a larger ball with two hands).
Question 1: Anticipated Response:	"How could you get the ball to your partner who is standing 10 feet away from you?"  Answer is shown in action; there is no need for a verbal response. Some children will show an overhead toss/pass, others will show a toss/pass from the side, and still others will show a toss/pass originating from the chest area. The ball may be tossed/passed with one or two hands, with or without a bounce between the pair.
Question 2: Anticipated Response:	"How could you get the ball to your partner who is now standing 20 feet away from you?"  Answer is shown in action and then verbal answers are sought. Most children will show an overhead pass, one or two handed, which may or may not bounce. They will likely state that they can only get it to their partner when tossed/passed from an overhead/overhand position because the partner is far away (which suggests that they can generate more power when tossing/passing from overhead). ("Good answer!")
Question 3: Anticipated Response:	"How could you get the ball to your partner when an opponent is standing halfway between the two of you?"  Answer is shown in action and then verbal answers are sought. "I had to throw it high and long." ("Very good!")
Question 4: Anticipated Response:	What kind of a toss/pass is needed when there is an opponent standing between you and your partner?  "An overhead pass using either one or two hands." ("Great! You've got it!")

Figure 1. Inclusion Style (E) criteria sheet for elementary-aged learners.  
Figure 2. Guided Discovery Style (F) sequence of questions.