

# A Framework for Teaching Tactical Game Knowledge

GAIL E. WILSON

ver the past two decades. a considerable amount of research on conceptual or tactical-based approaches to games teaching has been published in the physical education literature. Evolving primarily from the Games for Understanding Model proposed by Bunker and Thorpe (1982), and in response to criticisms about traditional or techniquebased approaches to teaching games, this research has provided games teachers with excellent resources for addressing tactical awareuess and decisiou-making in games classes.

However, in order to take advantage of these resources and deal with the many challenges involved in teaching games effectively, teachers themselves should understand basic teamgame tactics and strategy (Asquith, 1989; Griffin, Mitehell, & Oslin, 2000). This is particularly true with respect to the most complex of all game forms—invasive team games such as basketball, soccer, hockey, rugby, lacrosse, and ultimate.

Having taught undergraduate preservice physical education classes for over 20 years, this author has come to believe that many physical educators have an insufficient understanding of the fundamental concepts needed to teach the cognitive aspect of teamgame play. This view has been supported by others (Brooker, Kirk, Braiuka, & Bransgrove, 2000; Buller, 1996; Spackman, 1983).

The purpose of this article is to provide an example of a framework of generic knowledge, designed for teachers, that describes and explains the foundational tactical aspects of invasive team-game play.

#### A Generic Perspective of Invasive Team Games

Invasive team games share many characteristics (Grehaigne & Godbout,

Opposite: Soccer, hockey, and basketball all have one offensive purpose: to put the game object into the goal. Knowing the strategic and tactical implications of such commonalities can enhance the teaching of invasive team games. 1995; Hopper, 1998; Spackman, 1983; Werner, 1989). The first step in simplifying the tactical aspects of invasive games is to recognize and understand those similarities. For example, scoring in all invasive games requires a game object to be sent into a goal (basketball, hockey, soccer) or carried or passed across a line (football, rugby, ultimate). Furthermore, all invasive games involve the movement of players and a game object in a rectangular-shaped playing area. This common shape leads to common movement patterns by players using space in order to score and, at the same time, blocking or protecting space in order to prevent scoring. Since both teams share the same space, they employ similar tactics and strategies for influencing the actions and movements of each other.

These similarities make it possible to identify and describe the generic objectives, principles, or themes that govern play, and the tactical decisions that can be applied to all invasive team games. Approaching invasive games from a generic perspective simplifies their complexity. It also provides teachers with the knowledge needed to teach the basic strategy of any invasive game in the physical education curriculum and, most importantly, gives teachers a more global understandiug of how games are played.

## Game Language and Communication

In spite of the many similarities in invasive team games, there is great variation in the language that is used to describe both the events and the participants in different games. For example, movement of the game object towards the goal might be described as a through pass, a forward pass, or a penetrating pass. Movement of the game object back towards a team's defeuding goal might be classified as a back, negative, support, nr depth pass. "Checking" in one sport is "tackling" in another. Much of the ambiguity in games discourse is readily understandable to individuals who have had extensive game experiences. However, individuals who are unfamiliar with team-game terminology may—simply because of vocabulary be hindered in their ability to develop an understanding of team-game play.

The terminology of the framework incorporates terms that other authors have used in their research (Almond, 1986; Grehaigne & Godbout, 1995, 1997; Hopper, 1998; Rink, 1998; Spackman, 1983; Worthington, 1980). Because a standardized language describing generic game concepts does not exist, teachers will need to develop or choose terminology that they understand and that best suits their teaching situation.

# **Contents of the Framework**

As illustrated in table 1, this framework consists of fnur interconnected modules representing different strategic and tactical aspects of play in invasive team games. The four modules are:

1. Participants and Their Roles (the players and their responsibilities)

2. Objectives (what attacking and defending teams are trying to achieve)

3. Action Principles (general guidelines for teams in attack and defense)

4. Action Optious (the choices that are available to players in making game decisious)

To the knowledgeable games educator, the content of the model appears obvious, simple, and somewhat intuitive. However, it is precisely these simple, intuitive concepts and terms that are most often presumed and thus overlooked when preparing games educators.

The model takes into account the dual uature of invasive games, in which teams must attack and defend. Also, each of the four modules in the framework builds upon the preceding module and thereby becomes more complex, thus providing a logical sequence for teaching team-game concepts. Although the four modules are interrelated, each can be taught as a separate entity.

The coutent of the model covers that aspect of invasive game play that is often called "procedural knowledge"—the knowledge required to recognize and solve game problems, to make decisions, to anticipate play, and to execute appropriate tactics (Thomas, 1994). For teachers to demonstrate the procedural knowledge problems facing a defender in a twoon-one situation, for example, they must be able to define and recognize this tactical situation, understand the objectives of the attack and the defense, know defensive concepts such as ball-side and goal-side positioning, and be aware of the decisions available to the attackers.

## Module 1: Participants and Their Roles

Different invasive games have different numbers of players whose positions are identified by a variety of labels. Teachers who lack a background in games may think that, in order to teach invasive games well, they must know and understand all of the positions in many different games. However, the positions that players occupy are largely determined by the roles they play. In reality, throughout the course of any game, regardless of the number of participants or the specific game, players assume only four different roles (table 1).

The player in possession of the game object can be identified by the generic term "on-ball attacker." All other players on the attack team, regardless of their number, can be identified by the term "off-ball attackers." On the team not in possession of the game object, there should always be one player who is attempting to influence the player with the object. This role can be labelled the "on-ball defender." All other players on the nonpossession team can be categorized as "off-ball defenders." These four generic terms are abbreviated in the framework as Al, Ax, Dl, and Dx respectively.

The use of these terms clarifies and simplifies the roles of players in invasive games, thereby helping teachers to understand those roles better. Thus, in order to determine any player's position and tactical responsibilities in field hockey, rugby, soccer, lacrosse, basketball, or handball, the teacher needs only to understand which of the four roles a player is in at any one time. Because players in invasive games spend a relatively large amount of time in off-ball roles, it is especially important for games teachers to understand attacking and defending options for players in offball roles.

# Module 2: The Objectives of Invasive Team Games

The ultimate offensive objective is to score points or goals. The defensive objective is to prevent points or goals. Although players in different invasive games may use different techniques and abide by different rules to meet game objectives, the objectives are constant regardless of the game. The 15 players on a rugby team, for example, pass. kick, and run with the ball in order to reach their opponents' goal-line. They can be stopped by their opponents by direct physical contact, as can the five skaters on an ice hockey team who pass and skate with the puck in order to move it forward. In spite of these rule differences, the ultimate game objectives are the

| Content Area           | An  | ack  | l 🐥 De  | end ;   |
|------------------------|---|--|---|---|
| Participants and Roles | Offensive Team<br>(possession, attacking)<br>• On-ball attacker<br>• Off-ball attacker    |  | Defens<br>(nonpossessif<br>On-ball defender<br>• OR-ball defender                               | we Team<br>on, defending)                                     |
| Objectives             | <ul> <li>Score points, goals</li> <li>Retain possession</li> <li>Advance</li> </ul>       |  | <ul> <li>Prevent points, gr</li> <li>Regain Sossession</li> <li>Prevent advancem</li> </ul>     | ala<br>Hant t   |
| Action Principles      | <ul> <li>Mobility</li> <li>Advancement</li> <li>Width</li> <li>Offensive depth</li> </ul> |  | <ul> <li>Engagement</li> <li>Defensive dopth</li> <li>Contraction</li> <li>Expansion</li> </ul> |   |
| Action Options         | On-Ball Attacker<br>(A1)<br>• Attempt to<br>score   | Off Ball Attackers<br>(Ax)<br>• Provide depth<br>• Provide width | On-Ball Defender<br>(DI)<br>• Prevent<br>scoring  | Off: Ball Defenders<br>(Dx)<br>• Provide<br>• defensive depth |
|                        | <ul> <li>Ketain posses-:<br/>sion</li> <li>Pase</li> </ul>                                | • Advance<br>• Move  | Disposeese A1     Contain A1     Ginemeel A1  | Contract     Expand   |

same in these and all other invasive team games.

# Module 3: Action Principles

"Action principles" are the underlying guidelines for all tactics and strategies in invasive team games. Regardless of the game, adherence to these principles will largely determine a team's success. Although rules, techniques, and the number of players on a team vary among games, the action principles do not. As suggested by the labels used to identify the action principles, teams fulfill these principles primarily by moving themselves and the game object into specific areas of space. Teachers who understand these principles of attack and defense will have a good foundation in basic strategy and an understanding of the importauce of creating, using, and blocking space in invasive team games.

Action Principles of Attack. This model has four generic action principles of attack (table 2): • Mobility: movement of the game object and all offensive team players

• Advancement: the nse of forward space

• Width: the use of lateral space

• Offensive depth: the use of space behind the ball-carrier.

More simply put, in order to retain possession of the game object and meet the objectives of attack, teams position players ahead of, beside, and behind the player with the game object and move all players continuously in order to ensure that these areas are filled. Figure 1 illustrates the positioning of attack players (A) fulfilling the principles of attack. Generally speaking, the more mobility, advancement, width, and depth that teams have in attack, the harder it is for opposing teams to defend against them.

Action Principles of Defense. Defensive play is also guided by four action principles: engagement, defensive depth, contraction, and expansion (table 3). Each of these principles is designed to regain possession of the game object, prevent scoring, or slow down the opponent's attempt to move forward. Successful defensive play depends primarily on basic defensive positioning. Thus, in applying all of the defensive principles, players must occupy areas that are between their opponents and the goal. The term "goal-side" is commonly used to describe this concept. In figure 1, all defenders (D) are in goal-side positions. A closer look at these principles will clarify them:

• Engagement: generally speaking, in invasive games it is sound defensive strategy to counter the actions of, or "engage," the player in possession of the game object. In games such as basketball, handball, field hockey, or ultimate, where direct physical contact is not permitted, the defender engaging the ball carrier may try to force the player with the ball to move in a specific direction by blocking certain areas or may try to regain posses-

| AttackAction Principle  | Definition  | Teaching Activities<br>A1 = on-ball attacker<br>Az = off-ball attackers  |
|---|---|--|
| Mobility<br>(movement, motion)  | Movement of players and a<br>game object to create<br>and use space                 | <ol> <li>Pairs; free space; players toss the bean bag to<br/>each other while moving randomly.</li> <li>As above, but after each pass, the passer must<br/>move to a different space (forward, back,<br/>sideways); restrict A1's mobility.</li> </ol>   |
| Advancement<br>(penetrating, invasion,<br>forward support)                    | Movement of players and<br>game object towards the<br>attack goal-line              | <ol> <li>Pairs; players move from one end of the playing<br/>space to the other; the bean bag cannot be<br/>passed until the receiver is ahead of A1.</li> <li>Play three-sided games; before a scoring<br/>attempt can be made, at least one forward pass<br/>must be made; restrict A1's mobility.</li> </ol>                                  |
| Width<br>(lateral or square support)  | Movement of players and<br>game object parallel to<br>goal-lines                    | <ol> <li>Pairs; players move side-to-side in the playing<br/>area, using square or width passes; restrict<br/>A1's mobility.</li> <li>Play small-sided game with two players from<br/>each team positioned outside each sideline.<br/>Before a scoring attempt can be made, both<br/>sideline players must receive at least one pass.</li> </ol> |
| Offensive Depth<br>(negative support, support<br>behind the ball, retreating) | Movement of players and<br>game object back<br>towards their defending<br>goal-line | Pairs; players begin at attack goal-line; A1<br>passes bock to A2 runs to a position behind A2<br>to receive the pass; restrict A1's mobility.   |



sion by stealing the ball. In games such as rugby and ice hockey, the engager will often use direct contact (e.g., tackling the player with the game object) or may try to physically limit the player's forward motion.

• Defensive depth: this term describes the positioning that off-ball defenders should occupy in order to support the engaging defender. In the event that the ball carrier moves past the engager, the supporting defender becomes the engager.

• Contraction: describes the positions that off-ball defenders take to block dangerous areas (those near the goal or goal-line). Defensive players who are fulfilling the principle of contraction funnel or converge in zones between the ball and the goal line in order to protect the goal. They react according to movements of the game object rather than to the movements of attack players. This principle is the basis for the term "zone defense."

• Expansion: off-ball defenders who move with, and in reaction to, the movements by off-ball attackers exhibit the defensive principle of expansion. Each off-ball defender remains closer to the goal (goal-side) and closer to the ball (ball-side) of their respective opponent. This concept is commonly referred to as "player-toplayer" defense.

# **Module 4: Action Options**

Successful play in invasive games requires participants to make appropriate decisions in dynamic, unpredictable environments. While an understanding of the action principles of attack and defense will provide teachers with basic tactical awareness, a deeper knowledge of game theory will help teachers to facilitate their students' understanding of the more complex decision-making aspects of invasive games.

It is impossible to plan for each of the multitude of nnique events that might occur during invasive games (Grehaigne & Godbout, 1995). Nevertheless, it is both possible and necessary to outline the possible choices, or "action options," that players can use in order to react to game events. As mentioned previously and as table 1 illustrates, during the course of any invasive game, players perform a maximum of four possible roles. The role of a player determines the action options that are available and the decisions that have to be made. For example, the on-ball defender must decide whether to try to regain possession of the game object, slow down the ball carrier, or force the ball carrier to move in a specific direction.

Table 1 summarizes the action options for each of the four roles. In general, attackers must decide whether to use forward, lateral. or rear space. Players on the defensive team have four possible options; (1) engage the ball carrier, (2) provide depth behind the engager, (3) occupy dangerous locations near the goal area, and (4) react to the movements of individual attackers.

# **Teaching Activities**

To assist instructors in designing practical activities for teaching the content included in the framework, the following general guidelines may be helpful:

• Because the focus must be on tactical awareness and decision-making, the technical aspect of play should be minimized. For example, equipment such as bean bags or small balls should be used so that lack of skill does not prohibit the acquisition of tactical concepts.

• Minimize the use of traditional sports equipment such as basketballs, soecer or rugby balls, and hockey sticks in order to emphasize the generic nature of team-game play.

• Incorporate generic lead-up and progressive games in place of traditional game models. For all of the modules, the use of small-sided games will decrease the complexity of the learning environment and simplify the learning process. However, it is important to realise that one-on-one activities focus mainly on developing technical on-ball skills rather than tactical knowledge.

Morris and Stiehl (1999) provide an excellent resource for additional guidance designing generic tactical activities. Examples of activities that are designed to address each of the modules in the framework are presented below.

Game Objectives. An ideal method for teaching the scoring aspect of invasive games is to use modified target games and simple running games in which players have to hit a target or cross a line in order to score a point. To address the dual goal nature of invasive games, learning activities should be structured so that players are required to simultaneously fulfill the attack objective as well as the defense objective. See Belka (1994) and Doolittle and Girard (1991) for additional examples.

Action Principles of Attack. Table 2 provides examples of specific activities that address the action principles of attack. The following general ideas should also be considered. Since fulfillment of attack principles is primarily about motion, activities designed to teach these principles should incorporate movement in a variety of directions. The action principles can best be learned without opposition and in "closed" learning situations. That is, players can learn each principle in predictable environments without having to react to opponents or make decisions. The complexity can be increased and the predictability decreased by requiring players to demonstrate all four principles of attack in various combinations as they move through the playing space. Since the skill element is critical to the success of the on-ball attacker (A1), it is advisable to restrict the mohility of A1 and, when using opposition, to prohibit any interaction between A1 and D1. Restricting A1 mobility also provides time and space for off-ball attackers to make decisions and move accordingly. In addition, eliminating the use of acrial passes that travel over the head of defenders forces attack players to use the principles of depth and width.

Action Principles of Defense. Since defenders react to the play of the attack team, exercises designed to teach defending principles (table 3) must involve opponents. However, when teaching defensive concepts, the play of the attacker must be carefully controlled and modified so that defenders can practice each principle. For example, if teaching the principles of engagement and depth in a three-ontwo model, the ball carrier must hold

| Defensive Action Principle                                     | Definition  | Teaching Activities<br>D1 = on-ball defender<br>Dx = off-ball defenders  |  |
|--|---|--|--|
| Engagement<br>(pressure, confrontation,<br>tackling, checking) | Actions by a defender<br>(D1) that affect the<br>actions of the players<br>with the game object<br>or that are an attempt<br>to regain possession<br>of the game object | <ol> <li>Pairs; 20 x 20 yd space; players play a tag game<br/>where one player attempts to tag the other.</li> <li>Pairs; 30 x 10 yd space, a player in possession of a<br/>bouncing ball; (A1) tries to reach a goal-line without<br/>being tagged by the other player (D1).</li> <li>As above, only D1 tries to make A1 move towards<br/>the sideline.</li> <li>As above only D1 tries to gain possession of the ball.</li> </ol>                |  |
| Defensive Depth<br>(defensive support)                         | Positioning of off-ball<br>defenders behind D1  | <ol> <li>Groups of four; 30 x 10 yd space; A1 and A2 begin<br/>with a bean bag and attempt to pass D1. If success-<br/>ful, they are then challenged by D2. The defenders<br/>must remain in their grids; A1 cannot move.</li> <li>Once D1 is beaten, D1 moves to the empty square<br/>to provide depth.</li> <li>Three-on-two, one A1<br/>defender must engage,<br/>the other must provide A2<br/>defensive depth. A1<br/>cannot move,</li> </ol> |  |
| Contraction<br>(convergence, funneling,<br>concentration)      | Positioning of off-ball<br>defenders to occupy<br>spaces and protect<br>scoring area  | 1. Six attackers, three defenders; 30 yd x 10 yd space;<br>attackers pass bean bag and attempt to throw bag<br>across line. Defenders<br>move to protect the A A A A<br>line. All attackers<br>must receive at least<br>one pass before each<br>scoring attempt and<br>must remain behind<br>the lines.  |  |
| Expansion<br>(balance, spread,<br>defensive width)             | Positioning of off-ball<br>defenders in reaction to<br>movements of attackers.<br>Each defender is goal-<br>side and hall-side of<br>an attacker                        | <ol> <li>Groups of six, three pairs; one pair (X) throws bean bag back and forth, while moving around playing space. A's move to get in position to receive bean bag, D's move with A's.</li> <li>As ahove, add a goal, D's stay with their checks. Only A's can attempt to score.</li> </ol>  |  |

the ball until the defenders have had time to readjust their positioning. Similarly, if teaching player-to-player defense, attackers should move at a controlled speed so that defenders have time to react.

Action Options. The factors affecting the decisions that players have to make in games are directly related to the actions of teammates and opponents. Therefore, activities that are designed to teach decision-making should include more game-like situations involving all four playing roles. For example, to teach the fundamentals of decision-making by the ball carrier, use a three-on-one situation in a 20 yard by 30 yard space. The attackers must ensure that all four action principles of attack are fulfilled as they attempt to move a ball towards a goal. Restrict the mobility of the ball carrier and permit the defender to mark only the off-ball attackers. In this controlled situation, the ball carrier should decide to pass to the attacker who is not marked by the defender. The attack situation can be made more complex by narrowing the playing space and by timing the progress of the attack from one end of the playing space to the other. Gradually move to a threeon-two model and then three-on-three. Once players are able to make decisions in three-on-one and three-onthree situations, introduce the twoon-one. This tactical situation is usually more difficult for the attackers because only two players work together to fulfill all four attack principles.

The following sources provide further excellent examples of activities, lead-ups, and progressive games designed to teach the tactical and decision-making aspects of invasive team games: Werner (1989), Belka (1994), Grehaigne and Godbout (1997), and Morris and Stiehl (1999).

#### Discussion

In 1913, Bloom noted that knowledge precedes understanding, application, and analysis (Anderson & Krathwohl, 2001). Games teachers cannot be expected to identify and understand game problems or their solutions without fundamental knowledge of the cognitive aspects of team-game play. Many North American college and university physical education programs are now teaching tactical approaches to team games. In order to fully appreciate this methodology, preservice teachers may first need to acquire basic theoretical game knowledge. If future graduates of games classes are to become tactically aware and learn how to make appropriate tactical decisions, their teachers should know and understand the fundamental, cognitive elements of team play. This content knowledge is critical whether games teachers use a model that introduces skills first and then tactics (Rink, 1998). tactics first and then skill, (Bunker and Thorpe, 1982), or tactical game models (Griffin, Mitchell, and Oslin, 2000). In fact, if we continue to assume that games teachers have the knowledge and understanding required to teach the tactical aspects of games and create appropriate cognitive learning tasks, then any pedagogical approach may be compromised.

It is readily acknowledged that the theoretical content presented in this article is fundamental and that there is much more to tactical knowledge than a knowledge of game objectives, general principles of play, and basic guidelines to facilitate decision-making. However, it is precisely this fundamental knowledge that teachers must have if they are to identify game problems and guide their students to tactical solutions.

# Conclusions

The acquisition of generic cognitive knowledge, as summarized in this article, should enhance future teachers' general understanding of games. Teachers who approach games from a generic perspective may be less likely to exclusively teach the adult forms of traditional games to their students. They may also be more likely to provide their students with a broad-based games education rather than an eclectic offering of the rules and skills of diverse games that bear little relationship to one another. Preservice physical education majors who master fundamental game concepts such as those presented in this article should be capable of describing team games in understandable terms, designing developmentally appropriate learning tasks, and establishing progressive games that gradually incorporate all levels of the model. Most important, they should be able to effectively and confidently use the many concept-based resources now available in games education literature.

Obvious limitations to the acquisition of fundamental game knowledge may be the perceived diversity in games and the ambiguities in games vocabulary that exist in both research and teaching resources. When school children face teachers using different words to describe similar concepts and actions, confusion is often the outcome. Perhaps it is time for professional associations and government agencies to develop specific, standardized content to describe the tactical elements of team game play. This content should be incorporated into preservice and inservice physical education curriculum learning outcomes and goal statements so that teachers have not only the mandate to learn and to teach the cognitive aspect of invasive game play, but also the knowledge and abilities to do so.

# Acknowledgments

Dr. H. A. McKay and Ms. M. Gibson, School of Human Kinetics, University of British Columbia.

# References

- Almond. L. (1986). Primary and Secondary Rules. In Thorpe, R., Bunker, D., & Almond, L. (Eds.), *Rethinking games teaching* (pp. 58-40). Loughborough, England: University of Technology.
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longmans.
- Asquith, A. (1989). Teaching games for understanding. In Williams, A. (Ed.), Issues in physical education for the pri-Continues on page 56

is a record of scholarly achievement that will warrant appointment as a tenured Full Professor, Official starting date for the position is July 1, 2002. Formal review of candidates will begin immediately and the search process will continue until the position is filled. Women and minorities are encouraged to apply. Nominations or letters of application, accompanied by curriculum vitae and five references, should be sent to: David R. Austin, Chair, Search Committee for the Dean of the School of HPER, 133 HPER Building, Indiana University, 1025 E. 7th St., Bloomington, IN 47405, Indiana University is an Affirmative Action, Equal Opportunity employer.

# Sales and Services

#### Kick Stert an Exciting Future...

Personal Best Karate is now offering a franchise model. Help yourself and others to achieve physical, mental, and spiritual goals. Join the \$10.6 billion health and fitness industry and receive complete training, site selection and marketing support. Call (508) 285-5425 or visit www.personalbestkarate.com

**Only \$1.30** per word. Do you have new or used HPERD equipment for sale? Do you offer services to professionals in the HPERD fields? A classified ad is your most economical means of reaching *JOPERO*'s readers, the largest audience of HPERD professionals of any journal in the field. To place an ad, call (703) 476-3468; fax (703) 476-5489; or e-mail lpirrello@aahperd.org.

# Summer Employment Opportunities

**Golf Director:** Camp Wayne for Girls, private, resident children's camp in Northeast Pennsylvania (2 ½ hrs from New York), June 19th–August 16, 2002. High school, college coach or golf professional with experience to teach girls 6-16 years old. Driving renge, putting green and sand bunker on camp premises. Call 1-800-279-3019 or visit our website at: www.campwaynegirls.com

**Camp Wayne For Girls:** Private, resident children's camp (6-16 yrs) in Northeast Pennsylvania (2 ½ hrs from New York City), June 19th–August 16, 2002. If you love children and want to work in a caring and fun environment, we are looking to hire an Athletic Director and Golf Director. We also need coaches, teachers, & students (at least 1 year of college) to teach the following: Tennis, Golf, Basketball, Volleyball, Softball, Soccer, Gymnestics, Aerobics, Cheerleading, Self-Defense, Ropes (High & Low), Swimming, Sailing, Waterskiing, Call 1-800-279-3019 or visit our website at: www.campwaynegirls.com

# Wilson

Continued from page 26

mary years (pp. 76-90). Philadelphia: Falmer Press.

- Belka, D. E. (1994). Teaching children games: Becoming a master teacher. Champaign, IL: Human Kineucs.
- Brooker, R., Kirk, D., Braiuka, S., & Bransgrove, A. (2000). Implementing a game sense approach to teaching high school basketball in a naturalistic setting. *European Physical Education Review*, 6(1), 7-26.
- Bunker, D., & Thorpe, R. (1982). A model for the teaching of games in secondary schools. Bulletin of Physical Education, 18(1), 5-8.
- Butler, J. I. (1996). Teacher responses to teaching games for understanding. *fournal of Physical Education, Recreation* & Dance, 67(9), 17-20.
- Doolittle, S., & Girard, K. (1991). A dynamic approach to teaching games in elementary PE. Journal of Physical Education, Recreation & Dance, 62(4), 57-62.
  Grebaigne, L. & Condout, P. (1995). Tac.

Grehaigne, J., & Godbout, P. (1995). Tac-

tical knowledge in team sports from a constructivist and cognitive perspective. Quest, 47, 490-505.

- Grehaigne, J., & Godbout, P. (1997). The teaching of tactical knowledge in team sports. Canadian Association for Health, Physical Education, Recreation and Dance, 63(4), 10-15.
- Griffin, Linda L., Mitchell, S. A., & Oslin, J. L. (2000). Teaching sports concept and skills: A tactical games approach. Champaign, IL. Human Kineucs.
- Hopper, T. (1998). Teaching games for understanding using progressive principles of play. Canadian Association for Health. Physical Education, Recreation and Dance, 64(3), 4-7.
- Morris, G. S., & Stiehl, J. (1999). Changing kids' games, Ghampaign, IL: Human Kinetics.
- Rink, J. E. (1998), Teaching physical education for learning, Boston: W. C. Brown/ McGraw-Hill.
- Spackman, L. (1988). Invasion games: An instructional strategy. British fournal of Education, 14(4), 98-99.
- Thumas, K. T. (1994). The development of sport experise: from Leeds to MVP legend. Quest, 46, 199-210.
- Werner, P. (1989). Teaching games: A tactical perspective. *Journal of Physical Education, Recreation & Dance, 60*(3), 97-101.
  Worthington, E. (1980). *Teaching soccer skills*. London: Lapus Books.

Gail E. Wilson is a senior instructor at the School of Human Kinetics, University of British Columbia, Vancouver, B.C., V6T1Z1, Canada.

