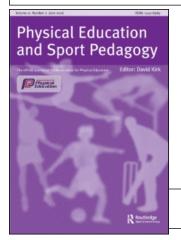
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Educating through the Physical—behavioral interpretation

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Background: Physical activity holds great promise as a natural and enjoyable setting for learning and for behavioral change. Despite claims that engagement in physical activity can promote socially desired behaviors, there remains a lack of a clear conceptual base that can guide interventions as well as research endeavors in this field. This situation leaves those who utilize physical activity as a learning agent to base their practice on common sense, intuition, or trial and error.

Purpose: The purpose of this paper is to provide the conceptual framework of 'Educating through the Physical'. This framework is grounded in the theory of Behavior Analysis and the principles of that science provide the guidelines for application and for the use of various procedures. The paper presents the rationale for 'Educating through the Physical' by identifying the unique qualities of activity and games, while providing behavioral interpretation for their merit.

Principles and procedures: Functional Analysis is presented as the main diagnostic tool used to reveal the motivating and maintaining factors for certain behaviors. Various behavioral principles and procedures are defined, their application within the context of physical activity is exemplified, and their role as vital ingredients of successful programs is explained. These principles include establishing operations, modeling, shaping, consequence alteration, behavioral momentum, desensitization, functional communication and generality of behavior.

Recommendations: General guidelines for 'Educating through the Physical' that are based on behavioral principles conclude this paper.

Keywords: Self-control; Value education; Applied Behavior Analysis; Physical education

Introduction

Physical activity encompasses certain elements (e.g. play, social interaction, structured games, exercise, etc.) that make it an ideal setting for learning and for change. Play is perhaps the most natural form of human learning and what young

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children do when they are not eating, sleeping, or complying with the wishes of adults (Gallahue, 1989). Past research has indicated that carefully designed activities and games can change behavior and attain positive outcomes (e.g. Staub, 1978; Ames, 1981; Cooper, 1982; Johnson & Johnson, 1985; Sherif *et al.*, 1987; Kohn, 1992; Bay-Hinitz *et al.*, 1994; Collingwood, 1997; Gough, 1997; Mannell & Kleiber, 1997 ; Priest *et al.*, 1999; McKenney & Dattilo, 2001). In a school context, physical education classes contain unique features (e.g. strenuous performance, competition, adherence to the rules of a game, etc.) that are not inherent to other school subjects or leisure activities (e.g. music, art). Generally speaking, students view their physical education classes as a welcome break from the classroom that helps keep them fit, healthy, challenged and socially active (Rice, 1988; Browne, 1992; Tannehill & Zakrajsek, 1993; McKenzie *et al.*, 1994; Tjeerdsma *et al.*, 1996).

The relationship between engagement in physical activity and development of socially desired behaviors has yet to be adequately explored. Theodoulides and Armour (2001) called for an in-depth inquiry into the contribution of team games to moral education. Hellison (1995, p. 1) claimed that 'it is just risky' to assume that feelings, attitudes, values and behaviors would automatically accrue due to mere participation in physical activity. Instead, Hellison raised the need for the careful planning of strategies that exemplify the target behaviors and values being taught. Such a didactical approach requires a well-developed rationale that is missing in many rehabilitative programs (Nichols, 1997).

Indeed, it has been recommended that research should present a stronger connection between theoretical foundations and the interventions employed (Ward & Barrett, 2002) as well as provide clearer definitions to concepts such as personal, social and moral education (Theodoulides & Armour, 2001). Thus, the purpose of the current paper is to provide the conceptual framework of 'Educating through the Physical', in order to address the need to connect theory and practice. This paper is grounded in the theory of Behavior Analysis. The principles of that science provide the guidelines for application and for the use of various procedures. The following section defines the concept of 'Educating through the Physical' followed by a brief description of Applied Behavior Analysis, its main diagnostic tool—Functional Analysis, the conclusions that can be drawn from its use, and how these conclusions can be addressed in the context of physical activity.

First, the notion of 'Educating through the Physical' needs to be carefully defined. The 'three dimensional model' (Arnold, 1988) draws a clear distinction between: about, in and through movement. While the first two dimensions are intrinsically involved with motion as a subject matter, educating through movement is viewed as promoting educational objectives that are extrinsic to those of movement. For example, educating through the physical occurs when processes such as character development or moral education are supported through movement (Shields & Bredemeier, 1995; Arnold, 1999). In other words, we suggest that participation in physical activities can serve as a context for behavioral change, rather than serve as the cause for the change.

Next, the theoretical core of this paper stems from Applied Behavior Analysis (ABA; Baer *et al.*, 1968, 1987). ABA is derived from behavioral philosophy (Skinner, 1953, 1968, 1971, 1974) and it seeks to understand and improve human behavior. More specifically, it addresses socially significant human behaviors that are objectively defined. ABA searches for reliable relationships between the procedures employed and their behavioral outcomes (Cooper *et al.*, 1987).

Understanding the reasons for certain behaviors and the motivating factors that maintain them is achieved through Functional Analysis (Skinner, 1953; Axelrod, 1987; Iwata *et al.*, 1994; Iwata, Wallace *et al.*, 2000). Functional Analysis provides educators with reliable information about behaviors of concern, enabling the detection of frequent patterns. A substantial body of research for more than 50 years has shown that a behavior is maintained by the consequences that follow previous iterations of that behavior. For example, a behavior that is consistently followed by positive praise is likely to be emitted frequently. Interestingly, the connection between a behavior and its consequence does not always follow conventional wisdom. Consider a situation where a child's repeated 'nagging' behavior is followed by a reprimand by the parents. In this case, the repetition of the child's behavior suggests that the reprimand increases the unwanted behavior due to the attention it provides. Notably, this functional analytic conclusion is based on data collection rather than relying on the assumption (i.e. conventional wisdom) that a reprimand should decrease the occurrence of a preceding behavior.

Information gathered through Functional Analysis helps identify the context variables that precede the behavior (antecedents) and consequences related to the challenged behavior. Thus, it enables teachers and practitioners to plan educational experiences that incorporate both triggers for inappropriate behaviors and opportunities for success. For example, if Functional Analysis identifies a specific cognitive demand as a major cause for problem behavior, students can be presented with carefully planned cognitive assignments that contain challenging, yet manageable tasks. Students' efforts are constantly supported and acknowledged and the level of difficulty is gradually increased. The aim is to increase the demand while a high success rate is maintained, hence achieving improvement in the students' skills.

The unique qualities of physical activity and games can serve as an enjoyable and constructive context in which students are presented with challenges and learning opportunities. For example, the 'Are You Square' game (Eldar *et al.*, 2006) is designed to teach and practice self-control. In this game, four groups are based in four stations (e.g. hoops), that contain an identical number of objects (e.g. rings). Participants are instructed to transfer as many objects as they can from other stations to their own, within a limited time frame and under specified rules. This game involves a strenuous activity that requires cooperation and tactical thinking in the presence of competition, stress, frustration, joy and upsets. Level of difficulty can be altered by adjustments of the rules, and activities are repeated to allow for correction and improvement.

The current paper presents the rationale for 'Educating through the Physical' and the strategies that can endorse educational goals other than those of movement.

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Functional Analysis can identify what maintains a problem behavior and the behavioral procedures described next can be used as strategies to support behavioral change, within the PE context. A special emphasis is placed on the emotional components of instruction and how educators can promote their students' motivation and self control while avoiding the traps of frustration and antisocial behavior. This paper relates to school-based programs as well as to generic settings in which physical activity takes place such as sport clubs and individual programs. Notably, the procedures described in this paper can also be utilized in clinical settings when teaching various personal and social skills (e.g. desensitization to fears, reducing anxiety, communication and interaction skills).

Behavioral interpretation

The behavioral principles presented in this section serve as the theoretical foundation for implementing change-promoting strategies within the context of physical education. Each principle is defined and examples of its application are provided.

Establishing operations

The term 'establishing operations', recently referred to as 'motivating operations' (Laraway *et al.*, 2003), is defined as the environmental influences upon the relative effectiveness of certain reinforcers, which in turn affects the future frequency of the reinforced behavior (Keller & Schoenfeld, 1950; Millenson, 1967; Michael, 1982, 1993, 2000; Iwata, Smith *et al.*, 2000). For example, when students are tired, their 'motivation' for learning is likely to be lower than under more alert conditions and their cooperation with the teacher tends to decrease; when we exit a smoky place, the reinforcing effect of fresh air is powerful and the frequency of behaviors that lead to the relief should increase in the future. Similarly, students are likely to be more inclined to learn when a favored activity (e.g. game) takes place after a complicated learning experience in the classroom.

In other words, establishing (motivating) operations refer to how students feel in a certain learning environment. The idea that emotional conditions alter the effectiveness of reinforcement (Skinner, 1953) can also explain inappropriate behaviors in the presence of unpleasant learning situations. In this case, the academic demand may serve as an abolishing operation (negative feeling by the student) that evokes avoidance or escape behaviors. For example, hitting a fellow student is negatively reinforced if it terminates an unpleasant learning episode (as the student is sent to the Principal's office). The term 'negative reinforcement' means that the behavior tends to increase in frequency because it was effective in eliminating or escaping unpleasant situations.

A teacher or a learning context can serve as discriminative stimuli ('reminder'), which indicates that an aversive learning situation is about to take place. This behavioral process explains why students occasionally 'don't feel good' during a learning session, or why they 'hate' some learning contexts (Laraway *et al.*, 2003). On the other hand, students may 'feel great' and 'love' certain tasks that were pleasant in

the past. Physical education classes hold great potential as a positive discriminative stimulus. Success in competition is normally followed by an abrupt emotional reaction. This creates a tight association between the pleasant emotional experience and the physical activity during which success has occurred. While this is a natural process, teachers can intentionally design scenarios that provide ample opportunities for success along with behavioral challenges. The presentation of behavioral goals (e.g. awaiting your turn, showing respect, etc.) in an emotionally pleasing context followed by a successful consequence, should increase the probability that such 'hard to reach' behaviors will repeat in the future in various situations.

Modeling and shaping

The human behavior repertoire is a product of imitation and ongoing shaping procedures (Skinner, 1953). We modify our responses based on the feedback we receive from the environment, in a process that establishes complex human behaviors. Modeling or imitation is incorporated into teaching through demonstrations conducted by either the teacher or fellow students. Shaping is achieved through the differential reinforcement of gradual approximations to the desired behavior (Skinner, 1953; Panyan, 1980; Cooper *et al.*, 1987; Sulzer-Azaroff & Mayer, 1991; Martin & Pear, 2003). For example, when children first learn to ride a bicycle their behavior is shaped through the support they receive—at first appropriate sitting is reinforced, then, their efforts to push the paddles are supported with extra wheels or physical guidance, next independent ride is acknowledged, while gradually reducing the physical support. Finally, riding becomes reinforcing in its own right without the need for external motivation.

Consequence alteration

A strategy to reduce the likelihood of future problem behaviors involves the elimination of consequences that strengthen the inappropriate behavior while increasing those consequences that reinforce appropriate functioning. Functional analysis (Skinner, 1953) provides a clear indication of the purpose of a given behavior. That is, what is being achieved as a result of a specific behavior. This information can then serve as the basis for the effective implementation of change producing strategies. For example, if the data reveal that the problem behavior leads to learning cessation, then effective strategies will ensure that the consequences of the inappropriate behavior do not terminate learning. Instead, the problem behavior can be ignored (a behavioral procedure called escape extinction) or addressed within the learning session (e.g. the student is required to restart the task at hand; a behavioral procedure called overcorrection). These strategies are supplemented by increased attention to the students' appropriate behavior (Weeks & Gaylord-Ross, 1981; Carr & Newsom, 1985), a procedure that maintains a constructive outlook and a pleasant atmosphere. Most importantly, this latter strategy supports the acquisition of new alternative behaviors that can replace the repertoire of problem behaviors, thus contributing to reduction in misbehavior.

Behavioral momentum

'Behavioral momentum' describes the tendency of behavior to persist after environmental conditions have been changed (Nevin, 1996; Wehby & Hollahan, 2000). In order to attain behavioral momentum, a high frequency behavior (activity that students like to perform, e.g. a game) is presented prior to a low frequency behavior (a new skill or a difficult one, e.g. exhibiting self-control). Most of the studies conducted in this field have examined students' cooperation with teachers. The findings suggest that behavioral momentum was prolonged from an initial high frequency task into the second series (the more difficult one). That is, the students' reaction time to the difficult task (from receiving the task until starting to perform it) has decreased and they remained on task (performance duration) for longer periods of time (Mace *et al.*, 1988; Sulzer-Azaroff & Mayer, 1991).

Behavioral momentum can be explained by the sensation accompanying success. A consistently reinforced behavior is followed by a pleasant feeling that serves as a positive establishing operation for further performance—even for more difficult tasks. We tend to say 'I am in a good mood now, so I am willing to try again'. Similarly, the claim 'I am not in the mood now', usually reflects a setting in which we did not do so well, or our thoughts were not cheerful. In the latter situation, a favored activity with a high success rate can change our mood and improve the learning conditions. Interestingly, behavioral momentum has been examined within the context of competitive sports (Mace *et al.*, 1992; Roane *et al.*, 2004). Overall, it revealed that teams that were performing well before an adversity (e.g. turnover) generally responded better to that adversity compared to teams who were performing poorly.

The well-known concept of momentum in the area of classroom management (Kounin, 1970) refers to the force and flow of a lesson. Although Kounin did not conceptualize how momentum develops, it may be well explained as portrayed above. Expert teachers plan their lessons ahead of time and have larger response repertoire (Siedentop & Eldar, 1989). The flow of the lesson is maintained by arranging sequences of easy-to-hard activities accompanied by an ability to adapt the lesson activities on site to ensure its flow. In addition to the integration of behavioral momentum into the lesson plans, it is prudent to terminate teaching episodes with high frequency tasks. Such ending, followed by a positive feedback related to students' performance and to their coping with difficulties, should elevate their learning willingness for upcoming trials. Physical activity as an educational venue is ideal for creating a positive momentum related to most learning contents.

Desensitization

Many of the occasions in which people lose control or behave inappropriately occur during frustrating situations. For the purposes of this paper, we operatively define frustration as a situation in which a behavior/thought is being emitted repeatedly and is not followed by an expected positive consequence (Eldar, 2002). Such a situation occurs, for example, when a team loses a game. It is possible to teach students how to successfully address frustration (Rolider & Axelrod, 2000), thus helping them to develop a strong sense of self-control. Learning to cope with success and failure should support students' perseverance and aid future integration in a competitive society.

Unfortunately, parents and educators often remove or mask frustrating triggers in order to eliminate unpleasant situations and ease emotional reactions from students. This 'walking on eggshells' strategy may achieve temporary relief, however, it does not teach the students self-control or how to cope with frustration. Furthermore, this strategy is likely to strengthen undesirable behaviors and even lead to escape (e.g. avoiding classes) or aggression (directed at peers and teachers) in order to remove unpleasant learning demands and complex challenges. The frequent 'rolling out the ball' practice in physical education is emitted by teachers in order to eliminate students' complaints and disruptive behaviors (Siedentop, 1983). A more educative strategy is to gradually expose students to meaningful learning experiences, thus reducing potential negative feelings associated with learning.

Physical activity is filled with many frustrating situations. As such, it simulates reallife challenges within a generally enjoyable setting. This combination is a prime context for teaching students to deal with frustration as it presents ample opportunities to 'desensitize' the students' behavior through gradual and planned exposure to challenging triggers. The key to an effective desensitization process is to ensure that a pleasant sensation (e.g. success) follows the aversive triggers (Friman *et al.*, 1998). Thus, the negative feelings associated with these triggers become less and less intense until the way is paved for positive functioning in their presence. In fact, the presentation of frustrating triggers during a favored game already allows for desensitization to occur, as the negative feelings are modified by the positive context (Wolpe, 1958; Taylor & Arnow, 1988).

Another element that can alleviate frustration is teaching the students to identify the aversive triggers (e.g. receiving uninvited corrective feedback), experience selfcontrol in their presence and thus emit appropriate behaviors leading to success. A more complicated process involves the identification of precursors to inappropriate behavior (Smith & Churchill, 2002). Such precursors (indications of what is to follow) appear after a specific trigger and prior to emitting an extreme and intolerable behavior. The physical education context is ideal for teaching students to identify precursors before escalation of an inappropriate behavior, thus, allowing them to change their behavior chain. Examples of possible precursors include changes in tone of voice, pace of movement, content of verbal behavior, aggressive responses, and more. Students can be taught to exercise self-control when precursors are apparent by changing the situation or altering their typical behavior (e.g. quitting the game, temporarily changing the activity, changing placement in the game, asking for assistance, etc.).

Teaching self-control through trigger analysis and gradual exposure can prepare youngsters for coping with the complex world they are entering (Rolider & Axelrod, 2000). Two major strategies—interspersion and fading—are used to support this learning process. These strategies are described next along with examples of how physical activity can serve as a natural host for their administration.

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Interspersion. Interspersion relates to the amount and sequence of triggers leading to frustration that are presented within a series of triggers associated with high success. In other words, the frustrating triggers are presented intermittently in between tasks that are associated with high student cooperation (Singer *et al.*, 1987; Horner *et al.*, 1991). For example, suppose a situation in which a student tends to react in emotional outbursts to referee calls during a ball game. In order to enhance compliance with such calls, the teacher can design a game situation that ensures high success rate for that student. Thus, supportive establishing operations are created. At the same time, frustrating referee calls are deliberately interspersed into the game. In this scenario, the student is more likely to maintain self-control because the context is positive (establishing operations) and the experience is that of ongoing success (creating momentum that supports further self-control).

Fading is a gradual change in the presentation of triggers associated with Fading. emitting a certain behavior. Initially, triggers are removed in order to achieve a reduction in inappropriate behavior, then, they are presented back in a gradual manner (faded- in) through time (Weeks & Gaylord-Ross, 1981; Heidorn & Jensen, 1984; Touchette et al., 1985; Pace et al., 1993). Fading is implemented when the level of difficulty of a task is increased (e.g. changing the height of the basketball rims), or when the frequency of triggers associated with problem behavior is gradually increased (e.g. more frequent corrective feedback). Either way, the key to a successful outcome is the gradual and cautious implementation of the procedures while ensuring high levels of success. Fading complements interspersion as may be demonstrated in the previous example. In the absence of outbursts by the student, the frequency and severity of referee calls can be increased. This process is completed when the student is able to cope with calls in an appropriate manner. Interspersion and fading support each other and their combinations help avoid a possible increase in inappropriate behavior during fading. This was demonstrated in a three-phase study by Kennedy (1994). First, functional analysis showed a high frequency of problem behavior during cognitive demands and an increase in appropriate behavior during social interactions. Next, the teacher's demands were interspersed within frequent social interactions and were faded in (the level of difficulty presented in the demand was gradually increased). This combination produced a marked reduction in problem behaviors, even as the frequency of demand increased. During the third phase of the study, cognitive demands were presented without social interactions. Notably, no behavior problems were observed.

Another form of fading (fading-out) is the gradual removal of cues that support an appropriate behavior (Ardoin *et al.*, 1999; Sarokoff *et al.*, 2001). The initial support can be in the form of verbal reminders or physical guidance, both increasing the like-lihood of emitting an appropriate behavior in the presence of frustrating triggers. For example, reminders to retain self-control despite seemingly unfair calls from a referee can help reduce the chance of an aggressive response. Subsequent to the internalization (consistent successful performance through time) of the appropriate behavior,

support may be gradually reduced (faded-out) while ensuring positive consequences for the appropriate behavior (e.g. self-control).

Teaching functional communication

This strategy is based on identifying appropriate alternatives to behaviors we wish to change. To successfully reduce an inappropriate behavior the alternative should yield similar outcomes to those of the problem behavior (Carr & Durand, 1985; Durand & Carr, 1987; Hanley *et al.*, 2003). This is a well-programmed strategy in which students acquire interaction skills producing attention and positive reactions from their environment (Durand, 1999; Hanley *et al.*, 2001). For example, students can learn how to ask for support during unclear and aversive situations. Instead of 'acting-out', students are prompted to express the difficulty they are facing and to ask for a short break. Students who use the functional communication can achieve the wanted outcome without having to emit the problem behavior (Durand, 1990).

The alternative behavior needs to be more effective than the problem behavior. That is, the alternative behavior should lead to the desired outcomes faster, more consistently, and with less effort than the inappropriate behavior. This is hard to attain and even more difficult to maintain. Contextual planning should be prearranged to rapidly support behavior change exhibited by students, especially by those who are likely to emit negative interactions. Functional communication is most consistent when it is reinforced by as many important others as possible, including peers, teachers and parents. It is important to acknowledge any improvement and assist the generalization of the alternative behavior across individuals and settings (Axelrod, 1987). For example, a student who learned to ask the teacher for clarification instead of throwing the ball in frustration can be encouraged to consult with a peer without disrupting the game. The general aim is to prompt the students to use available assistance while showing them how it correlates with improved performance and success.

The context of physical education holds great promise in the acquisition of functional communication. For example, students can be given an opportunity to discuss the rules of the game and make alterations, as an alternative channel to protesting aggressively or to escape behaviors. Furthermore, the students can be given choices among their learning assignments, which in turn tend to improve both behavior and learning (Guess *et al.*, 1985; Dyer *et al.*, 1990).

Generality of behavior change

'Behavior, unlike the flower doesn't naturally bloom' (Baer & Wolf, 1970, p. 320). Similarly, what is learned in a specific context does not automatically generalize to others. Therefore, careful programming should accompany any physical education behavior change curriculum in order to ensure effective consequences in other settings. Strategies for promoting the generality of behavior change are well documented in the literature (Baer & Stokes, 1977; Stokes & Baer, 1977; Cooper *et al.*, 1987;

Stokes & Osnes, 1989; Eldar, 1993). They are presented in three major forms stimulus generality, response generality and maintenance.

Stimulus generality refers to execution of the learned behavior outside of the training environment. A typical sport example is performing a learned drill during a competitive game. While the expected moves are identical to those in the training setting, the emotional pressure associated with the competition is much greater. Furthermore, competing in an unfamiliar sport ground requires adaptations and may jeopardize students'/players' concentration. Several strategies are used to teach stimulus generality. These include: introduction to the new environment (e.g. conducting a practice session where the competition takes place); programming common stimuli (e.g. simulating the practice in the learning setting to a game situation by creating pressure and fatigue); teaching enough stimulus examples (e.g. practicing presumed changes in the opponents' defense, controlled by the teacher); and training loosely (e.g. generating unplanned situations during the practice that are not controlled by the teacher/coach or the students/players). Stimulus generality strategies can teach students to adapt their behavior to changes in their environment. Notably, successful experiences in physical education can be generalized to other contexts and help the students display a variety of learned behaviors in adapting to new friends, teachers and learning materials.

In *response generality*, a change in a certain behavior may lead to changes in other similar behaviors. For example, a student who learned an offensive tactic in a 'three on two' situation may use a similar move when there are two players against one defender. Strategies to teach response generality include presenting enough examples (e.g. teaching the gymnast several ways to overcome a miss performance), and reinforcing a variety of the student's responses in the same situation. Generally speaking, response generality contributes to the creativity of the students because it teaches them to deal with the same challenge, using various ways.

Maintenance is generality through time, that is, performing the learned behavior even when practice sessions have been terminated. For example, the importance of defense in most games is obvious. However, offensive skills like scoring are normally much more rewarding by spectators, peers and media. Therefore, the learned defensive skills may be gradually extinguished if they are not supported. Strategies that support maintenance are: aiming for natural contingencies (e.g. arranging peers' support for defensive skills, ensuring that students will be motivated to use them); using indiscriminative contingencies (e.g. gradually changing or delaying the provision of feedback, decreasing students' dependency on external feedback); and teaching self-management (e.g. students set their own goals and learn to deliver self-consequences). Naturally, maintenance is a vital aspect of behavioral change, as without it the acquired appropriate behaviors cease to occur.

Recommendations for practitioners

The current paper presents a list of behavioral principles along with the advantage of their implementation in PE classes and in physical activity based programs. A

successful implementation of these strategies requires educators to carefully assess their students' target behaviors and needs. Sensitivity towards improvement and change is essential. Thus, educators must produce programs with flexibility and adaptability, rather than become 'technicians' who replicate set programs.

The author's experience indicates that skill and knowledge acquisition can be combined with teaching personal and social values. Aiming to prepare teachers who are highly skilled in attaining these two objectives, a new innovating teacher education program that qualifies educators as both PE teachers and behavior analysts has been initiated (Teacher Education Department, n.d.; The Experiment and Projects Division, n.d.). Indeed, teachers must be provided with practical skills if they are to become educating figures whose role goes beyond the mere portrayal of subject knowledge.

To date, the theoretical conception presented in this paper has been implemented in various programs in different educational settings. The initial results emerging from systematic replications are promising in supporting the effectiveness of such programs (Eldar, 2001, 2002, in press; Eldar *et al.*, 2006). The list of recommendations presented below summarizes the behavior principles discussed in this paper and can serve as guidelines for 'Educating through the Physical'.

- 1. Ensure that the content taught corresponds with the students' ability so that high success rates can be maintained followed by emotional excitement. A positive learning context will increase the motivation of the students.
- 2. Use short and defined episodes in order to provide the students with ample opportunities to succeed along with rapid chances to correct minor failures.
- 3. Observe your students when they learn and provide the most specific and immediate feedback you can master.
- 4. Plan effective demonstrations of appropriate behavior by both teachers and students. Teach students how to use the modeled behavior to improve their own performance.
- 5. State rules and routines clearly, explain their importance, include students in the process of selecting and keeping them, provide consecutive feedback and relate game rules and routines to everyday situations.
- 6. Conduct periodical assessment of successful learning. It will give you an indication of the clarity of your instructions and of your students' motivation.
- 7. Prepare your students for stressful situations (e.g. competition) and teach them to identify the emotional advantages and drawbacks.
- 8. Evaluate the frustration level of learning tasks and identify the triggers for inappropriate behavior. Make sure that your students are gradually exposed to frustrating situations while ensuring their success rate. Teach coping and communication skills for overcoming frustration and relate them to everyday situations.
- 9. Teach your students how to monitor their performance and progress, and use it as a motivational tool.
- 10. Reinforce gradual approximations of desired behavior. Be sensitive to minor improvement and change.

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- 11. Ensure the programming of high frequency (favored) tasks prior to more difficult ones to ensure behavioral momentum. Terminate every lesson with tasks that ensure high success rates.
- 12. Use strategies promoting the generality of behavior change. Make sure that the skills and values you teach are generalized to 'real life' situations.

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