

Educating Through the Physical - Procedures and Implementation

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Abstract

The unique features of physical activity and play highlight it as a constructive context for attaining behavioral goals such as self-control and social skills. Strenuous activity, competition, adherence to rules, team play, frustration and joy are all characteristics inherent in sport that make it a perfect “school for life”. This paper presents a model of Educating through the Physical, in which behavioral goals are achieved and mastered within the context of physical activity and then generalized across other settings and individuals. It provides educators and clinicians with practical tools to design and implement movement-related lesson plans (scripts) based on functional analytic information in order to attain pedagogical and clinical objectives.

Keywords: self-control, social skills, physical education.

Participation in physical activity can contribute to psychological, cognitive and social functioning. Past research has indicated that carefully designed activities and games, can change behavior and attain positive outcomes (e.g., Ames, 1981; Bay-Hinitz, Peterson, & Quilitch, 1994; Collingwood, 1997; Cooper, 1982; Gough, 1997; Johnson & Johnson, 1985; Kohn, 1992; McKenney & Dattilo, 2001; Priest, Krause, & Beach, 1999; Sherif, Harvey, Hood, & Sherif, 1987; Staub, 1978). Play is perhaps the most natural form of human learning and what young children do when they are not eating, sleeping, or complying with the wishes of adults (Gallahue, 1989). School-aged students tend to view their Physical Education (PE) classes as a welcome break from the classroom that helps keep them fit, healthy, challenged and socially active (Browne, 1992; McKenzie, Alcaraz, & Sallies, 1994; Rice, 1988; Tannehill & Zakrajsek, 1993; Tjeerdsma, Rink, & Graham, 1996).

Furthermore, physical activity encompasses certain characteristics that are particularity dominant within this context (e.g., strenuous performance, competition, adherence to rules, etc.) while they are not inherent to other school subjects. Thus, 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. Notably, the UN (2003) has recognized the unique qualities of sport education as a “school for life” that goes beyond mere teaching of physical skills. According to the special UN task force “sport provides a forum to learn skills such as discipline, confidence and leadership and it teaches core principles such as tolerance, cooperation and respect. Sport teaches the value of effort and how to manage victory, as well as defeat.” (p. 5). Consistent with this notion we present the concept of Educating Through the Physical as promoting educational objectives that are extrinsic to those of movement.

The aim of this paper is to provide educators and clinicians with practical tools to implement educational programs within the context of physical activity and play. The first part of the article presents a 5-stage model of educating through the physical. This model has been established throughout the author's 20 years of clinical experience. As part of a comprehensive effort, the main body of this paper concentrates on implementing lesson plans, as we introduce behavioral goals that can be attained and explain how to incorporate them into the curriculum. Notably, the procedures presented here are not exclusive to PE classes and they can be adjusted and applied to various intervention programs. Although many of the examples are derived from educational settings, in our clinical work we have implemented identical procedures with a single child or a small group of participants, both within and outside of school settings.

The Model of Educating Through the Physical

The model presented here is based on prearranged situations in which the target behavior is emitted in a predictable manner within a well structured and controlled curriculum (Axelrod, 1987; Iwata, Dorsey, Slifer, Bauman, & Richman, 1982/1994; Repp, Felce, & Barton, 1988; Rolider & Axelrod, 2000; Rolider & Van Houten, 1993; Skinner, 1953). The first step is to draw a clear picture of antecedents in which the target behavior is likely to occur and the consequences that tend to follow it. The functional analytic literature is rich with many strategies designed to obtain this information, which is then used to design scripts (specific lesson plans), in which the triggers associated with inappropriate behavior are incorporated, creating an opportunity for behavior change. For example, if the major context in which a problem behavior occurs is dealing with a specific cognitive demand, students will be presented with assignments, carefully planned to include manageable tasks. Level of difficulty should be gradually increased, while students' efforts are constantly supported and acknowledged. According to the model, the program is initially implemented in the context of physical activity by trained personnel. When a high level of cooperation is achieved in their presence, generalization to other important settings (e.g., other teachers, home) is addressed and assessed. It is essential to assure that the accomplished behavior change will be apparent in the presence of other people, in different places, and through time - with no stringent support. The model is presented in Figure 1, followed by a further description of its components.

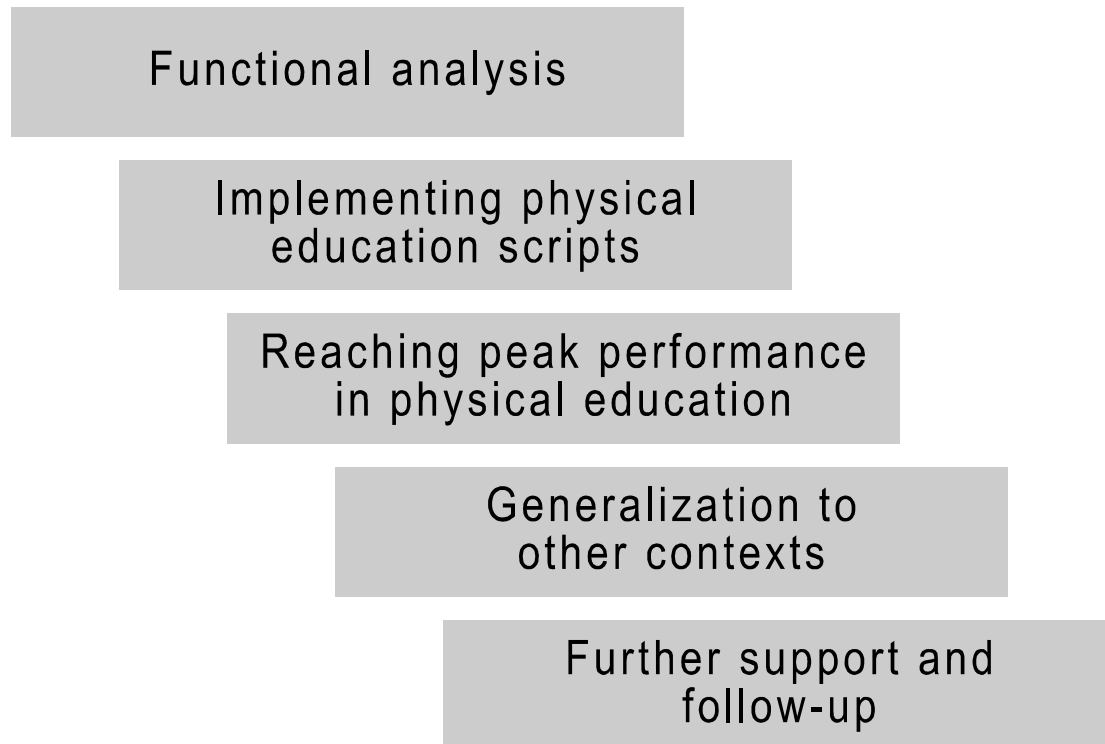


Figure 1. The components of the model.

Functional Analysis

Understanding the context for certain behaviors and the motivating factors that maintain them is achieved through Functional Analysis (Axelrod, 1987; Iwata et al., 1982; Skinner, 1953). Functional Analysis provides educators with reliable information about behaviors of concern, enabling the detection of frequent patterns through graphical representation of collected data. Thus, functional analytic conclusions are grounded in data collection rather than be based on the expected assumptions. The

information gathered during this stage enables the design of an adapted curriculum suitable for the unique necessities of individuals and groups sharing similar characteristics (e.g., having difficulties in concentration).

The PE context is perfectly tailored for conducting a brief functional analysis (Northup et al., 1991; Wallace & Iwata, 1999; Wallace & Knights, 2003). The repetitive nature of sport activities enables the programming of brief session in which certain variables (e.g., waiting, demand, attention, etc.) are manipulated sequentially. Games can be easily adapted to serve the analysis purpose, without losing their exciting properties. Furthermore, physical responses are visible, allowing for an accurate assessment of participants' functioning.

Implementing Physical Education Scripts

Scripts can be used to assess functional relationships between inappropriate behavior and specific environmental events (Iwata et al., 1982). In this pioneering endeavor Iwata and his colleagues observed developmentally disabled children during periods of brief, repeated exposure to a series of analogue conditions: play materials, demand, and social attention. Results showed that the motivation for inappropriate behavior may be explained as a function of distinct features of the social and /or physical environment. Similar strategies have been used to improve social-communicative interaction among children using socio-dramatic scripts (Goldstein & Cisar, 1992), to improve communication using the script-fading procedure in which embedded textual cues were gradually reduced (Krantz & McClannahan, 1998; Sarokoff, Taylor, & Poulson, 2001), and to teach self-control (Rolider & Axelrod, 2000; Rolider & Van Houten, 1993).

In the proposed model, scripts are short teaching-segments (about 5 minutes) that comprise a lesson within a comprehensive unit plan (i.e., a series of lessons sharing the same objectives). The scripts simulate real life situations, they gradually expose the students to the challenging antecedents, and they are highly adaptable based on the preliminary functional analysis. The scripts are comprised of physical activities or games that emphasize certain antecedents, consequences, or both. For example, during a strenuous anaerobic effort (e.g., two teams relay run) students are asked to adhere to rules and refrain from obstructing each other and cheating. Such a script exposes students to a stressful situation in which they had self-control difficulties in the past. Scripts are presented repeatedly while level of difficulty increases gradually (e.g., harder effort, proximity to opponent), keeping a high success rate (e.g., self-control in the presence of increased stress).

In order to help the students deal with “demand difficulties”, scripts are designed in a fade-in manner – from simple to complex (Heidorn & Jensen, 1984; Pace, Iwata, Cowdery, Andree, & McIntyre, 1993; Touchette, MacDonald, & Langer, 1985; Weeks & Gaylord-Ross, 1981). Such a process exposes the students to challenges they were used to decline by emitting an aberrant behavior. Persistency in performance, followed by teacher’s support and encouragement, should lead to greater learning perseverance exhibited by the students in the presence of similar difficulties.

Scripts may also be tailored to alter consequences that maintain the inappropriate behavior. For example, when the functional analysis indicates that a deviant behavior increases when followed by attention, scripts can provide an opportunity to ignore this behavior while providing ample attention to an incompatible one. Students who tend to insult their peers during social interactions may continue, if this behavior elicits certain reactions from peers and staff members. In other words, this unwanted behavior is reinforced by the attention that follows it. Scripts that present similar social interactions (e.g., soccer game), where on the one hand, any sort of insult is ignored, while on the other hand, any appropriate behavior wins immediate attention, may change the behavior patterns of the “bullies” (Carr & Newsom, 1985; Weeks & Gaylord-Ross, 1981). Such scripts should be repeated consistently, followed by a clear

explanation of the behavioral goals. There is no reason to mask the educational process that is in effect, rather, it should be well comprehended by all participants.

It is essential to implement several scripts in each lesson. This way, each script becomes an episode in itself, allowing for a separate conclusion. Teacher's, peers' or self-feedback, provided at the end of each script, constitutes an important step in the learning ladder. A multi-script lesson enables various learning and progress opportunities. Students failing to achieve a specified goal in a certain script can do so later, given similar opportunities. Such positive learning atmosphere may support students in dealing with corrective feedback, and ease the negative emotional effect ("feeling of failure") that may be carried over from one script to a succeeding one. Furthermore, knowing that "make-up" opportunities are always available can help maintain motivation for improvement. For example, a teacher's comment following an unsuccessful script can include corrective feedback supplemented with the promise - "you can make it up right away in the following script". Such a statement may serve as an establishing operation (Michael, 1993, 2000), increasing the likelihood of persistent cooperation and desired behavior.

Reaching Peak Performance in Physical Education

According to the next component of the model, scripts concerning all behavioral goals continue to be implemented in the PE context until optimal performance is achieved. Criteria specifying attainable performance level should be drawn for each behavioral goal in the program and success is measured by grades assigned for each script. A grade may include quantitative or qualitative evaluation based on the pre-specified criteria. Successful performance throughout three consecutive scripts or more signify the initial internalization of a certain behavior pattern in the PE context.

Reaching optimal performance in this protected and supported context holds several advantages:

1. As a natural and favorite context (Gallahue, 1989; Tjeerdsma et al., 1996), it is possible to present complex challenges in Physical Education, while reducing objection and "escape from demand".
2. Consistent and prolonged success supports students' "self-esteem" and is associated with general contentment. When students "feel good" about their learning environment their attitude toward challenging learning goals and toward the education system improves. The emotional change, although specific to the PE context, may support similar learning efforts in other contexts (e.g., math class) – if the generality of behavior change is carefully programmed.
3. The relatively easily attained success within the PE context may encourage other teachers as well as the parents to support the generalization of change to a variety of other contexts.

Generalization to other Contexts

Once the behavior change is consistently demonstrated in the context of physical activity, the aim is to generalize the appropriate conduct to other settings in which the students are active. Thus, it is essential to establish effective communication among staff members, clinicians and family members who are in contact with the students. Planning for generalization can be applied in several ways:

1. Implementing generalization-planning strategies in the PE context. These structured strategies (Baer, 1981; Cooper, Heron, & Heward, 1987; Eldar, 1993; Sulzer-Azaroff & Mayer, 1991) include simulation of everyday situations, presentation of gradually increasing complex behavioral situations, encouraging self-management, and more.
2. Including "important others" in the implementation of the program. Having other teachers/clinicians and parents visit the PE lessons, may increase their motivation to support the behavior change and to collaborate. Furthermore, the visiting teachers and parents can then use terms and examples noticed in the PE lesson - in their own interactions. For example, "It's

wonderful to see you helping others / your sister, as you did in the physical education lesson I observed”.

3. Frequent visits of PE staff in other contexts during the generalization phase. The presence of teachers / clinicians with whom students have experienced success, can improve their effort and performance in other settings (Rolider & Van Houten, 1993). Moreover, the PE teachers can assist the students with a hint or an advice and provide other teachers and parents with feedback concerning generalization support.

Further Support and Follow-up

The acquisition of behavior change requires time and depends on continuous success and on an apparent support by teachers, parents, peers and important others. Therefore, it is essential to conduct an ongoing formative evaluation of students' progress, based on data collection. It is also recommended that teachers present periodic scripts to strengthen learning, and to encourage students' determination. Finally, teachers and parents are ought to remain observant, detect and support any form of self-management and accountability exhibited by the students with regards to learning and social functioning (Sulzer-Azaroff & Mayer, 1991).

Incorporating into the Curriculum

Models for curriculum development in physical education are designed and adapted according to national guidelines and standards, school philosophy and policy, students' characteristics, teachers' educational perception and more (Eldar, 1997; Siedentop & Tannehill, 2000). The model presented here does not offer a replacement for a conventional curriculum. Instead, it can supplement, infuse into, or operate in conjunction with the basic curriculum. It can also be adapted to support individual or small group clinical programs.

The behavioral goals included in the current model are based on successive progressions throughout the academic year or a certain time period (e.g., quarter, semester). However, they do not necessarily impinge upon the PE content taught. Values can be demonstrated and self-control and cooperation skills may be taught in the different contexts of ball games like soccer, individual activities like gymnastics, and in pair games like tennis. In the next section of this paper, we demonstrate how a series of movement games can be designed to achieve specific educational goals. Our experience of more than 20 years recommends a series of behavioral goals that are presented systematically. Mastery in each one of these stages “paves the road” for presenting the next goal in the program. However, the key points are: a) Stages in the program are not necessarily prerequisite to their followings. They are built in a logical order that may be altered due to didactic or managerial considerations; and b) The structure of the program is spiral, allowing for further strengthening of a certain goal, even when its direct intervention has been terminated. In other words, every goal presented in the program continues to be included or mentioned in advanced stages. This curriculum integrates goals stressing emotional features such as self-control with goals like self-management in which the cognitive demand is more prominent. Empirical investigation of the program sequencing is warranted but has not been accomplished yet due to its methodological complexity. The suggested goals in their recommended order are presented next.

1. Ensuring a Supportive and Convivial Learning Atmosphere

The initial lessons should focus on creating a positive learning climate. This goal is vital in order to ensure students' openness and willingness to deal with future challenges. An enjoyable start (establishing operation - Michael, 2000) is likely to increase students' motivation and create a constructive momentum (Nevin, 1996; Roane, Kelley, Trosclair, & Hauer, 2004; Wehby & Hollahan,

2000) for further learning. Thus, Initial lessons should eliminate aversive situations accompanying complicated demands and expectations.

It is also important to begin and terminate each lesson with favored activities (e.g., preferred games), in order to support the prompt attendance of students and their anticipation for future meetings. A few “peaks” like competitions, students’ demonstration, creative assignments and integration of music, embedded within the lesson, should add to its emotional excitement and attractiveness. It is also advised to conduct a few breaks in the lesson, during which short discussions can take place, questions can be answered and humorous relaxed remarks are welcomed. The transition from breaks to learning tasks is important as it teaches the students to discern between different levels of concentration and demand and to adapt to changing learning situations.

Program climate should be examined throughout the implementation of the program. Any “drift” in the students’ motivation should be detected and corrected by adjusting learning goals and procedures. However, positive does not mean having students do “whatever they feel like”. This may lead to a short relief, but in the long run, increase inappropriate behavior, negative student pressure and loss of control by the teachers. Therefore, students should not solely dictate the content and the nature of the lesson. They can, however, be given choices about their learning assignments during prearranged discussions, which tends to improve both behavior and learning (Dyer, Dunlap, & Winterling, 1990; Guess, Benson, & Siegel-Causey, 1985). Other contributors to a positive climate include frequent opportunities to respond with a high success rate (i.e., challenging, yet manageable scripts) and providing students with immediate and positive feedback for appropriate performance (Eldar, 1997).

2. Cooperation with Teachers

Students’ cooperation with teachers / clinicians is a prerequisite for any program. Teaching tasks should, therefore, be presented to the students clearly and gradually while the criteria for feedback during this stage are related to the following aspects:

1. Reaction time - elapsed time between the presentation of task by the teacher and the initial adequate performance by the student.
2. Performance quality - proximity of performance to task instructions evaluated according to specified critical elements and to explanations and demonstrations.
3. Duration - continuous time of appropriate performance is indicative of a higher cooperation level.

It is very important that at this stage, the teachers running the program remain sensitive to students’ cooperation as identified by the criteria specified above. It is the teachers’ responsibility to ensure that any functional improvement is recognized and supported. Similarly, teachers need to take various actions when levels of cooperation are lower than expected. These actions include re-evaluation of planning and learning climate, providing the students with constructive feedback supplemented with guidance, or alternatively, ignoring the lack of cooperation, especially when it is temporary or when it is supported by teacher’s or peers’ attention (Siedentop, & Tannehill, 2000).

3.Attention and Concentration

Attention and concentration are vital for effective learning. Movement and games are ideal for “sharpening” these qualities, that is, teaching students to focus on relevant stimuli and to ignore masking and overshadowing environmental and physiological distracters. For example, in order to perform well, students need to be attentive to demonstrations, they can relax in the preparation for the drill, but need to refocus when executing the taught activity. As in other stages of the program, level of difficulty is gradually increased, for example, by moving from a verbal and visual explanation to verbal or visual only. It is possible to gradually increase interfering stimuli such as noise and crowd as well as manipulate

physiological distracters through alternations in level of fatigue (Nideffer, 1993). Keeping high concentration and adequate performance levels despite such barriers can help enhance the students' attentiveness in various situations and in other contexts.

4. Responding to Rules and Routines

Rules and routines define the framework of the PE lesson and form the basis for any other educational and organizational setting. Rules define general expectations regarding students' functioning in different situations (Siedentop, 1991). Rules are developed by defining the appropriate behavior (e.g., we listen to others when they speak) and by defining the inappropriate one (e.g., we refrain from insulting others). Routines are procedures that aim to structure frequent behaviors during the lesson (Siedentop, 1991). For example, "When I lower my voice, you are asked to stop where you are and look at me". Short and clear rules and routines taught in each unit, help support their comprehension and may improve students' conduct in other lessons as well.

This stage of the program presents a series of games in which rules and routines become more complicated, while the punctuality and accuracy of following them is being emphasized. Providing students with everyday examples of similar rules and routines (e.g., we wait in line to purchase cinema tickets), is likely to support their generalization. Furthermore, it is important to "bridge" between rules and routines that are "natural" to game situations (e.g., a ball is reverted to the opponent in cases of pushing) and those of "real life" (e.g., we do not use aggression to achieve our goals). This may be accomplished through discussion, questions and short remarks during the game.

5. Waiting

One of the principles of effective teaching is to minimize waiting as much as possible in order to increase learning time and opportunities to respond. Therefore, incorporating practice of waiting into lesson plans may be perceived as violation of this didactic principle. However, this program integrates waiting situations as an integral part of the activities conducted, in order to improve students' restraint. Thus, when waiting is the behavioral goal of interest, the students are provided with feedback that relates to their capacity to wait when required, without losing control or breaking rules and routines.

The sport context is rich with waiting situation that may serve this goal. For example: waiting in line to shoot a basket; waiting to receive the ball during the game; waiting for one's performance on a certain apparatus, etc. Level of difficulty can be manipulated in several ways:

1. Waiting duration - longer time demands higher restraint.
2. Attractiveness level of the activity - waiting for an attractive activity requires a higher level of self-control.
3. Interfering stimuli - other students refusing to wait, noise and other competing activities increase the level of difficulty.
4. Teaching ambiguity - when instructions regarding waiting are unclear, unavailable or given in low frequency, level of difficulty increases.

6. Independent Performance

Inappropriate and aberrant behaviors may be emitted because they gain immediate attention (Thompson & Iwata, 2001). Physical education is well suited for practicing independent efforts, with no immediate attention from teachers and peers. This stage presents scripts in which students are required to deal with more complicated and longer tasks while no immediate feedback is provided. For example: practicing passing in basketball, without teacher's supervision and feedback; independent running drills;

gymnastic routines; a scrimmage between two teams with no teacher's feedback or attention and more. The main goal is to teach students to endure their learning in the absence of an immediate and available notice. This goal is presented to the students and discussed with them while the major feedback during this unit relates to their ability to act independently. This does not mean that the students' performance receives no recognition. Rather, it is achieved through self-reflection and by postponed feedback delivered later. Independent learning is a prerequisite to self-management, explained later on in the program.

7. Dealing with Demands

Our experience with functional analysis conducted for clinical purposes shows that substantial percentage of inappropriate behaviors occur in the presence of some sort of teaching and social demand. The target behavior eliminates or terminates an aversive situation (e.g., a learning task), thus it is negatively reinforced. In order to overcome this obstacle, this stage of the program presents a variety of tasks, that become gradually more and more demanding only when the students are well prepared for dealing with the increasing difficulty. Through this process the students learn to identify the critical elements of the task and to find ways to ease the burden.

This behavioral goal can be practiced by utilizing various tasks, depending on the students' needs. These tasks may highlight cognitive, emotional, social or physical demands. When progress is evident, demands from different domains may be integrated. An example is solving tactical problems during a game (e.g., change of defense strategy) presented to students while they are at the peak of an extensive and strenuous physical effort. This combination of cognitive and physical demands increases the level of difficulty and teaches students to cope with more complicated situations that have previously led to "escape behaviors". Social demands may be simulated by regrouping teams' lineup and posing new cooperation challenges for each team. Emotional demands may include functioning under a pressure, followed by challenging remarks and hustles by the teacher and peers.

Gradual presentation of learning tasks from least to most demanding sets the scene for continuous success. This process will be effective if exposure to the aversive triggers is also followed by a pleasant sensation, for example, success in completing a learning task (Friman, Hayes, & Wilson, 1998). In fact, this is a desensitization procedure (Taylor & Arnow, 1988; Wolpe, 1958) in which the difficulties are presented during a favored physical activity and game. Students are taught to identify the aversive triggers, experience self-control in their presence, and at the same time emit appropriate behaviors leading to success.

8. Perseverance ("don't give up")

The ability to persist without giving-up is essentially an extension of dealing with a demand while being under strenuous emotional stress. The previous phase has emphasized students' ability to identify variables associated with demand difficulty and it presented strategies to confront such challenges. The perseverance stage introduces scripts characterized by tough situations that typically lead to "giving-up" reactions. Therefore, the aim of this behavioral goal is to teach students to cope with, rather than avoid or escape from unrefined difficulties thus gaining an opportunity to experience the successful results of their efforts. Level of difficulty can be manipulated by increasing task demand in different activity areas.

For example, a repeated anaerobic agility dash (running from one line to another), can be used to practice and support persistence, as this tiring and potentially boring task may simulate an "easy to quit" situation. Teachers can then encourage persistency, especially when the students are about to quit. Such encouragement may take the form of verbal comments that acknowledge the difficulty (e.g., "last time you gave up at this point") and promote enduring performance (e.g., "don't give up; try to hold for one

more minute.”). Additionally, at the end of the session it is best to amplify the sensation of success that resulted from the perseverance.

9. Termination of a Favored Activity

Ending a game or “fun activity” does not normally lead to aberrant behavior. However, it may result in complaining, bargaining and demonstrating discontent. Teaching students to cope with such situations may contribute to their self-control and learning persistency. In order to practice this goal, favored and less favored activities are executed in alternation. For example, the lesson is divided into four segments including free play, strenuous physical activity, peer teaching and a culminating competition. The termination of free play is likely to induce some protest, especially in light of the exhausting physical challenge that follows. Without proper planning, this scenario may develop into a mere confrontation between the teacher and the students. Yet the suggested solution is not to delay all favored activities to the end of lessons, but rather to use this as a structured opportunity to practice appropriate behavior and self-control despite the challenge.

Level of difficulty for this phase can be manipulated by increasing the attractiveness of the terminated activity, sequencing a less favored activity to follow a certain task or an abrupt cessation of the favored activity or shortening its extent. Other forms of manipulation can be incorporated into various activities regardless of the appeal of the activity itself. For example, changing teams match-up in a way that reduces success probability for one team or changing roles in different activities, from more favored to less favored, as when players become referees or feedback providers.

10. Cooperation with Peers

This phase is comprised of games that emphasize collaborative tasks. It represents a shift from small group participation and execution of simple tasks to larger groups and more complicated activities. Social tasks are fundamental in sport games as well as in collaborative movement like dance and gymnastics. They are also vital for individual performance in which students are supporting each other (e.g., spotting in gymnastics).

Many games are characterized by a potential discrepancy between the individual's and the team's objectives. At the personal level students are eager to fulfill their talent and to serve as “key players” as much as possible (e.g., scoring). However, at the team level they are expected to cooperate with their peers, grant them with equal opportunities and consider the “best interest” of the team. Thus, there are ample opportunities to teach cooperation and overcome egocentric participation style. Furthermore, games are easily adapted in order to plan creative circumstances that require cooperation. For example, dribbling can be banned in team handball, so that participants are forced to maintain eye contact and pass the ball to their teammates; rules in soccer can be set to enforce ball transfer between at least four different players before the team can score a permissible goal.

Furthermore, concepts such as “forfeiting” can be demonstrated and taught through games, in which several children play with limited equipment. Most participants will “naturally” do their best to be “first in line” and to engage with their favored equipment. In this context, children can learn to wait for their turn and they can be rewarded for socially desired behaviors such as sharing. Similarly, acceptance of others, especially students with special needs, is a vital value that can be well exemplified through physical activity. Games provide ample opportunities for all - even those who have difficulties in agility or in performing the correct technique. Furthermore, having students with difficulties share the game experience with high-level students enables the comprehension of individual variability and appreciation of others “as they are”. This value is emphasized especially when team’s success is dependent on the accumulating contribution of all participants.

The tension and emotional involvement attached to competitions obscure the attainment of social goals and values. Therefore, collaborative tasks should be planned gradually and evolutionary while keeping high levels of teamwork throughout the unit plan. It is advisable to implement collaborative scripts in other activities such as dancing, planning choreography, preparing for gymnastic exhibitions, and the like.

Level of difficulty may be elevated according to the following considerations:

1. Changing the complexity of the social task.
2. Re-shuffling the students that comprise a team.
3. Increasing the number of students in a team.
4. Manipulating the consequences contingent upon performance. For example, emphasizing the winning value may increase tension and make collaboration more vulnerable.

11. Self-Control

Acquiring self-control is a pre-requisite to all other skills taught and is supported in each stage of this program. Nonetheless, it is presented here as a discrete goal, in order to evaluate students' capability to deal with higher level challenges. This goal is related to coping with frustrating situations and using appropriate communication skills for informing difficulties, rather than emitting aberrant behaviors for the same purpose (Durand, 1990, 1999; Hanley, Iwata & Thompson, 2001). To accomplish this aim, scripts are designed to introduce situations in which the frustration level is gradually increased. This is a sensitive process requiring specific knowledge and careful preparation. Self-control scripts are comprised of various game situations like tackles between players, extreme demand, fatigue situations and intense competitive episodes.

Furthermore, self-control can be developed and exercised through the manipulation of rules and refereeing during the game. For example, running a game with no external referee may impose a heavy responsibility on all participants who are committed to admit any violation with no reminders. Meeting such a challenge marks a significant progress indicating that the students are able to bring their behavior under control even without their teachers' involvement.

Any change in antecedents, making them more complex or frustrating, can serve as a way to increase the level of difficulty. Such an increase should be carefully planned and monitored, self-control should be acknowledged, while any form of aggression or emotional counterattack should be immediately detected and desisted. Such unwanted conduct may be indicative of inappropriate planning and should lead to adjustment in the progression and the content of the scripts.

12. Self – Management

Self-management is demonstrated when students assume responsibility and are held accountable for their learning and social functioning (Cooper et al., 1987; Eldar, 1990). In order to reach self-management, students should be well versed with all other components of the model, especially with independent learning and self-control.

The two terms - self-management and self-control are frequently interchanged in the literature. However, in this model they define two distinct capabilities. Self-control relates to “emotional situations” and to students' ability to inhibit their reactions and refrain from an abrupt response to frustrating triggers. Self-management includes the above capability but requires further cognitive qualities that are essential for situation analysis, problem solving, setting self and collaborative goals and taking responsibility for consequences (Eldar, 1990).

Self-management scripts shift the responsibility for planning and implementing the lesson from teachers to students. This gradual process requires the selection of learning topics, planning the lesson and taking part in carrying it out. Students collect data that reflect their learning progress and reach conclusions and recommendations based on this information. Level of difficulty increases when more responsibility is shifted to students and learning tasks become more complex. Self-management as a learning strategy does not discharge teachers from active doing, but it does change the nature of their functioning, as they serve as advisers who support students according to their own initiation.

13. Peer Teaching

In peer teaching (e.g., Gumpel & Frank, 1999; Kohler, & Greenwood, 1990) students assume responsibility for learning and performance of other students. For example, activities in which a designated student is responsible for the final product of the group; providing performance-related feedback to peers; assisting and spotting; refereeing, and more. Peer teaching is highly valued by students who are challenged by the granted responsibility and are willing to meet their teachers' expectations (Gumpel & Frank, 1999). This process can be beneficial to the teaching students who get to practice their knowledge and improve their self-esteem. It is placed as the last stage of this program because it combines the attainment of personal goals along with giving to others.

Physical education provides ample situations in which peer teaching may be integrated. This context in particular, enables students who may struggle in other their regular classroom, to guide other students. Further implementation of peer teaching in other learning contexts should be easier after students have acquired this skill in physical education.

Summary and Recommendations

Table 1 presents a summation of the stages in the proposed program, definition of stages, implementation examples, ways for increasing level of difficulty, and generalization possibilities.

TABLE 1, NEXT PAGE!

Table 1 Summation of the Stages, Definition and Various Examples of the Proposed Model.

Goal	Definition	Example	Level of Difficulty (LD)	Generalization
Supportive and pleasant atmosphere	Planning to ensure a high success level and favored activities	First lessons are devoted to familiar and favored games	No change in LD. Activity is designed to ensure success and joy.	Students describe their everyday favored activities
Cooperation with the teacher	Performance according to teachers instruction	Arranging students in groups. Students react promptly with no argument.	Complicated tasks / Time frame for completion / Less favored tasks	Cooperation at home – parents / Cooperation in other lessons.
Concentration Paying attention	Focusing on teaching stimuli and ignoring irrelevant ones	Focused stare at a student's demo. Directing body toward the teacher.	Explanation complexity & clarity / Interfering stimuli / Distance	Read a book / Watch a movie / Attend a lecture
Adhering to rules and routines	Following rules and routines according to instructions	Arrive on time / Touch the line in relay run / Sit at the end of activity	Number of rules / Motivation to break rules / Reminders for compliance	Adhering to school's rules / Behavior outside school.
Waiting	Student is not active while others are engaged in activity.	Before shooting a basket / Listening to or watching others.	Extending time / Increasing attractiveness of task waited for.	In line at the ticket office / When others at home are playing computer games.
Independent performance	Continuous engagement with no immediate attention.	Working out independently with no "external" involvement	Task complexity / Performance duration / Attention to others.	Doing homework without parents' assistance.
Dealing with demand	Performing complex physical cognitive, social & emotional tasks.	Extreme anaerobic effort / Cognitive tasks within exhausting drills	Task complexity / Duration / Fatigue / Distracters / Explanation clarity	Homework / Helping at home / Teamwork.
Perseverance Don't give-up.	Adhering to performance when task is difficult and student is tired.	3 more pushups / 2 more laps when student is about to give-up.	Duration / Fatigue Task complexity / Distracters	Completing an assignment / Fixing a defective apparatus.
Termination of a favored activity.	Stop activity and move to next task with slowdown or complaint.	Terminating basketball game and attending to teachers' remarks.	Activity appeal / Complexity of Succeeding task / Sudden termination	Returning home after a game / Lights turned off during a game
Cooperation	Collaborating with peers, showing support and patience.	Team strategy in a game / Forming a collaborative stunt.	Task complexity / Peers' ability / Contingent consequence	Helping at home / Collaborating in a team effort.
Self-control	Restrain during frustrating situations.	Confrontation games.	Contingent consequence / Frustration intensity / Emotional status	Playing soccer with friends / Receiving feedback.
Self-management	Self planning, performing & executing consequences.	Goal setting / data collection / implementing a conditioning prog.	Tasks complexity / Teachers' supervision level.	Being accountable for homework and home duties.
Peer teaching	Assuming responsibility on peers' performance.	Supporting peers in same or another class.	Tasks complexity / Peers' cooperation.	Assisting family members / Group work in class.

The didactic and practical principles associated with the implementation of the presented model have been discussed in this paper. Educators, physical educators and clinicians who choose to apply this conception can adjust a variety of programs to meet the unique challenges they face. Comprehending and appreciating the rationale is vital for designing programs and curriculums that utilize the exclusive advantages of physical education and sport. The educational conception recommended here regards teachers and clinicians as independent planners, who are able to adapt curriculums to their students' needs

and conduct formative and summative evaluation of their implementation. Such a challenge is not easy because it requires educators to become producers rather than “technicians”. The “Are you Square” game (Eldar, Morris, Da Costa, & Wolf, 2006) exemplifies the application of this model. The game involves four groups or individuals based in four stations (e.g., hula hoops) that contain an equal number of objects (e.g., rings). The game challenges participants to collect as many objects as they can from other stations and place them in their own station in a limited time frame, while adhering to various rules. This strenuous and competitive framework presents challenging scenarios within a short period of time and thus, allows the implementation of all components of the model.

The current paper represents the fundamental principles of the proposed program, which deals with basic learning acquisition skills, self-control and mutual respect. Adapting these principles into an educational concept will enable the further acquisition of values such as responsibility, initiative, integrity, and forfeiting as an integral part of the curriculum. It is possible to incorporate these concepts into the annual curriculum and to present them consecutively as was done in basic skill acquisition.

The model presented here requires a thorough examination of educational philosophy by all its implementers. The didactical / clinical / educational values and goals it promotes, might presumably contradict the professional focus of a physical education curriculum. Consequently, teachers may adhere to the sport, fitness, posture and other physical education goals and withhold the implementation of the above. Nonetheless, the author’s experience clearly indicates that a “professional” conception focusing on skill and knowledge acquisition can be combined with an “educational” conception teaching personal and social values.

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