

Article

¿Por qué los “Juegos Físicos” son un Método Apropriado en las Clases de Educación Física Primaria?”

¿Why the “Physical Games” are an Appropriate Method in Primary Physical Education Classes?”

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RESUMEN

El presente artículo teoriza acerca de las principales tendencias mundiales respecto a las metodologías apropiadas para llevar a cabo una clase de educación física, apoya la teoría de Piaget y Ramsden, que reflexionan acerca de las etapas de desarrollo físico y psicológico por las que atraviesan los niños de primaria y la capacidad que tienen de transferir, a través de juegos físicos, sus aprendizajes, conocimientos y movimientos a la vida real, y con esto, su correcto desarrollo psicomotriz en enseñanza primaria. Además, se teoriza acerca de la importancia del profesor para el buen desarrollo de patrones motores básicos a desarrollar en niveles básicos del crecimiento humano.

Palabras Clave: educación física, desarrollo motriz, juegos físicos, Piaget

ABSTRACT

This article theorizes about the main world tendencies regarding the appropriate methodologies to carry out a physical education class, supports the theory of Piaget and Ramsden, who reflect on the stages of physical and psychological development that elementary school children go through and the ability they have to transfer, through physical games, their learnings, knowledge and movements to real life, and with this, their correct psychomotor development in primary education. In addition, it is theorized about the importance of the teacher for the proper development of basic motor patterns to be developed at basic levels of human growth.

Keywords: physical education, motor development, physical games, Piaget

INTRODUCTION

The purpose of this document is to understand through Piaget's Cognitive Stages of Development and Ramsden's Theories why games are an appropriate way to achieve the curricular objectives of Primary Physical Education Classes.

The context of the analysis is focused on the Chilean reality, according to the National Curricular Objectives of Physical Education and first year of school learning, as well as, its justification and critical reflection of the practice in its context. Secondly, it exposes theories that try to explain why games and their different motivations could influence to the success of children's learning, and how these experiences are transferable in the adaptation and development of children to the real world.

Finally, this document presents conclusions about why games are an appropriate tool for the development of learning in Physical Education; reflections on the influences that games have on the lives of children and on the importance of the role of the teacher of physical education to transfer the learning of children to the future.

BACKGROUND

The National Curriculum of Chile (Ministry of Education of Chile, 2012), indicates that the main objectives that must be met in the first stage of schooling have to do with the development of the basic motor patterns of manipulation and locomotion.

With this, it is possible to identify that these objectives are only based on measurable physical learning and that are related to their individual and body development; however, when children have the possibility to play, they develop skills that are more relevant and transferable to another type of learning; for example, the development of ingenuity, the spirit of observation, the stimulation of patience, creativity and self-confidence (Piaget, 1951; Wood, 1997), among other characteristics, demonstrating that games are a powerful tool for the individual and social life of children.

This reflection about a common practice that physical education teachers carry out, is a discovery that is known in a certain part of Chilean teaching, however, the importance of the games is related to the transfer of these lessons to real life, how significant these relationships are, and how teachers can stimulate their development, beyond what the National Curriculum calls for, teachings and values for life.

PIAGET'S THEORY

The Piaget's Cognitive Stages of Development, exposes different stages of intellectual and physical development in children, assigning specific ages for each of these stages. The stages are: Sensorimotor: 0-2 age, Pre-Operational: 2-4 to 7-8 age, Concrete Operational: 7-8 to 12-14 age, and Formal Operational: 14 and over (Piaget, 1969).

According to their studies, each of these stages explains the way in which the formational development of the children is carried out and specific in which moment of the children's lives the learning is acquired. To answer the research question, the second stage of development and its relationship with the practice of games in the Physical Education class will be analyzed.

The Pre-Operational Stage is carried out at ages of approximately 3 to 8 years, and according to the Curricular Bases of Chilean Education (Ministry of Education of Chile, 2012), it is framed by the beginning of the school life of children.

For Piaget this stage is highlighted by the beginning of logical thoughts and reasoning based on what children perceive of the environment that surrounds them, therefore, from there come their decisions and ways of acting.

Assuming that the children have already achieved the full development of the objectives of the previous stage, (Sensorimotor:0-2 age), where essential mental and physical patterns must be coordinated that create a basic pattern of responses; children give way to more logical thoughts based on the schemes already acquired and what is presented in the environment.

However, it is important to note that Piaget's stages may be superimposed, or perhaps they may be a bit more flexible in terms of age, because the personal development of individuals is affected to a large extent by the environment. For example, a child who was born exposed to motor stimulation at an early age, has a domestic context that perhaps encourages him to develop earlier than the rest of his classmates, as well as some child who did not attend during his early years at school, it will have another timing of individual and social development. (Slade, 1995; Wilkinson, 1980)

At the same time, the Sensory-motor Stage, could be still applicable and can continue to function and apply in some way during the rest of their lives, especially when group games are performed (Wilkinson, 1980).

Despite the existing criticism towards the ages of the Piaget's stages, constructivism is a form of learning that is in correct relation with the games in the Physical Education class, and therefore, with the consecution of the necessary learning.

For Piaget, (1950) learning is not acquired by itself or in isolation, but rather, is an interconnected network of structures that are formed over time and according to the various experiences to which they are exposed children.

Piaget's Pre-Operational Stage can be related to the games that take place in the Physical Education class: the children will develop their first logical thoughts according to what they see in their environment and what they want to achieve, they will be their first steps in the decision making and so both, in the unfolding of their individual and social potential. This stage is in total connection with the curricular objectives that must be developed in the Chilean Primary Education, however, at the same time it offers an opportunity for expansion of other capacities inherent to the human being and necessary for life.

Boden, (1985) explain the pillars on which the Piaget Theory is based, those are relate to the assimilation and accommodation of learning, explaining how an external stimulus enters the cognitive structures of children and is coupled with an existing learning by modifying and enriching what has been learned.

Most human beings have been exposed to games and how they "force" decision making, group cooperation, acceptance of others and of themselves, many times, without being aware that these complex processes are happening (Slade 1995; Wilkinson, 1980; Piers, 1977). The same is applicable in children. In Physical Education class children have the opportunity to leave their comfort zone and display their corporality in an unusual environment, where they can develop certain solutions to problems that arise, in this case to group games what they should do. With this, according to Piaget (1950), children build their own meanings from the experiences they live; through the activities and games that take place in the Physical Education class, they build their learning and concepts about their own abilities and the world that surrounds them.

RAMSDEN'S THEORY

Ramsden's Theory of Learning talks about superficial learning and deep learning. These two ways of learning have a real impact on cognitive processes and the acquisition of new experiences for life. Although Ramsden (2003) makes mention in his book of the learning of Higher Education with examples of more complex level, it is possible to adapt his theory to the learning of children and specifically to the game, and its incidence in deep learning of the kids.

According to Ramsden (2003), superficial learning has to do with the memorization of some subjects just to answer the exams, the little or no association between concepts, the non-assimilation and subsequent combination of learning, without extrapolating them to other contexts and / or realities; on the other hand, deep learning is that which is internalized and gives meaning to what has been learned, it is possible to combine it and transmute it into different contexts and it is intertwined with already learned structures, it is a much more significant type of learning and its application becomes coherent in the real life.

From here emerges a fundamental theme for deep learning, and is the rol of personal motivation. The motivation is that force that invites to carry out some activity (Fox, 2005; Biggs, 2003), to achieve the objectives and to the subsequent satisfaction for the task carried out. The intentions that students have play a fundamental role in their learning, since they direct the actions and activities that are developed in order to achieve the purposes that are proposed.

According to Fox (2005), the different motivations that children can present in the classroom can be: basic needs that stimulate them to perform certain tasks, the achievement of some achievement or reward, social reasons and also certain intrinsic values such as curiosity , competitiveness, fear and desire.

The reasons that children have are fundamental in the active learning process, this will encourage them to go beyond achieving a grade or pass an exam; very different from just remembering subjects or learning by memorizing without

internalizing and / or assimilating learning. The motivation to play at the Basic First Course is inherent in children: they are willing to run, dance and interact, because in this they find fun, becoming tangible in the Physical Education class, becoming a great opportunity to take advantage of to get deep learning in the children.

GAMES AND MOTIVATION

The diverse games that the professors introduce in the educational context have like purpose the learning of some concepts or necessary functions for the curricular objectives; among them is possible to find board games, mostly used in math classes, computer or electronic games, which have a wide range of objectives and are used in various contexts, and there are also physical games, which are used mostly in the Physical Education class (Wilkinson, 1980).

The personal intentions for the realization of each of these types of games are intrinsic motivations (Biggs, 2003), and are related to the inner world of children, preferences, personality and / or character, among other characteristics. Extrinsic motivations have more to do with the result of the activity performed than with the task itself.

When reviewing the importance of the different motivations that children can have for the realization of a game, it is essential to know these intentions to create strategies aligned to their motivations and curricular objectives.

According to Piaget (1951), children begin to play in their first months of life and to perform symbolic games in the second year of life. Regulated games begin to develop in the second stage of life, in the Pre-operational stage, and at this stage the rules replace the symbols and begin certain social interactions and their consequent social development.

So, according to their studies, it is possible to identify that some of the basic games; for example, Hide and Seek, meet the requirements of a game that a child can perform in its Pre-Operational Stage. Although it is a fairly basic game, is possible to find several features that make it an appropriate tool, for example, for the development of basic motor patterns of locomotion. When running, crouching, climbing, rolling and / or jumping, to hide; these skills are being practiced and developed without children noticing or being forced to "study or memorize" these lessons. The few rules that this game presents, its ease of execution and the interactions that occur between children, develop other skills related to communication, creativity, problem solving, and the attainment of objectives.

It is also possible to develop, according to Piaget (1951), the perceptions of the real world, his first reasonings or representations of what happens around him/her, the principles of the temporo-spatial orientation, and the union of meanings that allow him to identify what is the real thing of the imaginary. Here the systems of accommodation and assimilation of the new information play a fundamental role, where the stimuli are internalized generating or building a new knowledge that, it is possible to put into practice depending on the situation. In this stage of development, and with this type of games, intuitive thoughts are those that prevail as intermediaries, compared to their old representations and their future more elaborate thoughts.

Other authors like Piers (1977); Slade (1995) and Sheridan (1999) comment that the game must be spontaneous and not regulated, so that it is entertaining and can have more significance in their learning. It is possible that the spontaneity and curiosity that arises in certain occasions stimulate even more the personal development of the children, impelling them to the creativity and to the discovery of the world.

However, in the school, the teachers have certain objectives to fulfill, for which the game becomes a fundamental tool of work, consequently the formula must be created that the games are not obligatory and maintain their playful and entertaining character.

The amount of skills in development process depends, among other factors, on the ability of the teacher, and how it can relate or transfer these learning to other contexts of daily life (Fox, 2005).

Next, the importance of the role of the teacher in the motivation and transfer of children's learning through games is discussed.

5.1 Teacher's Role

Some authors like Fox, (2005) and Sheridan, (1999) point out that adults can stimulate the beginning of these games in different ways. Specifically in the school context and in the Physical Education class: the implementation, the spaces, the context, the friends, among others, can cause the children to be motivated by the achievement of the task. With this, it is possible that the teacher has the fundamental role of motivating students in their cognitive development.

First, the teacher must develop the ability to know their students and motivate them so that they consider entertaining and stimulating the games that take place in classes; for this, it is essential to plan classes that are meaningful and stimulate physical and cognitive learning in children through games and contextualized to their reality.

It is important to emphasize at this point that the teacher is a guide and the activities must go according to the context of the students, being the child's learning the finality in itself (Fox, 2005); considering that they build their own learning reinventing it to their measure and with their own formulas (Piaget, 1969).

At the same time, the relevant role of the Physical Education teacher is to provide equal opportunities, identify resources necessary for the achievement of the particular objectives and interests of children contextualized to their territorial and evolutionary reality, and not forget that many of the games played in class deliver something essential for life, values and foundations that impact on their human development, such as: respect for their peers, cooperation, solidarity, self-confidence, develops the willpower, the spirit of overcoming and the teamwork's participation.

5.2. Transfer of Learning

Wood (1997), says that the geographical context and the culture of the country makes the games completely different from each other, which will undoubtedly impact on their beliefs and ways of seeing life. Piaget (1951), supports this assertion, considers that the game is an essential functional value and is not simply fun, therefore national and cultural values are also acquired through games. Perhaps the socioeconomic context has a great impact on the type of games and the quality with which they are carried out.

Authors such as Piaget (1951); Wilkinson (1980) and Wood (1997), describe the importance of games with respect to human development and the adaptation of children to the social world, and to the quantity of abilities that children can achieve through games. Among them is possible to find the acquisition of a more elaborate language, the development of basic motor patterns, the practice of concentration and the building of interpersonal relationships, the possibility of investigating the world and the development of imagination and creativity.

With this it is possible to point out that games have a power that few teaching-learning strategies possess, that of teaching and learning a series of transferable contents towards all spheres of human development.

But in what way do all these learnings become transferable to the daily life and therefore to the cognitive structures of the children?

According to Biggs (2003), and his theory of learning; intrinsic motivations stimulate the possible commitment to what one wants to learn, although, his theory is focused on Higher Education; transferred to children, it is possible to observe that they only have short-term motivations, they can not project their desires and motivations beyond the achievement of a momentary achievement, which makes it difficult to encourage them to plan an objective.

However, it is possible that their motivations are on a smaller scale but that in the same way the learning is profound due to the assessment that children give to the game and its practice.

This is why, perhaps, the role of teachers, and in this case, the role of the Physical Education Teacher is fundamental so that the learning acquired through the game is transferable to other areas of the child's life.

According to the Chilean Curricular Bases (Ministry of Education of Chile, 2012), children at Basic First Course must develop their motor patterns of locomotion and manipulation. The game is an appropriate tool for the achievement of these objectives, since, it goes according to the cognitive and physical development that Piaget (1969), exposes in his Theory of the Stages of Development and to the pillars on which his theory is based: accommodation and assimilation of the learnings; and also according to what Ramsden (2003), says and his theory of deep learning, since children, through play, become active protagonists of their own learning and these capacities can be transferable to their context and human development.

However, the success of the achievement of the curricular objectives in Physical Education class, are measurable and easy to verify, since the motor patterns of one form or another are always developing and should not necessarily be achieved only at the Basic First Course. This is why the way to measure if the games really met the objective is to evaluate, over time, whether these developed the basic locomotion and manipulation patterns.

CONCLUSIONS

Through Piaget's and Ramsden's theory, it is possible to understand why games are an effective tool in achieving the objectives of the Physical Education curriculum in the first year. They explain the importance of meaningful and profound

learning that children can develop according to their ages and motivations, as well as explain the accommodation of these learnings and their transfer to the cognitive structures of children's daily lives.

Motivation in children plays a fundamental role in their deep learning, through it children become protagonists of active learning by relating the information acquired and their interpretations with the environment that surrounds them.

The success of the games applied in the Physical Education class have to do with its subsequent transfer to the real world, to how children, through the "played" face the different spaces to which they are exposed. To achieve this transfer, the teacher's role is fundamental.

Through this document and its respective review of the literature it is possible to conclude as personal learning that humans learn in many and complex ways due to the individuality of each being, its context and its personal history. With them they build their own perspectives and understandings of the world around, and games are a powerful tool for the enrichment of physical and cognitive structures of children.

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