

López Pastor, V.M. y Gea Fernández, J.M. (2010). Innovación, discurso y racionalidad en educación física. Revisión y prospectiva / / Innovation, discourse & rationality in physical education. Review and prospective. Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte vol. 10 (38) pp. 245-270.  
[Http://cdeporte.rediris.es/revista/revista38/artinnovacion154.htm](http://cdeporte.rediris.es/revista/revista38/artinnovacion154.htm)

## REVIEW

### INNOVATION, DISCOURSE & RATIONALITY IN PHYSICAL EDUCATION. REVIEW AND FORESIGHT ANALYSIS

### INNOVACIÓN, DISCURSO Y RACIONALIDAD EN EDUCACIÓN FÍSICA. REVISIÓN Y PROSPECTIVA

**López Pastor, V.M.<sup>1</sup> y Gea Fernández, J.M.<sup>2</sup>**

1 Doctor en Educación. E.U. Magisterio de Segovia. España. vlopez@mpc.uva.es

2 Licenciado en Ciencias de la Actividad Física y del Deporte. E.U. Magisterio de Segovia. España geasanra@yahoo.es

#### CÓDIGO UNESCO / UNESCO Code:

5801 Teoría y métodos educativos / Educational Theory and Methods

5899 (Otras especialidades pedagógicas: Educación Física / Other Pedagogical Specialities: Physical Education.

**Clasificación Consejo de Europa / Council of Europe Classification:** 5 Didáctica y metodología / Teaching and Methodology

**Recibido** 29 de abril de 2009 **Received** April 29, 2009

**Aceptado** 25 de noviembre de 2009 **Accepted** November 25, 2009

#### ABSTRACT

In this paper we review the most valuable and innovative proposals for the development of Physical Education started in Spain during the last two decades. It is important to note that these innovative tendencies and proposals are directly related to concrete Physical Education models and discourses, and therefore basic elements of pedagogic practice are powerfully influenced: methodology, attention to diversity, etc. Then we review the relationship between the main Physical Education (EF) models (Performance Oriented and Participation and Inclusion Oriented) and their respective didactic elements: contents, methodology, assessment, session structure, etc. Finally, we introduce some interesting applications of "Motor Praxiology" in Physical Education and one example of Physical Education curriculum on Primary

Education based on Motor Action Domains developed by Larraz (2002, 2008)

**KEY WORDS:** Educative Innovation, Physical Education, Curriculum Rationality, Physical Education Discourses, Physical Education for Participation, Motor Action Domains.

## RESUMEN

La finalidad de este trabajo es revisar las propuestas innovadoras generadas en el área de Educación Física (EF) en España desde la aprobación de la LOGSE. Dichas propuestas guardan una relación directa con modelos y discursos concretos de EF, lo cual afecta poderosamente a cuestiones básicas de la práctica educativa: metodología, evaluación, estructura de sesión, atención a la diversidad, etc. Por ello, primero analizamos las relaciones que existen entre los dos grandes enfoques de EF y los diferentes elementos didácticos (Orientada al Rendimiento vs. Orientada a la Participación y Racionalidad Curricular Técnica vs. Racionalidad Curricular Práctica). A continuación realizamos la revisión de las propuestas innovadoras generadas en las dos últimas décadas. Por último, realizamos una prospectiva de futuro, analizando las aplicaciones que puede tener la Praxiología Motriz al ámbito de la EF, a partir de la propuesta desarrollada por Larraz (2002, 2008) sobre un currículum de EF en Primaria basado en los Dominios de Acción Motriz.

**PALABRAS CLAVE:** Innovación Educativa, Educación Física, Racionalidad Curricular, Discursos en Educación Física, Educación Física Participativa, Dominios de Acción Motriz.

## 1. INTRODUCTION, CONCEPTUAL FRAMEWORK AND BACKGROUND

The aim of this work is reviewing the innovative proposals created in the field of Physical Education (PE) in Spain from the approval of the LOGSE (1990 Organic Act on the General Organisation of the Education System) mainly focusing on those closer to what Tinning (1996) calls “Participation Discourses”. First of all, we have prepared the Rationality frameworks allowing us to organise and analyse in a stricter manner all specific innovations developed so far. These rationality frameworks are based on Tinning’s proposal (1996) on “Types of Discourses” in Sciences of Physical Education and Sport and works by López (1999a) and López, Monjas and Pérez (2003) on Curriculum Rationality in PE. We have also reviewed the innovative trends emerged in PE in Spain these last years from approaches close to that “Participation Discourse”. Most of these proposals are based on class research and action-research collaborative dynamics. Finally, we have tried to produce a forecast focusing on one of these innovations –Motor Praxiology– and particularly in its practical applications in PE and the proposal developed by Larraz (2002, 2008), given its potential to provide a stricter manner and logic when programming learning processes for obligatory educational stages.

## **DISCOURSES IN PHYSICAL EDUCATION. WHAT IS PHYSICAL EDUCATION FOR US AND HOW DO WE PRACTICE IT**

According to Tinning (1996) there are two main discourses within the Physical Activity and Sports area: The *Performance Discourse* versus the *Participation Discourse*. This author advocates that the one dominating globally in every Faculty of Sciences of Physical Education and Sport is the Performance Discourse, which has been used for training most of the professionals taking up those university studies, while most of their professional tasks are to be carried out in Participation situations and contexts. Such paradoxical situation usually creates strong personal discords and represents serious shortcomings in the required professional competences.

When applying this approach to the PE area, we can also see there are two main ways to understand and practice PE, which oppose each other: *Performance-oriented PE* versus *Participation-oriented PE*. Every approach understands and implements different curriculum elements in a particular way: purposes, goals, methodology, assessment, contents, session structure, attention to diversity, etc. The relationships are thoroughly analysed in the work on Curriculum Rationality frameworks in PE by López, Monjas and Pérez (2003). The awareness of such relationships is to be considered in order to move forward implementing PE so that it acquires consistency among what we think, what we say and what we do; that is, between theory and practice. Now, we will explain and develop such relationships from works by Tinning (2006) and López, Monjas and Pérez (2003).

**The Performance-oriented PE Discourse** is specific to a Technical Rationality. This approach shows that PE's purposes are students' physical condition and motor skills development, and sports talents' selection and development. Its criteria for values are based on the physical results and performance obtained. It is inherent to dualist positions, either from the point of view of the body as an instrument or from purely physical and motor approaches where procedural contents are considered as "ours". The main contents for this approach are the following: physical condition and sports skills by generally applying sport training systems. They usually use the curriculum approach referred to as "Curriculum by goals". The students are normally grouped by levels. This model tends to create narrow groups of "motor elite", and extended groups of motor awkwardness and "PE objectors". The predominant methodology is directive, minimising the topic to a list of "Teaching Styles". Regarding assessment, the use of physical condition and motor and sports skills tests is extended, usually with the sole purpose of grading and with a great emphasis on "objectivity" and measurement.

On the other hand, **the Participation-oriented Discourse** is specific to the Practical Rationality. This approach shows that main purposes for PE are the following: 1- integrated development of the individual through and with motor and physical skills; 2-creation and recreation of physical culture; 3-promoting

positive motor experiences and engendering empowerment and physical activity habits; 4-working on motor and physical implications when training free and autonomous people within a democratic society.

The criteria for value are both within processes and results, as well as within those values which are deployed and developed. Integrated Education approaches are hereby defended. Contents usually comprise students' motor culture and the concern about their motor development, and they try to enable diversity and experimentation of different types of physical activity as well as their inherent internal logic. The experience, the motor and physical awareness, the group, the collaboration and the collaborative elements are especially important. The Curriculum is understood as Project and Process. Therefore, organising the class is mainly based on action principles of an inclusive and comprehensive PE addressed towards the success of every student. It is also important to have individual, interindividual and shared working moments (heterogenous groupings and concern about co-education). Regarding methodology, there is a tendency to use non-directive methodologies, with special focus on the experimentation, participation, search and discovery.

Procedural Principles are particularly important. There is not so much emphasis on Teaching Styles, since their structure and separation is not clearly visible. Assessment is focused both on the process and results in favour of formative assessment systems showing their concern over complex learning on motor skills and individual and group development processes. Qualitative and formative assessment methodology focused on the improvement of learning and processes is usually employed. There is a great interest in the students' participation in their own assessment.

## **PHYSICAL EDUCATION INNOVATION IN SPAIN AND ORGANISING THE CURRICULUM BY ACTION DOMAINS**

Sparkes (1992) explains the various levels of depth of change and innovation within PE. Those changes only affecting content or activities to be performed are at the most superficial level and they do not usually match any educational rethought but for the mere innovation. Innovations affecting more complex curriculum elements (methodology, assessment, session structure, etc.) are at the second level and they represent implications for their educational beliefs, as well as for the theoretical models used for the teaching practice. They are more complex changes and they normally lead to new changes, by deeply affecting professional beliefs that guide teaching practice. Finally, the third changing level is the deepest and most difficult to carry out, since it refers to personal beliefs and convictions on PE of each teacher. Any change at such level is difficult, complex and long, partly because it means challenging both educational practices performed as pedagogical convictions in which those practices are based, and partly because performing changes at the third level necessarily means to also perform them at previous ones. Both the "Discourses" concept by Tinning (1996) and the "Curriculum Rationality frameworks in PE" one by López, Monjas and Pérez (2003) refer to thought and action patterns inherent to

the third level of depth for educational innovation.

This work only includes innovations clearly belonging to second and third level changes which are basically those affecting the third level, with deeper changes and theoretical frameworks supporting teaching practice. However, these are also often connected to first and second level changes, as we just explained. Specifically, we will focus on innovative proposals that most closely reflect the discourse of Participation and Practical Curriculum Rationality in PE.

Innovations meeting this criterion are classified according to five subcategories: 1-The leap forward towards comprehensive models; 2-induced learning in PE through spaces and materials; 3-Physical Education and Values Education; 4-Critical Physical Education proposals; 5-programming by Physical Education action domains.

The leap forward towards comprehensive models refers to works implying a first step towards Participation Discourse and Practical Curriculum Rationality in PE models. The work by Devís and Peiró (1992) on new curriculum perspectives in PE might be the best reflecting such change. Subsequently, there are a number of works with practical proposals clearly approaching those theoretical frameworks. works from the continuing action-research seminar from Valladolid (Fraile et al, 1996, 2001, 2004, 2005a,...) and Segovia (López, 1999b, 2004, 2006a, 2006b; Monjas, 2006; Pérez, López, and Iglesias, 2004); continuing seminars in the province of Huesca; works on Sport initiation in school through a comprehensive approach by Méndez (2003, 2005, 2008); works on the use of cooperative methodology in Secondary Education by Fernández-Río (2001, 2003); proposals for change by Tabernero and Márquez (2003); works on interculturality in PE (Bantula and Mora, 2002; Lleixá, 2002; Mora, Díez and Llamas, 2003; Pérez, López and Iglesias, 2004; Velázquez and Fernández, 2002); or proposals for working body expression by Learreta, Sierra and Ruano (2005, 2006).

“Induced Learning in PE” refers to the various proposals used in the space and materials as activity inducers through students' free and exploratory play. They are proposals closely connected to inputs from French psychomotor strands and mainly to the work on psychomotricity in nursery school by Lapierre (1984) and works on experienced psychomotricity by Lapierre and Acourturier (1974a, 1974b). Main features shared by them are the following: using the space and materials as the children's free and exploratory play inducer, the session structure, the students' free and exploratory play and their subsequent derivative by the teacher.

There are many works on Values Education through PE. The authors closest to the pedagogy of values in PE might be Omeñaca (2004) and Carranza and Mora (2003), Prat (2001), Prat, Soler, Ventura and Tirado (2006), and Tirado and Ventura (2009). One of the lines of work with greatest influence both at national and international level has been the systematic use of cooperative

methodologies and physical activities in PE programmes, where La Comba (Velázquez et al., 1994, 1996, 2002; Velázquez, 2006) and the International Congress of Physical Activity (Velázquez et al., 2001, 2002a, 2003, 2004, 2006, 2008), along with the works by Omeñaca et al (Omeñaca and Ruiz, 1999; Omeñaca, Puyuelo and Ruiz, 2001; Ruiz Omeñaca, 2008) and Fernández-Río (2003, 2005), and Fernández and Velázquez (2005) played a relevant role. Finally, PE programmes focused on peace, coexistence and integration (Velázquez and Fernández, 2002; Velázquez, 2006) as well as those focused on the development of the personal and social responsibility (Escartí, Pascual and Gutiérrez, 2005) have been also included in this section.

Critical Physical Education proposals refer to the development of PE approaches and experiences close to the critical paradigm. According to López, Monjas and Pérez (2003) this critical paradigm is part of the Practical Curriculum Rationality as the most radical expression within such rationality and it differs from the rest because it is based on an interest in emancipatory knowledge. This is the main feature distinguishing these proposals from the rest. The first author to create works on this type of proposals in Spain was Fernández-Balboa (1993, 1999, 2004). There have been some other proposals in this line during the last decade. Durán (1998); Fraile Aranda (2004); Gómez and Prat (2009), Sicilia, Balboa (2005). Also, the work in two continuing seminars is to be highlighted: The seminar on "Alternative PE" (Cortés et al., 1996, 1999) and the seminar on action-research in Segovia (López, 1999b, 2002, 2005, 2006, 2007). Finally, there are some experiences regarding critical PE towards the development of students' autonomy and emancipation by Barba (2007); Lacasa and Lorente (1999), López Alcántara (1999), Lorente (2008), Tirado and Ventura (2009).

PE programming by "Motor Action Domains" represents the didactic application of Motor Praxiology approaches to PE area. The main reference on Motor Praxiology is Parlebas (2001, 2003) and his research on motor and sport play operation structures. Motor Praxiology is intended as a scientific discipline aimed to study motor action. In order to get a first approximation to his topic it is recommended to first consult the work by Lagardera and Lavega (2003), and that by Parlebas (2001), and Navarro and Jiménez (2004). It is difficult to frame the Praxiology within one of the two Rationalities, although some of the most specific proposals would be rather closer to a Practical Rationality and, particularly to a comprehensive teaching approach when referring to the didactic usage of sport and motor play.

## 2-OBJECTIVES

This research is mainly aimed at: Revising and classifying innovative experiences and proposals arising from PE area since the Spanish LOGSE system implementation, and which are closer to the so-called "Participation Discourses" and to the "Practical Curriculum Rationality" in PE (Tinning, 1996; López, Monjas and Pérez, 2003).

A forecast focused on the proposal developed by Larraz (2002, 2008, 2009)

and based on PE Motor Praxiology practical applications will appear below so as to complement this.

### **3-MATERIAL AND METHOD**

The methodology carried out implied a literature review and the classification of data compiled by means of a category system considering the following aspects: 1-Their thematic and innovation; 2-Workgroup or author building them; 3-locality or province where they are developed.

Regarding the first category—“thematic and innovation”— data have been grouped in 5 subcategories: 1-the leap forward comprehensive models; 2-induced learning in PE through spaces and materials; 3-Physical Education and Values Education; 4-Critical Physical Education proposals; 5-programming by Physical Education Action Domains.

A chart for each subcategory compiling main aspects for every innovative proposal according to the three categories established has been created. In the discussion section we will analyse key aspects for the various proposals and their innovation relevance for PE.

#### **STUDY POPULATION (EXPERIENCES AND PROPOSALS)**

A selection of proposals from all possible innovation ones has been carried out following two criteria: a-Their educational value and the extent in which they fit into the reference frameworks explained (participation discourse and practical curriculum rationality frameworks in PE); b- Literature review (books, journal articles, and conference and seminar proceedings) published in Spain for the last twenty years.

#### **POTENTIAL LIMITATIONS TO THE STUDY**

Due to the great extent of the thematic studied some innovation experiences or proposals which actually fit into the rationality frameworks established might not appear in the list due to any lack of awareness.

### **4-RESULTS**

During the two last decades there have arisen a great number of innovative proposals in PE. Some of them clearly support a Technical Rationality and Performance Discourse, but in most of them there is a less explicit and latent Practical Rationality approaching the Participation Discourse. It is important to be aware that every innovative proposal is more or less clearly based on educational rationality frameworks and specific PE discourses and models. When this internal structure is consistent, it affects the way to understand the educational event, to present the teaching-learning processes, to develop the educational practice, the session structure, the prevailing methodology, and the assessment system, and to look at diversity, etc.

This research will be focused on proposals based on Practical Rationality and

Participation Discourses in PE frameworks. Most of these innovative proposals arise from collective and collaborative dynamics aimed at research in class and/or action-research, although some cases of the innovative process have been mainly personal. By means of Tables 1, 2, 3, 4 and 5, a summary of innovative proposals built for the last twenty years is presented. Every table is classified into the three sections already explained: a-innovation thematic; b-authors and references; c-locality or province where the innovation is developed.

Each table corresponds to one of the five established subcategories. The Conceptual Framework shows a brief review of the state of affairs for every thematic and the Discussion section analyses the pros and cons of each of them, as well as their impact on the educational practice.

Table 1 groups the proposals under “The leap forward towards comprehensive models”. As it can be observed in Table 1, this is an area of interest giving raise to a great number of works on various thematic (physical condition & health, sport initiation within the school, body expression, cross-cutting topics and PE, Values Education in PE) or on other specific contexts for developing PE teaching (rural school, Early Childhood Education, attention to diversity, immigrant students). The best work to reflect the curriculum change is that published by Devís and Peiró (1992) on new curriculum perspectives on PE.

**Table 1.** PE innovation proposals implying a leap forward towards Performance-oriented and Participation-oriented models and a step forward towards comprehensive approaches in PE.

The leap forward towards comprehensive models		
INNOVATION THEMATIC	AUTHORS AND REFERENCES	CONTEXT
<b>New curriculum perspectives in PE:</b> health and modified games; collaborative research in PE; sport initiation at school from a comprehensive approach, skipping ropes and health...	José Devís and Carmen Peiró (1992, 1996, 2001, 2004...); Pérez and Devís (2003); Peiró, Hurtado and Izquierdo, 2005	Valencia
<b>Action-research in PE;</b> body expression, PE & Health, Values Education in PE, alternative extracurricular physical activity, attention to diversity in PE, cross-cutting topics in PE, curriculum materials, etc.	Antonio Fraile et al (1996, 2001, 2004, 2005a, 2005b,...)	Valladolid
-Group and collaborative work -PE and Rural School; -Provincial Days; PE and “personal growing”; playground and settings; “Action-Adventure” Spaces.	Workgroups from Huesca: Adell, Larraz, Generelo, Gracia and Tomeo, Mendiara, Julián, etc. (1986-2008)	Province of Huesca
-Attention to Diversity in PE;	Action-Research WG (Pérez, López and Iglesias,	Segovia

-Values Education in PE. -PE in Rural Schools; -PE in Early Childhood Education	2004; López, Monjas and Pérez, 2003; López, 2004; López, 2006a).	
<b>Sport Initiation</b> in school by means of a <b>comprehensive and participating approach</b> . Motor games in PE. Reusage of waste material in PE and new collective games building.	Méndez (2003, 2005, 2008, 2009)	Asturias
<b>Alternatives in PE</b> , Values Education in PE, etc.	Tabernero, Llanos et al. (2003)	Zamora León
<b>Immigrant Students</b> , interculturality and integration in Physical Education.	Bantula and Mora, 2002; Lleixá, 2002; Mora, Díez and Llamas, 2003, Pérez, López and Iglesias, 2004; Velázquez and Fernández, 2002; ...	Barcelona, Cuenca, Segovia, Valladolid,
Sport Initiation in School. PE programme assessment.	Castejón (1996, 1997, 2003)	Madrid
Physical Condition in Secondary School considering a critical perspective and cooperative methodologies.	Fernández-Río et al (2001, 2003);	Cáceres
Body expression in PE.	Learreta, Sierra and Ruano (2005, 2006)	Madrid

The key innovation point for all these works in this table is that they represent a first step towards Participation Discourses and Practical Curriculum Rationality in PE models. The work by Devís and Peiró (1992) on new curriculum perspectives in PE might be the best reflecting such change. Most of these works are created by teacher groups which perform action-research cycles and/or research in class projects.

Table 2 shows proposals focused on the use of “induced learning in PE through spaces and materials”. We already explained in the conceptual framework that these are proposals closely connected to inputs from French psychomotor strands and mainly from Lapierre and Acourturier. Such common features are: using the space and materials as inducers for learning, the session structure, the non-directive approach, students’ free and exploratory play and their subsequent derivative by the teachers. Logically, they show original and inherent aspects, as well as a clear contextualization. Most of the cases have experienced a long and thorough practice by means of action-research cycles, giving raise to a progressive evolution with respect to the initial proposals.

**Table 2.** Innovative proposals on the use of Induced Learning in PE.

<b>Induced learning through spaces and materials</b>		
<b>INNOVATION THEMATIC</b>	<b>AUTHORS AND REFERENCES</b>	<b>CONTEXT</b>
The “Action-Adventure” Spaces.	WG - EUM Huesca (Generelo et al, 1993, 1994); Mendiara (1997, 1999, 2006)	Huesca
Action-Research in PE, Learning Settings and Environments in PE.	Blández (1995, 2000)	Madrid
<b>Pedagogic Usage of Body Expression</b> in Early Childhood, Primary and Secondary School.	Seminar on Pedagogic Usage of Body Expression (Vaca, 1996, 2002, 2008) Bores, 2005	Palencia
Psychomotor Education and Education by movement in Early Childhood Education.	Seminar on Psychomotor Education (Viscarro and Camps, 1998)	Tarragona
<b>Adventure and Fantasy Spaces.</b> Physical Activities in the nature, big games, fantasy spaces, Eco Physical Education.	Parra et al. (2001, 2002; Caballero et al, 2006); Sánchez (2001).	Cáceres Zamora

The key innovative point for all these proposals is the use of space and materials as inducers for activity through the students' free and exploratory play which, sometimes also implies the teachers' engagement to make it progress. Most of these proposals have been performed in Early Childhood and Primary Education, but there are also some practical examples in Secondary Education with their corresponding adjustments (Caballero et al, 2006; Parra et al, 2001, 2002; Bores, 2005).

Table 3 shows innovative proposals mainly focused on Values Education in PE. We have included all those proposals connected to cooperative methodology in PE, and the systematic use of cooperative physical activities in PE. As it can be observed, they are two thematic attracting great interest in Spain during the last twenty years and, when referring to the use of cooperative methodology and physical activities in PE programmes, this also has a substantial projection in Latin America. The key innovative point for the works in this table is Values Education through PE, the development of cooperative methodologies and physical activities and the development of PE programmes addressed at integration, coexistence and peaceful conflict resolution among students.

**Table 3.** Innovative proposals supporting Values Education and cooperative physical activities in PE.

Physical Education and Values Education		
INNOVATION THEMATIC	AUTHORS AND REFERENCES	CONTEXT
Cooperative games and physical activities, world dances, waste material reusage, PE for Peace, Coexistence and Integration, new cooperative challenges; preparing the International Congress on Cooperative Physical Activities; preparing the International E-Journal on PE Didactics, etc.	La Comba y La Peonza (Velázquez et al., 1994, 1996, 2002a,...); Velázquez (2006); Velázquez et al, (2001, 2002a, 2003, 2004, 2006, 2008)	Valladolid
-Cooperative Physical Activities and PE; Values Education and PE; PE in Rural School.	Omeñaca and Ruiz (1999) Omeñaca, Puyuelo and Ruiz, (2001); Ruiz Omeñaca (2004, 2008)	Logroño
-Cooperative Programmes and Methodology in PE. -Cooperative Physical Activities	Fernández-Río (2003, 2005); Fernández and Velázquez (2005)	Cáceres, Guadalajara and Gijón
<b>Values Education</b> and Physical Education. Values as a filter for selecting activities and the approach.	Pomer et al (1998)	Valencia
Values and Physical Education	Carranza and Mora (2003)	Barcelona
<b>PE based on attitudes.</b> Values Education in PE. Learning Methodology by Projects. Grouping progress.	Pérez Pueyo (2005, 2006, 2007).	León
Values in PE	Prat (2001)	Barcelona
WG. “ <b>Valors en joc</b> ”: didactic units, web, etc.	Prat, Soler, Ventura and Tirado (2006) Tirado and Ventura (2009)	Barcelona
Personal and social responsibility in PE Programme.	Escartí, Pascual and Gutiérrez (2005)	Valencia

Table 4 shows the proposals related to Critical PE. This is a strand comprising only a few works, particularly when developing practical proposals and experiences in the class. A possible explanation might be the lack of tradition in Spain for such approaches. On the other hand, they are proposals difficult to implement on a daily basis practice in Spanish centres.

**Table 4.** Innovation proposals implying a step forward towards Critical Physical Education approaches based on an obvious Emancipatory interest.

Critical Physical Education Proposals		
INNOVATION THEMATIC	AUTHORS AND REFERENCES	CONTEXT
<b>Alternative PE.</b> Filters. Application to contents and contexts (application in rural school, use of the student's notebook, theory-practice relationship)...	Seminar on Alternative PE (Cortés et al., 1996,1999)	Benavente (Zamora)
A-R in Physical Education; Assessment in PE; Bases for <b>Critical PE.</b>	WG. Action-Research (López, 1999a; 1999b, 2002, 2005, 2006b, 2007); López, Monjas and Pérez, 2003.	Segovia, Ávila, Madrid
Critical Physical Education Proposals	Duran (1998); Fernández-Balboa (1993, 1999, 2004); Fraile Aranda (2004); Gómez and Prat (2009), Sicilia and Balboa (2005)	Madrid, Almería, Granada, Barcelona, Valladolid
Experiences in Critical Physical Education; students' autonomy and emancipation in PE.	Barba (2007); Lacasa and Lorente (1999), López Alcántara (1999), Lorente (2008), Tirado and Ventura (2009)...	Ávila, Lérida, Cádiz, Barcelona,...

The key point for these innovations is their emancipatory purpose and their closeness to the critical paradigm. This is an area of innovation and interest arising in Spain in the early 1990s and it has been developed since then, maybe more at a theoretical level than at a practical one, at least with regard to obligatory educational stages. Despite of this, so far there are sufficient practical experiences in this line allowing us to have a faster development for those teachers interested in Critical PE approaches.

Finally, Table 5 shows proposals developing PE programmes classified by Motor Action Domains. These are proposals based on Motor Praxiology and its application to Physical Education. As it can be observed, this is the subcategory compiling less works. The following section will be specifically focused on this topic due to its potential for PE improvement.

**Table 5.** Innovative proposals regarding Physical Education Programmes by Action Domains.

Programming by Motor Action Domains in Physical Education		
INNOVATION THEMATIC	AUTHORS AND REFERENCES	CONTEXT
<b>-Curriculum by Action Domains</b> (Motor Praxiology applied to the class in Primary Education) <b>-Methodology by Projects in PE</b>	Larraz (2002, 2004, 2008, 2009) WG Jaca-Sabiñánigo	Jaca-Sabiñánigo
	Generelo, Zaragoza and Julián (2005)	Huesca
Preparing <b>Curriculum Material in PE</b> and PE programming in Primary Education based on Action Domains.	A-R WG from Segovia (Barbas, Lopez, 2006; Monjas, 2006)	Segovia
Other proposals <b>with practical applications</b> based on Praxiology.	Hernández (2000), Navarro (2002)	Las Palmas, La Laguna
<b>Student's Assessment</b> in PE from Motor Praxiology perspectiva.	Sanpedro, Sagardoy and Gómez (2009)	Madrid

### FORESIGHT ANALYSIS: BENEFITS AND POTENTIAL OF PROGRAMMING BY “ACTION DOMAINS” IN PHYSICAL EDUCATION.

This section will explain **Praxiology applications to Physical Education**. The most elaborate proposal so far might be the one developed by Larraz (2002, 2008, 2009). This teacher has been preparing his programmes in PE for Primary Education based on this approach for fifteen years and he has designed a Curriculum for PE area in Primary Education mainly based on this approach. This application to PE may be interesting when applying greater rigour and structure to this area. Preparing programmes for PE by “Motor Action Domains” allows for performing a learning process with much more logic, consistency, rigour and closeness to everyday reality. This can also be applied to the sequence of sessions within a didactic unit and specific learning activities to be developed in the class. Such approach can be very helpful when clarifying what, when and how is to be taught.

A curriculum design based on Motor Praxiology can be found in Curriculum Designs for Physical Education for Primary School within the Community of Aragón (Larraz, 2002, 2008, 2009). This curriculum proposal establishes Blocks of Content according to the various relationships between the individual and the physical and human environment. Thus, there are six types of “*Motor Action Domains*” identified:

- 1-Actions in a stable physical environment and with non-direct interaction with others.
- 2-Interindividual opposition actions.

- 3-Cooperation actions .
- 4-Cooperation and opposition actions .
- 5-Actions in an uncertain physical environment.
- 6-Artistic and expressive actions.

Larraz (2002, 2009) considers these fields organise the six great types of physical experiences that go through the various motor practices within school Physical Education. These categories also represent six types of different motor problems for the students to face. Main aspects of each of these motor action domains (MAD) according to Larraz (2008) are presented below:

**1<sup>st</sup> MAD - Actions in a stable physical environment and with non-direct interaction with others.** These are activities mainly performed at individual level. They are usually measurable actions with spacial or temporal parametres.

**2<sup>nd</sup> MAD - Interindividual opposition actions.** One-to-one confrontation setting activities.

**3<sup>rd</sup> MAD - Cooperation actions.** There is a common problem requiring the whole group cooperation to be resolved. There is no confrontation with other groups or persons. This is a win-win situation. It involves dialogue, assistance and solidarity processes.

**4<sup>th</sup> MAD - Cooperation and opposition actions.** They are collective actions requiring collaboration with people from the same group in order to overcome the opposite group. They are usually highly codified situations where compliance with play standards and rules is very important.

**5<sup>th</sup> MAD - Actions in an uncertain physical environment.** They are activities within an unknown setting or, mainly, in the nature. The key is the right interpretation of the environment variations. Safety is very relevant.

**6<sup>th</sup> MAD - Artistic and expressive Actions.** They are actions aimed at aesthetic and communicative purposes. There is usually also a close connection to the rhythm. They are considerably addressed towards organising collective action projects.

Larraz (2009) shows a detailed list with expected learning for the 6th grade Primary School students in PE, specifying knowledge, skills and attitudes to be acquired in every motor action domain. Reading this recent work can be enlightening due to its high curriculum precision.

## **5-DISCUSSION**

Every innovation included in the results tables clearly belong to the second and third levels of change in PE explained by Sparkes (1992); most of them belong to the third level, which refers to beliefs and convictions supporting the teaching

practice. On the other hand, we consider all of them to be innovations fitting into the Participation Discourse and the Practical Curriculum Rationality in PE to a greater or lesser extent, both with regard to any of the education purposes and to curriculum elements (session structure focused on the learning, non-directive and cooperative methodologies, formative and participatory assessment, attention to diversity, etc.).

The key point for the innovation experiences compiled in table 1 (the leap forward towards comprehensive models) is, above all, a renewal in understanding and practising PE, in its search for greater educational value alternatives in PE than the traditional one, which prevailed at the beginning of the 1990s. On the other hand, its weak point might be the lack of thorough preparation of theoretical frameworks to base such change, but for some exceptions (Devís and Peiró, 1992; López, Monjas and Pérez, 2003; Lleixá, 2002). The results obtained when implementing these practices are generally good in practice since they seem to show a greater students' engagement in the subject and an increase of learning and positive experiences in PE. Many cases seem to provide authentic and relevant learning.

Innovations collected in table 2 (induced learning through spaces and materials) show some key points: developing PE proposals focused on the non-directivity and students' exploratory play; they are very appropriate proposals for working contents on basic physical skills, especially for the 3-8 year period; they allow to perform proper attention to diversity and intervene from time to time in order to stimulate the students' learning; they achieve high level of motor involvement and learning; they attach importance to students' final verbalization; all of them have been experienced for many years, building a great number of researches and collecting many data on the results. With regard to their weak points, they are innovative proposals difficult to implement when working certain contents (body expression, traditional children's games, sport initiation, cooperative games, activities in the nature, etc.) and they are especially focused on the first stages (3-8 years), although two of them have also been proven in Obligatory Primary and Secondary Education: the pedagogic usage of body expression (Bores, 2005; Vaca, 1996, 2002, 2008) and adventure and fantasy spaces (Caballero et al, 2006; Parra et al, 2001, 2002; Sánchez, 2001). The outcomes when implementing them seem to be very positive and they build a great involvement and motivation by the students, as well as a learning increase (Mendiara, 1997 y Vaca, 2002, 2008).

Key points for innovation proposals compiled in table 3 (Values Education and Cooperative Physical Activities in PE) are the following: the systematic thorough work on PE cross-cutting topics; the achievement of proper group atmosphere within the classes, encouraging integration, coexistence and peaceful conflict resolution; the development of programmes on social responsibility and marginalised or threatened by social exclusion populations integration; building training systems encouraging experience sharing among teachers interested in these topics (six editions of the International Congress of Physical Activity and the International Journal on Physical Education) and great dissemination of the

proposal within Spain and whole Latin America. On the other hand, its weak points might be: the lack of theoretical frameworks on the location and role of such type of proposals within PE models and approaches, and their place in complete PE programmes; the risk of mere activism and of understanding cooperative physical activities as a methodological instrument for working any content, instead of understanding it as a specific content within PE; focusing solely on values education and ignoring learning contents inherent to PE. Although there are only a few systematic studies on students' outcomes after implementing it (Escartí, Pascual and Gutiérrez, 2005; Fernández-Río, 2003; Fernández-Río and Velázquez, 2005; Velázquez and Fernández, 2002), they can be considered very positive, both regarding coexistence and conflict resolution in class, as well as the students' general attitude and specific content learning. There also seem to be positive results with respect to the students' motivation improvement and engagement in developing the subject.

The innovations compiled in table 4 (Critical PE) show some key points: working towards PE students' independency and emancipation; building a critical spirit in students with regard to the body and motor culture within our society; the search for possibilities and inputs from PE to social transformation. There are also some weak points: there is a theoretical base much more developed and abundant than specific practices; in fact, there seem to be a great difficulty to create specific critical PE practices. On the other hand, when this practical experiences appear, there are usually no data regarding students' outputs or difficulties arising during their practical development or potential solutions found.

With regard to the works form table 5, and as a first approximation, it might be difficult to fit Motor Praxiology within one of those two Rationalities. On the one hand, the initial use of a language more akin to behaviourism may lead to confusion, since the motor behaviour is considered the core of every PE teaching-learning process. On the other hand, most of the PE specific practical proposals prepared come clearly close to the purposes and features of the Practical Curriculum Discourse and the Participation Discourses in PE and, above all, to a comprehensive teaching approach when referring to the didactic usage of sport games and motor play. This is the reason why we placed this PE innovation within this framework. As it can be observed in table 5, there are not many innovations including specific practical proposals and only one complete curriculum programming proposal for PE (Larraz, 2002, 2004). According to Navarro and Jiménez (2004) Praxiology provides a series of inputs for better organising el PE teaching learning process. Being aware of the internal logic of various motor situations which are to receive major attention in PE allows the teachers to:

1-Have internal criteria to classify physical activities from the type of interaction established among participants and teachers and the physical setting where the motor activity is being developed.

2-Better organise contents and develop motor tasks best suited to educational intentions according to their internal logic.

3-Prepare didactic criteria for organising and/or sequencing curriculum contents according to their structural and/or functional complexity. This means being able to organise sequences of situations, tasks and motor activities.

4-Organise the teaching of one-modality or joint-modalities games and/or sports if they share the same structural and functional features.

5-Identify significant elements (structural and functional features) to organise a comprehensive teaching of sociomotor games and sports.

6-Discriminate the existence of balance between the various types of motor situations in the programmes.

7-Discriminate the educational potential of every motor situation from the awareness of their structural and/or functional features regarding the demands made by the students in cognitive, emotional, social and motor fields.

In a recent work, Kirk (2008) raises interest for analysing potential "futures" for PE in next years. After analysing the evolution undergone by the "idea of PE idea" along its existence throughout the educational system, he observes we might stand at the threshold of a new change towards the action plan for PE and sport approved in England in 2008 (Physical Education and Sport Strategy for Young People), establishing three types of PE and Sports programmes: One oriented towards the sport performance; one oriented towards fighting obesity; and one oriented towards the development of prosocial behaviours.

In opposition to this future possibility, Kirk considers that school learning transfer to life both during and after school hours, the school knowledge authenticity in connection to life and the role of school as institution for social transformations are the challenges for any school subject. In this sense, we may consider that all the proposals reviewed in this research contribute to such challenge to a greater or lesser extent, in a way that PE builds students' learning relevant for life and, in some cases, it also has a social transformation purpose. However, in our modest opinion, the programme comprising the greatest potential for addressing this challenge is PE programming by Motor Action Domains.

## **6-CONCLUSIONS AND FORESIGHT ANALYSIS**

This work comprises the literature review of innovative proposals and experiences in PE built in Spain since the implementation of the LOGSE system, and particularly those closer to Participation and Practical Curriculum Rationality in PE discourses. One of them has been studied in more detail: the proposal by Larraz (2002, 2008) on a PE curriculum based on Motor Action Domains due to its potential for stepping forward towards greater rigour and educational quality in PE. The most relevant inputs might be: 1-the great number of proposals and experiences reviewed (over 100 references); 2-the

establishment of a category system in order to group such proposals; 3-the inclusion of a PE curriculum rationality framework allowing to organise and analyse any educational innovation taking place in that field; 4-analysis of benefits and possibilities from a PE curriculum based on Motor Action Domains when stepping forward towards greater rigour and educational quality in PE. We could observe the greatest number of innovation proposals and experiences are grouped under the following subcategories: "The leap forward towards comprehensive models" and "Physical Education and Values Education". The other three subcategories comprise a reduced number of proposals and experiences ("Induced learning in PE", "Critical PE Proposals" and "Programming by Physical Education Action Domains"). It can also be observed that most of these proposals have been built from collective and collaborative dynamics in the class or action-research dynamics.

Work applications, mainly directed towards an audience connected to PE teaching and didactic, might be the following: a-learning about innovation proposals built in Spain from the LOGSE system implementation, in case any of them can be of interest and use for being transferred to the teaching practice, as well as updating the professional knowledge. We consider knowing innovative proposals developed so far represent a basic step to faster improve the teaching practice and to move the professional community forward; b-getting a better understanding of Motor Praxiology potential practical applications to the world of PE, and particularly the PE curriculum proposal by Motor Action Domains, as a model allowing to better organise and sequence the learning to be developed by PE students over their passing through the educational system.

## REFERENCES

- Bantulá, Mora (2002) Juegos multiculturales. 225 juegos tradicionales para un mundo global. Barcelona: Paidotribo.
- Barba, J.J. (2007) La necesidad de dignidad y democracia en la escuela del siglo XXI. Rompiendo tópicos en la educación. *Innovación educativa*, 17, 53-61
- Barba, J.J. y López, V.M. (coords.) (2006) *Aprender a correr con autonomía. Unidades didácticas en primaria y secundaria*. Buenos Aires: Miño y Dávila.
- Blández Ángel, J. (1995) La utilización del material y del espacio en Educación Física. Barcelona: Inde.
- Blández Ángel, J. (2000) Programación de unidades didácticas según ambientes de aprendizaje. Barcelona: Inde.
- Bores Calle, N. (2005) La lección de Educación Física en el Tratamiento Pedagógico de lo Corporal. Barcelona: Inde.
- Caballero, P.; Sayazo, D.; Domínguez, G.; Pérez, O. y Parra, M. (2006) Jugando en un espacio de fantasía. Claves para elaborar una jornada de aventura en un centro de enseñanza. *Retos, nuevas tendencias en Educación Física, Deporte y Recreación*, 10, 23-30.
- Carranza, M. y Mora, J. (2003) Educación física y valores: educando en un

- mundo complejo. Barcelona: Graó.
- Cortés, N. et al (1996) El deporte en la escuela. Narración en torno a una práctica de Investigación-Acción. *Actas XIV Congreso Nacional de EF de EU. Magisterio*. Guadalajara. Universidad de Alcalá (p. 31-38).
- Cortés, N. et al (1999) La Educación Física Alternativa en la Escuela Rural en la zona de Benavente. En López (coord.) *La Educación Física en la Escuela Rural*. Segovia: Pastopas-Diagonal (p. 39-87).
- Castejón Oliva, F. J. (1996) *Evaluación de programas en Educación Física*. Madrid: Gymnos.
- Castejón Oliva, F. J. (1997) La iniciación deportiva en la Educación Primaria: lo que opinan los profesores de Educación Física. *Revista Apunts Educación Física y Deportes*, 48, 24 - 33.
- Castejón Oliva, F. J. (Ed.) (2003) Iniciación deportiva: La enseñanza y el aprendizaje comprensivo en el deporte. Sevilla: Wanceulen.
- Devís, J. y Peiró,C. (1992) Nuevas perspectivas curriculares en Educación Física: la salud y los juegos modificados. Barcelona: Inde.
- Devís Devís,J. (1996) *Educación Física, Deporte y Currículum*. Madrid: Visor.
- Devís, J. y Peiró, C. (2001) La salud en la educación física escolar: ¿qué es lo realmente importante? *Tándem. Didáctica de la Educación Física*, 8, 73-83.
- Devís,J. (2004) Educación física y Salud. Revisión de la propuesta diez años después. En López,V.; Monjas,R y Fraile,A. (coord.) *Los últimos diez años de la Educación Física Escolar*. Valladolid: Universidad de Valladolid.
- Durán,J. (1998) Deporte y medios de comunicación: una propuesta educativa. Hacia una educación crítica y responsable ante los grandes espectáculos deportivos televisados. En Martínez, J. *Deporte y calidad de vida*. Madrid: Esteban-Sanz (p. 403-414).
- Escartí, A. (coord.), Pascual, C., Gutiérrez, M. (2005) Responsabilidad Personal y Social a través de la Educación Física y el Deporte. Barcelona: Graó.
- Fernández-Balboa, JM. (1993) Aspectos crítico y cívico de los profesionales de la Educación Física y el Deporte: conexiones con la política, la economía y el medio ambiente. *Apunts Educación Física y Deportes*, 34, 74-82.
- Fernández Balboa, JM. (1999) Pedagogía crítica y EF en la escuela secundaria En *Conceptos*, 6 "La EF en la escuela", 15-32. Granada. Alhama.
- Fernández-Balboa, JM. (2004) La Educación Física desde una perspectiva crítica: de la pedagogía venenosa y el currículum oculto hacia la Dignidad. En López, V.; Monjas, R y Fraile, A. (coord.) *Los últimos diez años de la Educación Física Escolar*. Valladolid: Universidad de Valladolid.
- Fernández-Río, J. (2003) El aprendizaje cooperativo en el aula de Educación Física. Análisis comparativo con otros sistemas de enseñanza y aprendizaje. Valladolid: La Peonza Publicaciones. CD-R.
- Fernández-Río, J.; Medina Gómez, J.F.; Garro García, J. y Pérez González, M (2001) Un ejemplo de investigación-acción aplicado al bloque de contenidos de condición física en enseñanza secundaria. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte* vol. 1 (2), 84-99 (<http://cdeporte.rediris.es/revista/revista2/artcondfis.htm>) (consultada:

30/03/2009)

- Fernández-Río, J., Medina Gómez, J. F., Ochando Cerdán, G. y Garro García, J. (2003) Una experiencia autocrítica en el trabajo autónomo de la condición física. Opiniones del propio alumnado participante. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte*, vol. 3 (11), 125-135 (<http://cdeporte.rediris.es/revista/revista11/artexperiencia.htm>) (consultada: 30/03/2009).
- Fernandez-Río, J y Velázquez, C. (2005) *Desafíos físicos cooperativos*. Sevilla: Wanceulen.
- Fraile Aranda, A. (2004) Didáctica de la Educación Física: una perspectiva crítica y transversal. Madrid: Biblioteca Nueva.
- Fraile Aranda, A. et al (1996) *Actividad física y salud en la Escuela*. Valladolid: Junta de Castilla y león.
- Fraile Aranda, A et al (2001) *Actividad Física Jugada*. Alcoy (Alicante): Marfíl.
- Fraile Aranda, A. et al (2004) *Actividad física y salud en Secundaria*. Valladolid: Junta de Castilla y león.
- Fraile Aranda, A. et al (2005a) *Actividad física y salud. Educación Infantil*. Valladolid: Junta de Castilla y león.
- Fraile Aranda, A. et al (2005b) *Actividad física y salud. Primaria*. Valladolid: Junta de Castilla y león.
- Generelo, E. (1993) Diseños experimentales a partir del acondicionamiento del espacio como estrategia de formación del maestro. *Congreso Mundial de Ciencias de la Actividad Física y el Deporte*. Granada.
- Generelo, E.; Guillén, R. (1994) Los compromisos del naufragio. *Actas XII Congreso Nacional EF. EU. Magisterio*. Sevilla: Wanceulen.
- Generelo, E.; Zaragoza, J.; Julián, J. A (Coord.) (2005) *La Educación Física en las aulas: Aprender a partir de un proyecto*. Zaragoza: Gobierno de Aragón. Departamento de Educación, Cultura y Deporte.
- Gómez, I., & Prat, M. (2009) Hacia una Educación Física crítica y transformadora de las prácticas sociales: de la práctica a la reflexión y viceversa. *Cultura y Educación* 21(1), 67-88.
- Gracia, F.; Tomeo, M. (2006) Experiencias del Seminario del CPR de Sabiñánigo: Encuentros, Sobras Chinas y Danzas de paloteo. En López (coord.) *La Educación Física en la Escuela Rural*. Buenos Aires: Miño y Dávila (p. 115-136).
- Hernández Moreno, J. (coord.) (2000) La iniciación a los deportes desde su estructura y dinámica. Aplicación a la educación física escolar y al entrenamiento deportivo. Barcelona: INDE.
- Kirk, D. (2008) Los futuros de la Educación Física: la importancia de la cultura física y de la “idea de la idea” de Educación Física. En AA. VV. *Actas V Congreso Asociación Española de Ciencias del Deporte*. León: Universidad de León. (CD-R).
- Lacasa, E. y Lorente, E. (1999) Una experiencia sobre como responden los alumnos ante una EF emancipadora. *Actas I Congreso Internacional de EF. “La EF en el siglo XXI”* (Jerez de la Frontera). Madrid: FEDE. (p. 615-624).

- Lagardera, F.; Lavega, P. (2003) *Introducción a la praxiología motriz*. Barcelona: Paidotribo.
- Lapierre, A. (1984) La educación psicomotriz en la escuela maternal. Barcelona: Médica y técnica.
- Lapierre, A. y Aucouturier, B. (1974a) *Los contrastes*. Barcelona: Científico-médica.
- Lapierre, A. y Aucouturier, B. (1974b) *Los matices*. Barcelona: Científico-médica.
- Larraz Urgelés, A. (2002) *Diseños curriculares de la comunidad autónoma de Aragón. Educación Primaria: Educación Física*. (consultado 5-5-2008) ([http://www.praxiologiamotriz.inefc.es/PDF/Praxio\\_Lleida\\_curri\\_011.pdf](http://www.praxiologiamotriz.inefc.es/PDF/Praxio_Lleida_curri_011.pdf))
- Larraz Urgelés, A. (2004) Los dominios de acción motriz como base de los diseños curriculares en educación física: el caso de la Comunidad de Aragón en educación primaria. En Lagartera, F. y Lavega, P. (Ed.) *La ciencia de la acción motriz*. Lleida: Universitat de Lleida (p. 203-226).
- Larraz Urgelés, A. (2008) Valores y dominios de acción motriz en la programación de educación física para la educación primaria. *Seminario Internacional de Praxiología Motriz*. Lérida.
- Larraz Urgelés, A. (2009) ¿Qué aprendizajes de educación física debería tener el alumnado al finalizar sexto curso de primaria. *Tándem. Didáctica de la Educación Física*, 29, 45-63.
- Learreta, B., Sierra, M. A. y Ruano, K. (2005) *Los contenidos de Expresión corporal*. Barcelona: Inde.
- Learreta, B., Ruano, K. y Sierra, M. A. (2006) *Didáctica de la Expresión Corporal. Talleres Monográficos*. Barcelona: Inde.
- López Alcántara, JM. (1999) Educación Física, pedagogía crítica y modelo social hegemónico. *Actas I Congreso Internacional de EF. "La EF en el siglo XXI"* (Jerez de la Frontera). Madrid: FEDE (p. 779-787).
- López Pastor, V. M. (1999) Prácticas de Evaluación en Educación Física: estudio de casos en primaria, secundaria y formación del profesorado. Valladolid: Universidad Valladolid.
- López Pastor, VM. (coord.) (1999b) *Educación Física, Evaluación y Reforma*. Segovia: Diagonal.
- López Pastor, VM (coord.) (2004) *La Educación Física en Educación Infantil*. Buenos Aires: Miño y Dávila.
- López Pastor, VM. (coord.) (2006a) *La Educación Física en la Escuela Rural*. Buenos Aires: Miño y Dávila.
- López Pastor, VM. (coord.) (2006b) *La Evaluación en Educación Física. Revisión de los modelos tradicionales y planteamiento de una alternativa: la evaluación formativa y compartida*. Buenos Aires: Miño y Dávila.
- López Pastor, VM.; Mojas Aguado, R.; Pérez Brunicardi, D. (2003) Buscando alternativas a la forma de entender y practicar la educación física escolar. Barcelona: Inde.
- López Pastor, VM. et al (2002) Posibilidades, propuestas y experiencias para avanzar hacia una Educación Física Crítica. *Cuadernos Pastopas*, 1, 4-17.

- López Pastor, VM. et al (2005) Doce años de Investigación-Acción en Educación Física. La importancia de las dinámicas colaborativas en la formación permanente del profesorado. El caso del grupo de trabajo internivelar de Segovia. *Lecturas de Educación Física y Deportes*, 90. ([www.efdeportes.com](http://www.efdeportes.com)) (consultado 15/05/2008).
- López Pastor, V.M., et al (2007) Trece años de evaluación compartida en Educación Física. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte* (26) (<http://cdeporte.rediris.es/revista/revista26/artautoeval48.htm>) (consultado 10-7-2008).
- Lorente, E. (2008) Estimular la responsabilidad y la iniciativa: Autogestión en Educación Física. *Apunts Educación Física y Deportes*, 92, 26-34.
- Lleixá, T. (coord.) (2002) *Multiculturalismo y educación física*. Barcelona: Paidotribo.
- Méndez Giménez, A. (2003) Nuevas propuestas lúdicas para el desarrollo curricular de la Educación Física. Juegos con material alternativo, juegos predeportivos y juegos multiculturales. Barcelona: Paidotribo.
- Méndez Giménez, A. (2005) Hacia una evaluación de los aprendizajes consecuente con los modelos alternativos de iniciación deportiva. En *Tándem. Didáctica de la Educación Física*, 17, 38-58. *Monográfico sobre la evaluación en Educación Física*.
- Méndez Giménez, A. (2009) La enseñanza de los juegos de golpeo y fildeo en el contexto escolar a partir de material reciclado. *Tándem. Didáctica de la Educación Física*, 29, 105-118.
- Méndez, A. (coord.) (2009) *Modelos actuales de Iniciación deportiva*. Sevilla: Wanceulen.
- Mendiara, J. (1999) Espacios de Acción y Aventura. *Apunts Educación Física y Deportes*, 56, 65-70.
- Mendiara, J. (2006) La Educación Física en Educación Infantil. En: López Pastor, VM. (coord.) *La Educación Física en la Escuela Rural*. Buenos Aires: Miño y Dávila (p. 167-182).
- Monjas Aguado, R. (coord.) (2006) *La Iniciación Deportiva en la escuela por el modelo comprensivo*. Buenos Aires: Miño y Dávila.
- Mora, JM.; Díez, R.; Llamas, J. (2003) *Un mundo en juego*. Barcelona: Inde.
- Navarro Adelantado, V. (2002) *El afán de jugar*. Barcelona: INDE.
- Navarro, V. y Jiménez, F. (2004) Aportaciones de la praxiología a la Educación Física en los últimos diez años: de la teoría a la práctica. En López, V.; Monjas, R y Fraile, A. (coord.) *Los últimos diez años de la Educación Física Escolar*. Valladolid: Universidad de Valladolid.
- Omeñaca, R., Ruiz, J.V. (1999) *Juegos cooperativos y Educación Física*. Barcelona: Paidotribo,
- Omeñaca, R., Puyuelo, E.; Ruiz, J. V. (2001) *Explorar, jugar, cooperar*. Barcelona: Paidotribo,
- Parlebas, P. (2001) *Juegos deporte y sociedad. Léxico de praxiología motriz*. Barcelona: Paidotribo.

- Parlebas, P. (2003) Un nuevo paradigma en educación física: los dominios de acción motriz. En Fuentes, J. P. y Bellido, M. (Ed.) *La Educación Física en Europa y la calidad didáctica en las actividades físico-deportivas. Primer congreso internacional de Educación Física*. FIEP (p. 27-42). Cáceres: Diputación de Cáceres.
- Parra, M. et al. (2001) Los ambientes de fantasía: modificación del espacio cotidiano. En Actas del IV Congreso Internacional La enseñanza de la Educación Física y el Deporte Escolar. FEADEF. Santander (p. 330-335).
- Parra, M. y Rovira, C. (2002) Jugando con fuego. Propuestas pedagógicas al calor de las sensaciones de aventura. *Tándem. Didáctica de la Educación Física*, 6, 51-64.
- Peiró, C.; Hurtado, I.; Izquierdo, M. (2005) Un salto hacia la salud. Actividades y propuestas educativas con combas. Barcelona: Inde.
- Pérez, D; López, VM.; Iglesias, P. (2004) *La Atención a la Diversidad en Educación Física*. Sevilla: Wanceulen.
- Pérez Pueyo, A. (2005) Estudio del planteamiento actitudinal del área de educación física de la educación secundaria obligatoria en la LOGSE. Una propuesta centrada en una metodología basada en actitudes. León: Universidad de León.
- Pérez Pueyo, A. (2006) El estilo actitudinal: una propuesta didáctica centrada en una metodología basada en actitudes. *Revista Española de Educación Física y Deportes*, 5, 10-35.
- Pérez Pueyo, A. (2007) La organización secuencial hacia las actitudes: una experiencia sobre la intencionalidad de las decisiones del profesorado de educación física. *Tándem, Didáctica de la Educación Física*, 25, 81-92.
- Pérez Samaniego, V. y Devís Devís, J. (2003) La promoción de la actividad física relacionada con la salud. La perspectiva de proceso y de resultado. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte* vol. 3 (10), 69-74 (<http://cdeporte.rediris.es/revista/revista10/artpromocion.htm>) (consultada: 30/03/2009)
- Pomer, M. et al (1998) Actitudes y valores en Educación Física. *IV Jornadas Hispano-lusas de intercambio de experiencias en EF*. Medina del Campo: Junta de Castilla y León.
- Prat Grau, M. (2001) Actitudes, valores y normas en Educación Física. Reflexiones, problemáticas y propuestas para su integración en la escuela. *Tándem. Didáctica de la Educación Física*, 2, 7-20.
- Prat, M.; Soler, S.; Ventura, C. & Tirado, M.A. (2006) El deporte como instrumento para el desarrollo de la capacidad crítica de los adolescentes. En Duran, J. y Jiménez, J (eds) *Valores en movimiento: la actividad física y el deporte como medio de educación en valores* (Vol 45, p. 127-160). Madrid: Consejo Superior de Deportes.
- Ruiz Omeñaca, JV. (2004) Pedagogía de los valores en Educación Física. Madrid: CCS.
- Ruiz Omeñaca, JV. (2008) *La Educación Física en la Escuela Rural*. Barcelona: Inde.

- Sánchez, A.; Muñoz, E. y Fernández, F. (2001) La creación de espacios de fantasía en Educación Física. Una experiencia práctica con alumnos/as de tercer ciclo de Educación Primaria. En *Actas del IV Congreso Internacional La enseñanza de la Educación Física y el Deporte Escolar*. FEADEF. Santander (p. 109-116).
- Sanpedro, J., Sagardoy, J., Gómez, M. J. (2009) Propuesta de evaluación del alumno en educación física. Un enfoque desde la Praxiología Motriz. *Retos, Nuevas tendencias en Educación Física, Deporte y Recreación*, 16, 41-46.
- Sicilia, A.; Fernández-Balboa, JM. (coord.) (2005) La otra cara de la enseñanza. La educación física desde una perspectiva crítica. Barcelona: Inde.
- Sparkes, A. (1992) Reflexiones sobre las posibilidades y los problemas del proceso de cambio en la Educación Física. En Devís y Peiró. *Nuevas perspectivas curriculares en Educación Física: la salud y los juegos modificados*. (pp. 251-266). Barcelona: Inde
- Tabernero, B.; Márquez, S. (2003) *Educación Física, propuestas para el cambio*. Barcelona: Paidotribo.
- Tinning, R. (1996) "Discursos que orientan el campo del movimiento humano y el problema de la formación del profesorado". *Revista de Educación (Madrid)*, 311, 123-134.
- Tirado, M. A., y Ventura, C. (2009) Propuestas para el desarrollo de la competencia crítica en Educación Física. *Cultura y Educación* 21(1): 55-66.
- Vaca Escribano, M. (1996) La Educación Física en la Práctica de la Educación Primaria. Palencia: ACCEM.
- Vaca Escribano, M (2002) Relatos y reflexiones sobre el Tratamiento Pedagógico de lo Corporal en Educación Primaria. Palencia: ACCEM.
- Vaca, M. y Varela M.S. (2008) El tratamiento pedagógico del ámbito corporal (3-6). Barcelona: Graó.
- Velazquez Callado, C. (coord.) (1995) Ejercicios de Educación Física para Educación Primaria. Fichero de juegos no competitivos. Madrid: Escuela Española.
- Velazquez Callado, C. (coord.) (1996) Actividades prácticas en Educación Física. Como utilizar materiales de desecho. Madrid: Escuela Española.
- Velazquez Callado, C. (coord.) (2002a) *Así juegan los niños y niñas del mundo*. Valladolid: La Peonza. (CD-R).
- Velazquez Callado, C.; Fernández, I (2002) *Educación Física para la paz, la convivencia y la integración*. Valladolid: La Peonza.
- Velazquez Callado, C. (coord.) (2003a) *Nuevos retos cooperativos*. Valladolid: La Peonza. CD-R.
- Velazquez Callado, C. (2005) *365 juegos de los niños del mundo*. Barcelona: Océano.
- Velazquez Callado, C. (2006) *Educación física para la Paz*. Buenos Aires: Miño y Dávila.
- Velazquez Callado, C. et al. (2001) Actas I Congreso Internacional de Actividades Físicas Cooperativas. Valladolid: La Peonza.

- Velazquez Callado, C. et al. (2002b) *Actas II Congreso Internacional de Actividades Físicas Cooperativas*. Valladolid: FIEP-La Peonza.
- Velazquez Callado, C. et al. (2003b) *Actas III Congreso Internacional de Actividades Físicas Cooperativas*. Valladolid: CFIE Gijón - La Peonza.
- Velazquez Callado, C.; López, VM.; Monjas, R. (coord.) (2004) *Actas IV Congreso Internacional de Actividades Físicas Cooperativas*. Valladolid: La Peonza.
- Velazquez Callado, C.; Castro, C. (coord.) (2006) *Actas V Congreso Internacional de Actividades Físicas Cooperativas*. Valladolid: La Peonza.
- Velazquez Callado, C.; Barba, JJ., Castro, C. (coord.) (2008) *Actas VI Congreso Internacional de Actividades Físicas Cooperativas*. Valladolid: La Peonza.
- Viscarro, I.; Camps, C. (1998) *Propuesta de Educación Psicomotriz*. (Vídeo y texto). Tarragona: Universidad Rovira y Virgili.

**Número de citas totales / Total references:** 114 (100%)

**Número de citas propias de la revista / Journal's own references:** 4 (3.5%)

[Rev.int.med.cienc.act.fís.deporte-](http://www.revintmedciencactfisdeporte.com) vol. 10 - número 38 - junio 2010 - ISSN: 1577-0354