130 - THE HUMAN MOTRICITY SCIENCE AND PRINCIPLES FOR TEACHING PHYSICAL EDUCATION

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New ideas have emerged in the context of Physical Education in Brazil since the eighties of last century, suggesting that physical education needed in crisis, to justify itself and seek their identity (MEDINA, 1983). For this crisis, the ideological traps were denounced as not to allow the area to be a promoter of transformation in education through a pedagogical action to intervene in reality promoting the awareness of students as subjects with others and the world.

Even after some years, values and concepts which justified the crisis that began in the eighties, are still observable in the context of the area, training curricula for teaching and especially at school. This context shows that although studies such as the Human Motricity Science, demonstrate possible referrals to overcome this crisis, which is observed is a long way to go for physical education teachers, educational policies and society as a all.

All proposals submitted in order to overcome the crisis are closely linked to the paradigms of science and society and philosophical assumptions. Since classical antiquity, there are explanations about man / body a dual conception which was evident from the Cartesian philosophy and thought of Modern Science (CAMPANHOLI, 2008). For Manuel Sérgio (2004), Western philosophy coexists with distinction and differentiation between deep reason and imagination, between spirit and body. Physical education is historically constituted under the aegis of the Cartesian rationalist philosophical paradigm, noting features of this thought as the reduction of complex systems at lower levels of reality in order to decomposition of the parties, indicating a purely rational and persistent notion of progress. Under this paradigm and the Cartesian philosophy, the division was established between body and mind, rational thought and the body that acts as an instrument of thought.

For the Human Motricity Science the educational process is the formation and education of human intentionality in moving toward transcendence. This transcendence is the quest to be more, to solve the problems presented in the interactions with the world, to overcome human limitations in order to overcome himself. Human Motricity is being in the world, synonymous with the corporality, because all human action involves motor and is therefore in complexity and in practice, in the unity of the gestures that are never repeated, and laden with meaning, by intent, are also felt toward transcendence (SÉRGIO, 2004).

The Human Motricity Science proposed by Manuel Sérgio (1991, 1994, 1999, 2004) presents itself as a new science of man, set in a new scientific paradigm that considers the complexity of relationships and knowledge, proposing an epistemological break. In this new paradigm, ignores the hegemony of rationalism, the rigidity of mathematical patterns to ensure scientific relevance; fragmentation; reductionisms and generalizations; classification; hyper appreciation of the thought to the matter that reflects the dualism between body and mind and the conception of nature as a perfect machine, also attributing these characteristics to human nature, considering the body and society as mechanical bodies.

The Human Motricity, understood as an independent science, since the whole autonomous practice should correspond to an autonomous theory, studies the human being, the purposeful movement of transcendence, where the original dimension of openness to the world is revealed in the fullness of its meaning . Each of us is an entity that, in seeking to transcend and go beyond, if known contingent, limited, but can be more (SÉRGIO, 1999, p.26).

Pereira (2006), says the Human Motricity has among its principles the emancipation of human beings, not fragmented, serving as a conceptual basis for the epistemological perspective of education for an entire subject that is not a body education so only. Therefore, Human Motricity approached from the man who moves, calls into question the legitimacy of mere human movement, suggesting the essential aspects of existence, for it is its most immediate. In this sense, the educational process is an education of human intentionality in moving toward transcendence.

With physical education stems from a pre-scientific positivist context due to their practices and determined that this only could be understood and legitimized in the context of the humanities. However, one cannot question the validity of epistemology for education for all teachers in general, because that knowledge necessarily involves body movement, operative intentionality, which plays predominant role in the process of knowledge construction (ORO, 1999; SÉRGIO, 1996).

The name of Human Motricity, although it poses immediately to Physical Education as an academic discipline or school subject because it stands as an epistemology in order to question a scientific problem and methods. By presenting itself as a reference to proposals that consider the educational process so complex and sensitive to the rights and needs of students, Human Motricity matter with the awareness of students as the subject of his process, his own body he feels, wishes, act, reflect, learn and intentionality seeks to overcome the limits in all dimensions (ORO, 1999, PEREIRA, 2006, SÉRGIO, 1999).

Under these considerations, the educational relationship between teachers and students can no longer be seen without considering the existence of a multidimensional involvement therefore the corporality is involved too. The school is an environment of coexistence and social class is actually a human encounter that relate in pursuit of learning, knowing, therefore, to transcend. Humans involved in this process communicate, express, dialogue, constituting relations of culture, knowledge and affection. At this meeting the school's human relations are strongly influenced according to epistemological propositions and consequently the concepts of the body and corporality of educators. In this case, the conception of man and the human body have the same meaning for Human Motricity.

The Human Motricity Science considers the man in constant search for improvement, because it recognizes it is an incomplete and lacking in nature. And this search to supplement what it lacks, to overcome the current condition it is, is what leads him to seek transcendence, "to overcome their condition, to go beyond, to achieve the full realization of their desires" (PEREIRA, 2006, p. 112). This movement towards transcendence is a movement that builds the story, working shifts and changes in yourself and in the middle, in society in the world of life. It is a dialectical movement in which man acts in the world and turns, and the world that acts and transforms the man in return.

Education, human development and reflection are expressions that refer to the idea of change, transformation, and not the suitability and appropriateness, for thought and reflection characteristics of subjects are able to act. Think there is, is to be us, is to live in the real world, is to have a relationship with this world and interact with it and him. This relationship between man and reality, man and world, implies the transformation of the world itself (FREIRE, 1979).

The Human Motricity Science has complexity as one of its foundations by the fact that man is a complex unit and be the producer of knowledge and culture. In this universe of knowledge construction and culture reveals the complexity of contexts because the human being is in fact a body and simultaneously 'has' a body open to the world, which takes in and incorporates the culture (PEREIRA, 2006, p. 107). Therefore it is necessary that the teaching of physical education, their teaching practices are closely related to its contents in accordance with planning for teaching (curriculum), emphasizing the interdisciplinary and context of the everyday student, because the complexity is to understand man in its entirety in relation "[...] body-mind-desire-nature-society [...]" and the lived world (SÉRGIO, 2004, p. 15).

Physical Education seen from the perspective of Human Motricity Science, in the context of a new paradigm in which the Man, Science and Society can only be understood in complexity and each teacher in your classroom is able to construct a pedagogy that promotes students to overcome from the knowledge that has meaning and significance.

In this sense, the guiding principles for the teaching of Physical Education from the Human Motricity are based on theses submitted by Pereira (2006), "The intervention of Motor Education as complex", "[...] the human being as unit complex and multidimensional, towards an authentic education in and the motor", "Sense and Meaning" and "Human praxis" (p. 234), presented in dialectical connection, interacting, interposing, feeding, associating, producing and co-producing to each other, because the whole is in the part and the part at all, "Everything is in everything, without distinction, without separation ..." (p. 237).

Thinking in Education under the paradigm of complexity is also thinking in education and the human development subject as a whole. Whereas, as well as in society, also a student in the educational process is related to himself, with others and the world, that is, an intersubjective relationship, the human being acts and gives meaning and significance to their history and is not only subjected to it by certain relationships.

The search for absolute truth and undeniable was the goal of positivist science rationalist. The search for truth is what drives modern thought. It seems contradictory that a judge scientific thought dealing with doubt and uncertainty in teaching that has always given the answers ready, correct and repressed doubt. As a first step towards transcendence, doubt and uncertainty stand in the way of an opening for the new, allowing new solutions to old problems or even things that have not been thought out.

Morin (2004) states that the unexpected when it presents, surprises us and puts doubt and uncertainty about our theories and ideas, forcing us to review them.

By encouraging the doubt, through the problematization students during the lessons, provoke thought about the common sense and popular knowledge that students bring is what allows the construction of hypotheses, to make building a new knowledge and that is why "reflection of the action, self-observation, self-critical favor self-organization and self-transformation that cannot end" (PEREIRA, 2006, p.238).

For this principle to consider the human being as a complex being, all dimensions: biological, spiritual, emotional, recreational, ethical, aesthetic, social, psychological, historical, cultural, moral, among others, constitute the whole and must be designed in the context of the interaction. The human interaction is a being in this sense, cannot be understood as the sum of the parts physical and mental, body and soul, biological, psychological, cognitive, motor, but the interaction of these parts make a whole human being indissoluble.

For a Physical Education by Human Motricity, the human being in its entirety, the process of teaching and learning needs to be according to student life and from it the principle of contextualization, respecting the culture of students, whether children or young adults, seeking the construction of shared knowledge in a way, also considering their motivations and trying to motivate them when necessary.

The class with sense and meaning that if you want to achieve is the same as you want the student is motivated to learn, because this will is operative intentionality of meaning that needs to direct a meaning for life.

One must question why certain content to teach and not others and seek to bring to teaching subjects in context, based on the culture of the students. Under the socio-interactionist dynamic culture is seen as a production, creating a work. In this conception social relations, construction and reconstruction of knowledge and culture, the significance and possible redefinition of what is taught (SILVA, 1999). Similarly, for the student, the construction of meaning and meaning is not only an understanding or definition of the word, but the meaning, the context of that content represents. This is also true sense, it is not only what the content or the word means, but more importantly, the value is and why it gives a sense of what is learned.

The school knowledge as legitimate knowledge, popular knowledge that needs to appear in the curriculum, not to establish an epistemological equality, but let the dialogue with the scientific knowledge in the process of mutual inquiry, and the criticism of common sense in order to make content on action tools that students are able to promote a change in concepts, aimed at better understanding and transforming reality in which they live, recognizing different and valid knowledge as possible within its boundaries, allowing knowledge to discern the false from the true (LOPES, 1993).

To Saviani (1992), the school is the institution whose role is elaborated in the socialization of knowledge and not the spontaneous knowledge, common sense, the systematic knowledge and not fragmented to learn, not to high culture and popular culture. In this sense the school must prioritize its goal of socialization of knowledge and not deviate in the midst of so many secondary conditions and obligations created around and within the school. What should be taught in school are the knowledge and culture scholars and systematization of popular knowledge of science, as a point of arrival as soon as the democratization of knowledge they need to be socialized knowledge learned in the pursuit of equality that the popular not have access except through school.

Responsible participation in the process of communication between teachers and students in a school that seeks the construction of meaning and meaning is an authentic praxis, because there is only one transmission of content, but makes sense in action. It is the existence of meaning in particular experience an education that allows for transcendence, for the sense of movement is the motivation of self-overcoming (PEREIRA, 2007).

The man of praxis in the Human Motricity Science is the active subject who acts with intent, causing problems and taking action that conscious decision making, ethical and political in seeking to overcome.

The notion of praxis, in the Human Motricity Science, articulated with the phenomenological perspective and dialectic. Because every practice is a condition of human existence, which is revealed in the corporality, that is, to say, the motor! It is rooted in a complexity that involves, simultaneously: being in the world, the sensible and the intelligible, nature and culture, action and reflection, the language of the sense and meaning, understanding and critical criterion, and also the freedom of creation and expression. In practice the complexity is human and human complexity is the practice in a globalizing and indissoluble relationship. All this, in an endless process of living and social interaction, located in a certain space and time, as well as a concrete historical context given (PEREIRA, 2006, p.180).

The term praxis is then brought to treat a broader sense than the original meaning, linked to the theory of dialectical historical materialism of Marx. This concept is related to the practice "material activity of social man" (p.06), because everything that happens in history is the result of human intervention and comes from the productive activity of man, the creation of social

relations of production and work . It is the man who develops these forces of production and he is also the force (VÁSQUEZ, 1968). "Thus understood, the practice is the central category of philosophy which sees itself not only as an interpretation of the world, but also guide its transformation" (p.05).

The notion of praxis by Manuel Sérgio for Human Motricity understands the man in the sense of actual existence as a being in the world and the complexity in all aspects of life that manifests itself in the subjective and objective experience, appropriating this conception of Marxist praxis as transformative action, but overcomes the dialectical historical materialism which holds only in the class struggle and the aspect of labor and material production, economics and politics. The view of the complexity given by the Human Movement believes that the social structure also in culture, science, religious beliefs, moral, and others (PEREIRA, 2006).

How to structure a relationship between theory and practice in physical education classes under this conception of human praxis presented by Human Motricity? Consistent with the paradigm presented issues concerning the construction of knowledge and the world through the interaction, the teaching of Physical Education, needs to be guided by a methodology that has as principle the questioning.

The Human Motricity Science presents itself as a proposal for overcoming the crisis of Physical Education, considering the human being in the context of their relationships and the complexity of life. "Without the Human Motricity Science (HMS) physical education would be meaningless, without physical education, HMS would not have history" (SÉRGIO, 1999, p. 23).

Paulo Freire (2005), advocates of a critical theory of education, points out that "the practice of teaching critical thinking tease of course, involves the movement dynamic, dialectical, between doing and thinking about what to do" (p.38). Man praxis is the subject capable of decision making and consciously opposed and it is only this way that we can guarantee the full exercise of citizenship, as there are for opening autonomous and ethical attitudes, while free of manipulation.

When we consider the term to educate for autonomy, as used and distributed in the educational field, it is necessary awareness about the embodiment that is given from the knowledge. The teacher training is essential when applying any change in education as the teacher is the main promoter of this awareness in educating about himself as being in the world and with others. This realization about the Motricity is the first step and condition that enables the subject to gain autonomy over all its dimensions and about the conquest of their citizenship.

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THE HUMAN MOTRICITY SCIENCE AND PRINCIPLES FOR TEACHING PHYSICAL EDUCATION
ABSTRAC

New ideas have emerged in the context of Physical Education in Brazil since the eighties of last century, suggesting that physical education needed in crisis, to justify itself and seek their identity. After a few years, ideas that justified the crisis are still observable. The Human Motricity Science presents itself as a proposal for overcoming the crisis in question, since she appears in the context of a paradigmatic crisis in Science, a new paradigm in which the Man, Science and Society can only be understood in the look of complexity. However, the complex paradigm cannot completely exclude the processes and modes of thought of previous paradigm, but proposes a new world view. Similarly, the Human Motricity Science cannot replace what has been proposed so far for Physical Education, or give up the whole construction of knowledge produced, but allows for changes. The Human Motricity Science proposes an epistemological break, a change in the way of seeing the area in all its aspects. The object of study for Physical Education is the physical, because physical education itself has its origin in a science guided by fragmentation. The object of study of Human Motricity Science is Man in search of transcendence, and that Man is a being in the world, only one, indivisible, showing the relationship between man and society and culture. While emerging Science, Human Motricity is in the process of building its methods and its pedagogy, but the teaching as a complex process, the human being as a unit complex and multidimensional, the meaning and significance of what is taught and human praxis, can be considered as guiding principles of an action under the new teaching paradigm.

KEYWORDS: Human Motricity, Teaching of Physical Education, Teacher Training.

LA SCIENCE MOTRICITÉ HUMAINE ET PRINCIPES D'ENSEIGNEMENT D'ÉDUCATION PHYSIQUE
RÉSUMÉ

De nouvelles idées ont émergé dans le contexte de l'éducation physique au Brésil depuis les années du siècle dernier, ce qui suggère que l'éducation physique nécessaire en situation de crise, à se justifier et demander leur identité. Après quelques années, les idées qui ont justifié la crise sont encore observables. La Science Motricité Humaine se présente comme une proposition pour surmonter la crise en question, car elle apparaît dans le contexte d'une crise paradigmatique dans les sciences, un nouveau paradigme dans lequel l'homme, science et société ne peut être compris dans le regard de la complexité. Cependant, le paradigme de complexité ne peut pas complètement exclure les processus et modes de pensée de paradigme précédent, mais propose une nouvelle vision du monde. De même, la science Motricité Humaine ne peut pas remplacer ce qui a été proposé jusqu'ici de l'éducation physique, ou de renoncer à toute la construction des connaissances produites, mais permet des changements. La Science Motricité Humaine propose une rupture épistémologique, un changement dans la façon de voir la région sous tous ses aspects. L'objet d'étude de l'éducation physique est le physique, parce que l'éducation physique lui-même a son origine dans une science guidée par la fragmentation. L'objet d'étude des sciences Motricité Humaine est l'homme à la recherche de la transcendance, et que l'homme est un être au monde, seulement une, indivisible, montrant la relation entre l'homme et de la société et la culture. Alors émergent des sciences, Motricité Humaine est dans le processus de construction de ses méthodes et sa pédagogie, mais l'enseignement comme un processus complexe, l'être humain comme une unité complexe et multidimensionnel, le sens et la signification de ce qui est enseigné et la praxis humaine, peuvent être considérés comme des principes directeurs pour une action d'enseignement sous le nouveau paradigme.

MOTS-CLÉS: Motricité Humaine, L'enseignement de L'éducation Physique, Formation des Enseignants.

LA MOTRICIDAD HUMANA Y PRINCIPIOS PARA LA ENSEÑANZA DE LA EDUCACIÓN FÍSICA
RESUMEN:

Nuevas ideas han surgido en el contexto de la Educación Física en Brasil desde los años ochenta del siglo pasado, lo que sugiere que la educación física necesaria en situaciones de crisis, justificarse a sí misma y buscar su identidad. Después de unos años, las ideas que justifican la crisis aún son observables. La ciencia de la Motricidad Humana se presenta como una propuesta para superar la crisis en cuestión, ya que aparece en el contexto de una crisis paradigmática en la Ciencia, un nuevo paradigma en el que el hombre, la ciencia y la sociedad sólo puede ser entendida en el aspecto de la complejidad. Sin embargo, el paradigma de la complejidad no puede excluir por completo los procesos y modos de pensamiento del paradigma anterior, sino que propone una nueva visión del mundo. Del mismo modo, la Ciencia de la Motricidad Humana no puede reemplazar lo que se ha propuesto hasta ahora para la Educación Física, o renunciar a toda la construcción del conocimiento producido, pero permite los cambios. La ciencia de la Motricidad Humana propone una ruptura epistemológica, un cambio en la forma de ver la zona en todos sus aspectos. El objeto de estudio de la educación física es el físico, porque la educación física en sí misma tiene su origen en una ciencia guiada por la fragmentación. El objeto de estudio de Ciencias de la Motricidad Humana es el hombre en busca de la trascendencia, y que el hombre es un ser en el mundo, sólo una, indivisible, que muestra la relación entre el hombre y la sociedad y la cultura. Mientras que la ciencia emergente, Motricidad Humana se encuentra en el proceso de construcción de sus métodos y su pedagogía, pero la enseñanza como un proceso complejo, al ser humano como una unidad compleja y multidimensional, el significado y la importancia de lo que se enseña y la praxis humana, se puede considerar como principios rectores de una acción bajo el paradigma de la nueva enseñanza.

PALABRAS CLAVE: Motricidad Humana, Enseñanza de la Educación Física, Formación del Profesorado.

A MOTRICIDADE HUMANA E OS PRINCÍPIOS PARA O ENSINO DA EDUCAÇÃO FÍSICA
RESUMO:

Novas reflexões surgiram nos contextos da Educação Física no Brasil desde os anos oitenta do século passado, sinalizando que a Educação Física precisava entrar em crise, justificar a si mesma e procurar sua identidade. Passados alguns anos, concepções que justificaram a crise ainda são observáveis. A Ciência da Motricidade Humana apresenta-se como proposta para a superação da crise em questão, pois ela mesma surge no contexto de uma crise paradigmática no campo da Ciência, um novo paradigma em que o Homem, a Ciência e a Sociedade só podem ser compreendidas sob o olhar da complexidade. Porém, o paradigma complexo não pode excluir completamente os processos e modos de pensar do paradigma anterior, mas propõe uma nova visão de mundo. Do mesmo modo, a Ciência da Motricidade Humana não pode substituir o que foi proposto pela Educação Física até então, ou abdicar de toda a construção de conhecimentos produzida, mas permite mudanças. A Ciência da Motricidade Humana propõe uma ruptura epistemológica, uma mudança no modo de ver a área em todos os seus aspectos. O objeto de estudo da Ciência da Motricidade Humana é o Homem em busca de transcendência, e este Homem é um ser no mundo, uno, indissociável, evidenciando a relação homem-sociedade-cultura. Enquanto Ciência emergente, a Motricidade Humana está em processo de construção de seus métodos e de sua pedagogia, porém o ensino como processo complexo, o ser humano como unidade complexa e multidimensional, o sentido e significado do que é ensinado e o ser humano práxico, podem ser considerados como princípios orientadores de uma ação docente sob o novo paradigma.

PALAVRAS-CHAVES: Motricidade Humana, Ensino da Educação Física, Formação de professores.