1. INTRODUCTION

Considering that the purpose of this text is to present a reflection about the composition of the body rhythm as a knowledge for the teacher of the Physical Education discipline. Considering the implications of this for the action of the teacher, it is necessary to know the composition of the rhythm, understanding that beyond this knowledge it is necessary that the teacher also understand how the process of cognitive development of the subject is performed so that it can organize the systematization of this knowledge in the years of Basic Education. In this reflection we will be particularizing the composition of the rhythm, the issues related to human development will be for a next moment.

The discipline of Physical Education should enable students to understand their motricity, that is, to enable the apprehension of specific knowledge. In order to do so, it occupies itself in teaching the contents that are organized in nuclei, axes or blocks of knowledge depending on the theoretical reference. Faced with this task, we have some reflections: what is the composition of the rhythm? How is this composition apprehended by the subject? What are the implications for teacher action? We understand that the discipline of Physical Education as a curricular component in the school must possess a science that allows it bases for the teaching action, bases that can be found in the science of Human Motricity.

Human Motricity "studies the human being in the intentional movement of transcendence, where the original dimension of openness to the world is revealed, in the fullness of its meaning" Sérgio, (1999, 26). The Science of Human Motricity goes beyond the unilateral and restricted character of Physical Education, centered on the abstract immobility of the physical; thought by some teachers, because it is a science of understanding and explanation of motor conducts. This structuring and presentation of Human Motricity by Manoel Sérgio shows the need for a new look at the discipline of Physical Education, but we must not forget that it is linked to a pedagogical project and a school system.

A pedagogical political project means a purpose. "It is political because it expresses an intervention in a certain direction and it is pedagogical because it carries out a reflection on the action of men in reality explaining their determinations" Soares, (2004, p.25). The educator must know the political pedagogical project of the school in which he works, since it is he who guides his practice in the classroom; both in the relationship with its students, and in the contents that it will teach about the values, the logic and the theoretical reference that such school defined as support to the teaching actions.

From the structuring of the pedagogical political project we have the curriculum of the disciplines, the social function of a curriculum is to provide an organization of the disciplinary knowledge and also to enable a pedagogical reflection of the student, in a way that the social reality thinks in a certain logic. The curricular axis, the principle that guides the fundamental reference of the curriculum, "[...] delimits what the school intends to explain to its students and to what extent pedagogical reflection is carried out. From it, the curricular framework is outlined, the list of subjects, subjects or curricular activities". Soares, (2004, p.27)

The curriculum of a school discipline must organize the knowledge throughout the Basic Education, in this sense, Palma et al (2010), present that Physical Education is a school discipline that has specific knowledge, knowledge that comes from the culturally constructed movement and such knowledge were organized by the authors in Knowledge Cores so named: movement and corporeality; movement and games; movement and sports; the movement in expression and rhythm, and movement and health. These nuclei treated at school express a sense and a meaning in which the intentionality of man and the goals of society are interpenetrated.

The sense and meaning includes the understanding of the interdependence relations of the knowledge that can compose the program of Physical Education and of the great socio-political problems of the present time. If it is pretended to enable the student to understand their reality by interpreting it and from this understanding to act with adequacy in this. In this sense, all the teachers responsible for the school subjects should enable students to appropriate their specific knowledge and contextualize them. For the discipline of Physical Education the responsibility is not different and for this to happen the knowledge of the teacher about the specific contents is fundamental. In view of this we propose a reflection on the composition of the rhythm as a necessary knowledge to the teacher of the discipline of Physical Education.

1.1 Rhythm and body rhythm

The word rhythm, from the Greek Rhythmos, means “that which flows, that which moves.” According to Artaxo (2003), the human organism works in a rhythmic way, which can be determined by the pulsation, by the tension x muscular relaxation (physiology) and emotional control. Rhythm is part of the physiological and emotional actions of the individual and also of nature, that is, we are directly influenced by rhythm.

The human being depends on rhythm in all his activities, whether they are: feeding, moving, sleeping, working among other activities. Artaxo, (2003). When we reflect on the emphasis that the author presents on our daily actions and also on the rhythm that nature accomplishes, we can see that understanding this notion allows us to act in a more adequate way in reality.

According to Pallares (1983) it is necessary to think about the meaning of rhythm in the universe, in movement, in music, in education; so that a study of the role of rhythm in the educational task can be done.

[...] the impulse, the force that characterizes life, movement; it manifests itself in nature, in human, animal, and plant life; it occurs in the organic functions of man, in his activities of locomotion, in the manifestations of his inner expression by taste, in movement, in shape in modeling, in color in painting and drawing, in sound in tale and in music. [...] (PALLARES, 1983, p.22).

The author states that rhythm is vibration. Rhythm defines the natural movement and is peculiar to each individual according to their personal perception. The rhythmic movements are those that satisfy the nature of the human organism, result from the expression itself, reflect the sensitivity of each. From this understanding presented by the author, can we then say that rhythm is vibration? If it is not how we can understand what comes to be rhythm. Before we make further reflections on this
The objective of this research was to verify the complexity of rhythm and its importance in physical education classes. The search for an understanding of the rhythm we understand how important it is to verify other authors who have dedicated themselves to the research of the same, since we verified the different concerns and paths covered in the search for clarifications on this topic.

For Le Boulch (1983), human movement unfolds simultaneously in space and time. The human movement represents a whole that has an internal organization and is characterized by its duration, that is, the movement happens in a certain time and space. Observing the human body (understood as an inseparable unity, body and mind), in relation to its possibilities of moving in space, one can see that it does not move in block, with a single movement, but rather discontinuous way, by means of the execution of a series of supports that constitute natural divisions of the movement. Several segments enter the scene in the action of a movement, performing a global work, but with subdivisions, which occur at the same time. In its search for definition, Le Boulch (1983) considers rhythm as an organization or structuring of phenomena that unfold in time. The organization of time can have two different levels of significance: the level of immediate perception and the level of mental representation; being that the child only reaches the second level "later", because it occurs in function of the evolution of his intelligence, according to the author.

In the development of temporal perception, the exercises essentially require hearing and the kinesthetic sense (movement sensitivity). Le Boulch (1983: 191) states: "Audition locates only very vaguely in space, while it locates admirably in duration ... it is par excellence the sense of time, succession, rhythm, compass".

As regards the rhythm, we can verify the attention that Le Boulch treats the rhythm and also of the importance of understanding it. It is clear that the author thinks about this learning considering the cognitive development of the subjects. In our search for an understanding of the rhythm we understand how important it is to verify other authors who have dedicated themselves to the research of the same, since we verified the different concerns and paths covered in the search for clarifications on this topic.

For Kiefer (1973), in addition to the rhythm designating what flows, what moves, this word (rhythm), for the author, relates the idea of measurement. This speaks of rhythm starting from the moment when this flow presents discontinuities that when perceived, bring with it the comparison, the measurement between the fragments of what flows. With this, it relates the rhythm to the idea of order, in which the rhythm supposes an ordering that implies a regularity of equal or comparable elements.

When we analyze what the author presents about the rhythm, what is rhythm and what is composed still remains vague. Barros and Barros (1983) affirm that the components of the basic structure of movement activities are: time, space and rhythm. Rhythm is regarded as the ordering of motion and the alternation and proportion of time values between the parts of a whole.

The authors have already been concerned with presenting the composition of the rhythm, and as already presented, time and space seem to be part of this composition, but these put the rhythm itself as part of this composition, it seems to us that the object of study, in the if rhythm, is not a constituent part of it. We understand that time and space must be considered by the individual in an action that demands rhythm, but we still have a question, is rhythm composed only of rhythm and space?

According to Le Boulch (1983), the coordination of movements occurs with the union of rhythm and space, and the development of rhythmic automatisms responds, in addition to the internal structural conditions, to a correspondence between the conditions of the space where they unfold. For the author, the body rhythms must adapt to the temporal conditions imposed by the medium, that is, the rhythmic experience of the movement adjusts the information of the space and must be maintained through the work of temporal perception. To become possible the perception of time, it is necessary to execute the temporal information first to the level of corporal experience.

What is usually termed a "coordinated gesture" is, in fact, a rhythmic gesture, that is, a good temporal structuring, giving it some harmony. It is through the rhythm of the movements carried out by your body that the child has an entrance into the temporal organization. Our intention to present this author again is that it emphasizes the importance of time and space as components of rhythm and also present the need to consider the cognitive development of the subject for learning.

According to Fonseca (1995), rhythm is the unit of extension of the temporal dimension, with constant rhythm being a series of equal time intervals, such as circulation and respiration (biological rhythms in the individual); or else the rotation of the Earth and the phases of the moon (physical rhythms). According to the author, the function of rhythm is not limited to the temporal dimension, since it is introduced in all manifestations of behavior, occurring in several areas: in motricity (movement coordination), in hearing (auditory stimulus recognition), in (systematic exploration of involvement), and in school learning (reading, writing, calculus).

With this author we can verify that time is the most important structure in its composition, but it does not present another. We can also verify the amplitude in which the rhythm is presented, in the physiology and biology of the subject as well as in the physical world, external to the individual. Piccolo (1993) points out that several factors are part of the rhythm formation in movement. He concludes that it is the rhythm that determines his own style, for he gives a temporal order to the movement, imposing a duration on it (characterizing it in a symmetry). Thus, the rhythm determines the progress (degree of velocity) of the movement, that is, the stage that the movement translates.

For this author, the composition of rhythm is not only highlighted by "time" but also by "accentuation", an element perceived as "very strong", that is, by speed. Then, the rhythm in the movement happens through an action of the muscle in the "time" of the "accentuation". When the rhythm is analyzed in the time of the movement, it can be seen that the temporal changes occur due to the acceleration and slowing of the basic movements; being at the end of the movement possible to see the acceleration and slowing of the body rhythm.

Here we can highlight a new element in the composition of the rhythm that is speed, but the author presents us only two structures in his understanding of rhythm, time and speed. This search to verify what the rhythm is composed in the studies presented by the above authors led us to the understanding that it is structured in three physical valences: time, space and speed. The objective of this research was to verify the complexity of rhythm and its importance in physical education classes.

2.METHODOLOGY

This research was carried out through a bibliographical review, which was based on the consultations in books, articles, specialized magazines, newspapers, doctoral theses, dissertations and other references on The rhythm related to the capacitative structures and the role of the teacher in the development of physical education classes at school.
3. DISCUSSION

Unlike body strength, body balance among other capacitive structures, body rhythm can not be understood as one of them. It is our understanding that rhythm only occurs when the capacitive structures work, excluding here the physiological actions that are not under the control of the subject.

Pallares (1983) understands rhythm as a vibration and is present in everything that exists. Artaxo (2000) argues that everything is done through rhythm, and to execute a rhythm with precision it is necessary, above all, to establish rapid communications between the brain that perceives and analyzes, and the body that performs. Keifer (1973) relates the rhythm to the idea of measure, order. De Meur (1991) argues that rhythm must be taken into account when one wishes to acquire a spatial notion.

These authors do not speak of the composition of the rhythm, they try to define the rhythm only, but in order to define the rhythm it becomes necessary to know about the composition of the rhythm, since in order for the subject to perform an action with rhythm and a proper awareness of the processes he performs) of how he can accomplish this action, he must understand that time and space are present. Mendes (1985) makes the relationship of dance and rhythm, stating that dance occurs in a space and at a given time, which characterizes rhythm. The author signals space and time as the rhythm in dance, but does not understand speed as an integral part.

Le Boulch (1983) states that the movement of man happens simultaneously in space and time, and defines rhythm as an organization of phenomena that unfold in time. When speaking of human movement, the author understands the presence of space and time, but when speaking of rhythm, he presents only time.

Barros and Braga (1983) understand time, space and rhythm as components of movement. Authors speak of time and space as being separate from rhythm, not as structures that compose it.

Still to Le Boulch (1982) the rhythmic experience of the movement adjusts the information of the space and must be maintained through the work of the temporal perception, as already pointed out previously. The author talks about time, space (although it does not affirm that space is something properly rhythm), and referring to speed nothing quotes.

The rhythm understanding that Fonseca (1995) presents is that the temporal structuring does not separate from the spatial one, and in saying that rhythm is the unit of extension of the temporal dimension, it is understood that space is also part of the rhythm.

For Piccolo (1993) the rhythm determines the progress (degree of velocity) of the movement. The author understands that rhythm is formed by time and accentuation, and that it is possible to see the acceleration and decrease of the speed of the body rhythm. Piccolo (1993) is the only researched author who cites speed when speaking of rhythm but does not present the space in his explanation of rhythm.

It is noticed that although many authors write about the rhythm, it is difficult to find some that in its explanations present the time, space and speed like composition of this one. Some even speak of rhythm as space and time, but speed is not understood as an integral structure of rhythm.

Reflecting a little on the structures that make up the rhythm, and thinking about the body rhythm, we can conclude some facts. If the time used to perform a certain movement increases, the space being the same, consequently the speed will be lower; and if the time is smaller, the velocity increases which leads us to understand that time and velocity (in the same space) are inversely proportional quantities. Example of this is: a person walking in the space of 500 meters, and to perform this action used 5 minutes, and thus, walked at a speed of 100 meters / minute. If the speed increases to 200 meters / minute, obviously the time spent to perform the course will be less, ie, it will be 2 and a half minutes.

Contrary to the above case, the space and time valences; when the velocity is constant, they are directly proportional, that is, if one increases the other increases also, and if one decreases, the other decreases. Using the same previous example: the speed traveled is 100 meters / minute initially in a space of 500 meters in which it takes 5 minutes to travel it. If the space is increased to 1000 meters, the time will also rise, being spent 10 minutes, not more 5. If the space decreases to 250 meters, the time will decrease to 2 and a half minutes; that is, they are directly proportional.

Still as an example, let's look at a jump rope action. When we present this action, either as content or as a teaching strategy, what do we usually see occur? Some students perform the jump exactly at the moment when the rope is very close to it, thus allowing it to pass under it, but we also see cases where the student stands next to the rope and says that it is ready, it starts a series of jumps with the expectation that the rope passes under him, but in this case at random.

Why does this difference occur between these subjects? Can we say that one has rhythm and another does not? What happens is that in the first case the subject already coordinates mentally the space that the rope will go through the speed that it is and the time it will take to reach the starting point, in this way it makes the jump allowing to surpass under his body. In the second case the subject does not perform an adequate coordination between these three physical valences and in this way has difficulty in knowing when the rope will return to its starting point.

These examples are to show that the three structures that make up the rhythm (time, space, velocity) are dependent on each other. We can not speak of rhythm only by space or time or only by speed. Rhythm is something complex to be understood, and perhaps a more efficient way to teach it in Physical Education classes is by considering its composition and how students "acquire" the notion of time, space, and speed, since subjects they must apprehend each of these notions and differentiate them, in other words, the individual must insert such physical valences by differentiating them in a system of relations and coordinating them in a joint action, can achieve a certain request in which the rhythm is present.

To present the rhythm to the pupil as "is everything that exists in the universe", "rhythm is life", and the like, no longer meet the educational needs if we understand the Physical Education discipline as a curricular component that must necessarily enable knowledge about its specific knowledge.

Thinking about the structuring and systematization of content for Physical Education classes is a necessary but insufficient condition in itself. It is also necessary for the teacher to be aware of the composition of the different contents. Faced with this need, we see not only a change in teaching activity, but also the possibility of a proper construction and understanding of reality by the students.

4. CONCLUDING

When thinking about rhythm we usually refer to music, dance among others; and in trying to define it, we usually conclude that "rhythm is in everything". However, when we refer to the school environment and more specifically in Physical Education classes, we understand that it is necessary for the teacher responsible to enable students to transcend the initial knowledge of common sense for scientific knowledge.

The rhythm, as you can see, is something complex and to understand it in its composition is not an easy task. The
reflection presented here becomes a principle for such an understanding, but to become understood it is necessary to study more deeply how children construct their understanding about the capacitive structures that will enable actions of rhythm, that is, the teacher who wants to understand the processes of cognitive development of the subject must also know how the process of developing the understanding of the notions of space, time and speed is realized, remembering that these notions are realized both in the physical and in the corporeal world.

If we understand that the discipline of Physical Education should enable knowledge, it becomes necessary for the teaching action to know what the content to be taught is composed and also how the subject develops the understanding of this knowledge on the agenda.

This study also partially demonstrates the complexity of the knowledge to be understood and taught in Physical Education classes, since it is evidenced that, even in an inferential way, a teacher whose pedagogical action is based only on "doing" does not for the pupil to understand the world as it is, for if we relate to the world in an elementary way only by imitating or copying it, we end up staying only on the surface of the phenomenon, without really knowing how our reality works.

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Keywords: Physical Education; content; body rhythm.
A disciplina de Educação Física deve possibilitar aos educandos a compreensão de sua motricidade, ou seja, possibilitar a apreensão de conhecimentos específicos. Para tanto, ocupa-se em ensinar os conteúdos que estão organizados em núcleos, eixos ou blocos de conhecimentos dependendo do referencial teórico. O objetivo deste estudo foi verificar a complexidade do ritmo e sua importância nas aulas de educação física. Esta pesquisa foi realizada através de uma revisão bibliográfica, que teve como base as consultas em livros, artigos, revistas especializadas, jornais, teses de doutorado, dissertações de mestrado e outros referenciais sobre o ritmo relacionado às estruturas capacitativas e o papel do professor no desenvolvimento das aulas de educação física na escola. Os resultados apresentaram que pensar na estruturação e sistematização do conteúdo para as aulas de Educação Física é condição necessária, porém insuficiente por si só. Torna-se também necessário, para o professor, ser sabedor da composição dos diferentes conteúdos. Diante dessa necessidade, vemos não somente uma mudança na ação docente, mas também a possibilidade de uma construção e compreensão adequada da realidade por parte dos alunos. Ao pensar sobre ritmo geralmente nos remetemos à música, à dança dentre outros; e na tentativa de definir-o, geralmente acabamos por concluir que o ritmo está em tudo. Porém ao nos remetermos ao ambiente escolar e mais especificamente nas aulas de Educação Física, entendemos que é necessário o docente responsável possibilitar aos estudantes a transcendência do conhecimento inicial de senso comum para o conhecimento científico.

Palavras-chave: Educação Física; conteúdo; ritmo corporal.

RESUMO
A disciplina de Educação Física deve possibilitar aos educandos a compreensão de sua motricidade, ou seja, possibilitar a apreensão de conhecimentos específicos. Para tanto, ocupa-se em ensinar os conteúdos que estão organizados em núcleos, eixos ou blocos de conhecimentos dependendo do referencial teórico. O objetivo deste estudo foi verificar a complexidade do ritmo e sua importância nas aulas de educação física. Esta pesquisa foi realizada através de uma revisão bibliográfica, que teve como base as consultas em livros, artigos, revistas especializadas, jornais, teses de doutorado, dissertações de mestrado e outros referenciais sobre o ritmo relacionado às estruturas capacitativas e o papel do professor no desenvolvimento das aulas de educação física na escola. Os resultados apresentaram que pensar na estruturação e sistematização do conteúdo para as aulas de Educação Física é condição necessária, porém insuficiente por si só. Torna-se também necessário, para o professor, ser sabedor da composição dos diferentes conteúdos. Diante dessa necessidade, vemos não somente uma mudança na ação docente, mas também a possibilidade de uma construção e compreensão adequada da realidade por parte dos alunos. Ao pensar sobre ritmo geralmente nos remetemos à música, à dança dentre outros; e na tentativa de definir-o, geralmente acabamos por concluir que o ritmo está em tudo. Porém ao nos remetermos ao ambiente escolar e mais especificamente nas aulas de Educação Física, entendemos que é necessário o docente responsável possibilitar aos estudantes a transcendência do conhecimento inicial de senso comum para o conhecimento científico.

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