

GYMNASTICS LEARNING IN ELEMENTARY EDUCATION: ORGANIZATION OF DATA ON REALITY

*AS APRENDIZAGENS DA GINÁSTICA NO ENSINO FUNDAMENTAL: A
ORGANIZAÇÃO DOS DADOS DA REALIDADE*

*LOS APRENDIZAJES DE LA GIMNASIA EN LA EDUCACIÓN PRIMARIA:
ORGANIZACIÓN DE LOS DATOS DE LA REALIDAD*

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Abstract: The purpose of this study was to analyze gymnastics learning interconnecting content and sign in Physical Education classes based on the “Critical-Overcoming” perspective in the 1st cycle of basic education. Aligned to the Marxist theoretical approach, the study used the method of ascending from abstract to concrete, from general to unique, in order to analyze 28 classes documented in a field diary. It found that the process of identifying data on reality materialized learning, raising theoretical thinking levels in learners that formed representations about gymnastics, which is a content and a symbol of Physical Education.

Palavras chave:
Ensino.
Aprendizagem.
Ginástica.

Resumo: O objetivo consistiu em analisar as aprendizagens da ginástica que entrelaçam o conteúdo e o signo em aulas de Educação Física na perspectiva crítico-superadora, no primeiro ciclo do ensino fundamental. Alinhada à abordagem teórica marxista, a pesquisa utilizou o método da ascensão do abstrato ao concreto, do geral ao singular, analisando 28 aulas documentadas num diário de campo. Concluiu-se que o processo de identificação dos dados da realidade materializou as aprendizagens elevando os níveis do pensamento teórico nos aprendizes que formaram representações sobre a ginástica, sendo esta um conteúdo e signo da Educação Física.

Palabras clave:
Enseñanza.
Aprendizaje.
Gimnasia.

Resumen: El objetivo fue analizar los aprendizajes de gimnasia que entrelazan contenido y signo en las clases de Educación Física desde la perspectiva crítico-superadora, en la enseñanza básica. En línea con el enfoque teórico marxista, la investigación utilizó el método de ascenso de lo abstracto a lo concreto, de lo general a lo singular, analizando 28 clases documentadas en un diario de campo. Se concluyó que el proceso de identificación de los datos de la realidad materializó los aprendizajes, elevando los niveles del pensamiento teórico en los aprendices, que formaron representaciones sobre la gimnasia, que constituye un contenido y signo de la Educación Física.

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1 INTRODUCTION

Our research is situated among those dealing with pedagogical practice and the struggle to change its direction, especially in the field of Physical Education (PE). The specific research topic is gymnastics in School Physical Education (SPE) during the 1st learning cycle (1st-4th grade). Its object of study focuses on gymnastics learning from the so-called critical-overcoming perspective of Physical Education.

Lisboa and Teixeira (2012) investigated gymnastics by assessing current scientific production in Brazil by 2011, emphasizing works on gymnastics in School Physical Education in national journals (*Motrivivência*, *Movimento*, *Revista do Colégio Brasileiro de Ciências do Esporte – RBCE*, *Motriz*, and *Pensar a Prática*) and the bank of theses of the Coordination for Improvement of Higher Education Personnel (CAPES). The authors found 51 articles dealing with problems of gymnastics, including 11 works on school gymnastics. At Capes, in turn, we consulted 166 theses and dissertations available during the 1987-2010 period, 152 of which were master's dissertations and 14 were PhD theses. We found nine works related to gymnastics in SPE – three PhD theses and six master's dissertations. These results showed that the production on gymnastics is still low in SPE, which justifies further research in the area.

To Lorenzini (2013), gymnastics in its specificity needs to be treated historically so that elementary education students take ownership of its bases and foundations, practices and materials, the consequences of exercise for vital functions, the abilities and skills contained in that knowledge, among others, thus appropriating knowledge.

Gymnastics is a teaching-learning content of Physical Education as a school curriculum component worked in different cycles of elementary education in order to contribute to learners' reflection and intervention in the area of Body Culture from the perspective of critical and overcoming knowledge. It is covered from its genesis under a view of historicity where the subject reflects on gymnastic action, the exercise of body type, with social significances and personal meaning (LORENZINI, 2013, p. 231).

To Lorenzini (2013), gymnastics is also a sign of SPE when it forms structures that allow raising student's thinking levels through higher mental abilities. The sign is in school learnings that generate definitions and concepts (Martins, 2011).

Explaining the sign, Vygotsky (1984, 1989) states that it promotes mediation in which a thing is interposed between one point and another with the intention of relation. It is a special instrument, a tool that is in the person and mediates subjects' relationship and attitude with others and themselves, being located between subject and activity, thus mediating the former's influence on the object.

For Soares *et al.* (2012),¹ in Body Culture-oriented Physical Education, the critical-overcoming methodology (COM) incorporated the Vygotskian principle of social interaction, which allows pedagogical reflection that enhances definitions and concepts related to bodily actions, emotions, towards developing students' thinking – generating cultural development of the historical subject that contributes to social change in the construction of historical rationality. It has also contributed to the learning of specific content (Game, Dance, Gymnastics, Sport, Fights, among others).

¹ The first version of this work is 1992, which is registered at the the International Standard Book Number (Câmara Brasileira do Livro, SP, Brasil) as *Metodologia do ensino de educação física/coletivo* de autores. São Paulo: Cortez, 1992. (Coleção magistério 2º grau. Série formação do professor)..

In that perspective, EFE is relevant when it seeks students' learning in the process of ownership and production of body knowledge whose main purpose is human development. At school, the discipline with educational content promotes apprehension of historical knowledge that is essential to develop thinking about Body Culture, thus expressing the political character of the educational act.

Still in order to justify the study, we resort to the theoretical framework underlying learning cycles and the construction of students' theoretical thinking, focusing on the arguments of the critical-overcoming methodology (COM) and Historical-Cultural Psychology (HCP), since, for cycle-based curricular organization of knowledge, the COM assimilated benefits of HPC² based on Vygotsky and his successors³.

In view of the above arguments and elements, our question is: what are the learnings of gymnastics that intertwine content and sign in the first cycle of elementary education that are addressed in Physical Education under the critical-overcoming perspective? Our goal was to analyze gymnastics' learnings by intertwining content and sign in Physical Education classes from the critical-overcoming perspective, in the first cycle of elementary education.

We expect to contribute to the debate about School Physical Education based on gymnastics' learnings with implications for pedagogical practice.

2 THEORETICAL BASES

Next, we list the fundamental conceptual basis for this research through arguments posed by Leontiev (1978), Vygotsky (1984, 1989), Martins (2011), Soares *et al.* (2012) and Lorenzini (2013). We close by establishing nexuses and relations with gymnastics learnings, for it is one of Physical Education's contents.

For Leontiev (1978), the development of the psyche appeared with human society, with external phenomena of material and intellectual culture, with work. That is how logical thinking develops, or acquisition of knowledge (concepts) that occurs through a process of appropriation of culture created by previous generations, passing to the next generations that multiply and perfect knowledge through work and struggle to acquire the cultural wealth transmitted to them, thus developing humanity.

In turn, Vygotsky (1984) contributed the idea that knowledge needs to be worked at different levels during development of thinking, seeking links between the actual level and the potential level. For the author, school promotes the overcoming of the real development level toward the formation of concepts at different levels, in a process under construction. Potential development brings forth something new in the spheres of higher functional processes, which are essential to the formation of historical subjects.

School is in charge of the cultural development of higher mental functions that, according to Vygotsky (1989), include: perception of the object, voluntary attention, intervened memory, imagination. Their development demands the process of internalization of learnings, generating definitions and concepts produced under the condition described below.

Each function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological) (VYGOTSKY, 1989, p. 223).

² Historical-Cultural Psychology studies the human psyche and represents efforts to formulate and consolidate scientific Psychology based on the philosophical concept of dialectical and historical materialism, with the methodological principles that support it, allied to the ideals of overcoming the capitalist political-economic system (MARTINS, 2011).

³ Luria and Vygotsky (1992) looked into human development. Their concern to avoid an essentialist and ahistorical view of human nature led to interest in the historical development of the human psyche emphasizing the practical, productive side of society that needed to create tools for human work developing man's psyche. Objectivity of knowledge is situated in the social and in man's productive activities in history.

We understand that learnings that generate the development of signs start with an external, collective, social, interactive process, advancing to internalization at each subject's mental level when operating signs.

The Vygotskian legacy contributed to the development of the human psyche⁴ from determinants located in culture historically systematized by human labor, investigating the development of higher mental functions. These are still not fully conceptualized today, but in Vygotskian legacy, according to Martins (2011), they are cultural formations involving man's mastery over nature and over himself, and sustain culturally developed complex activities.

Vygotsky (1984) explained human thought through social interactions that allow changing nature and being changed by it, with the body and the environment as reciprocal and complementary influences from the biological and the social in development. According to the author, internalization of socially rooted and historically developed activities is the characteristic feature of human psychology. Internalization is the internal reconstruction of an external operation, that is, the process that transmutes external formations in internal formations.

Vygotsky (1984) formulated the idea that learning leads to development, introducing the category called zone of proximal development (ZPD)⁵. Under this category, according to students' levels when they reach a certain target in cooperation with adults or with more experienced colleagues, their subsequent independent performance in achieving a new goal can be predicted. Therefore, according to the said author and his collaborators (DAVYDOV, 1982; LEONTIEV, 1978; LURIA, 1992), definitions and concepts are formed that begin with syncretic thinking and reach synthetic thinking.

We understand that the syncretic thinking stage is that of sensitive experience, of disordered impressions, in which learners perceive data of reality that, in this research, are related to gymnastics, in a diffuse, mixed way, with little relation to each other and with vague, subjective nexuses guided by apparent perception, by images. Synthesis, in turn, is a new product coming from the development of thought about knowledge that, for Shardakov (1978), allows new understanding of reality so it cannot be reduced to mechanically joining parts to form a whole or the simple sum the elements of a set because it requires the establishment of relations between the parts and the whole.

Based on studies by the authors above, Varjal⁶ and Soares *et al.* (2012) treated learning cycles in Physical Education as an organizational process of thinking about knowledge in which students are the subjects who interpret and understand knowledge, and content is found and explained in a process of approximation to the real. This reference is based on the view of curriculum organized in cycles, which aims at overcoming the series system.⁷ It

4 The psyche is the material and ideal unity that develops socially. It is the set of social relations transported to the interior and converted into the foundations of the social structure of personality (MARTINS, 2011).

5 The ZPD defines the distance between the level of real development, established by the ability to solve a problem without help, and the level of potential development, established by solving a problem under the guidance of an adult or in collaboration with another partner. It defines the functions that have not yet matured but which are in the process of maturing, in an embryonic state. In this, education should address the functions which are under development in the ZPD (VYGOTSKY, 1984).

6 VARJAL, E. **Subsídios para o trabalho pedagógico no ciclo de organização da identificação dos dados da realidade**. Recife, 1990. mimeo.

7 In the series system, knowledge was broken down, being contained in the disciplines, distributed along years and divided into units for controlling the speed of learning. A minimal amount of knowledge to be mastered by students was established. Knowledges must be checked in specific evaluation processes. So, those who master it will progress and those who do not learn it will repeat the year or leave school; there is also the logic of the exchange of learning for grades. School distances itself from its relationship with life, with social practice. It emerged from capitalist society's needs for skills, i. e., its productive forces needed a "school that trained, quickly and serially, human resources to feed the production in an hierarchical and fragmented way" (FREITAS, 2003, p. 27).

proposes that students' thinking references are expanded as a spiral, finding data on reality and interpreting, understanding and explaining knowledge.

Soares *et al.* (2012) chose a perspective based on knowledge processes, where students can handle different cycles at the same time, but the cycle has its own configuration that defines the levels of complexity of thinking about the content. The first cycle approaches "Organization of identity of data on reality".

According to Lorenzini (2013), this is the stage of syncretic thinking, of sensitive experience, of disordered impressions, when learners perceive data on gymnastics in a diffuse, mixed way, with little relation among themselves, with vague, subjective nexuses guided by apparent perception, by images. Students should be instructed to form representations in their thinking (definitions that precede concepts) when categorizing objects, classifying them and associating them according to their similarities and differences, both visible and felt. This cycle is the basis for the formation of generalizations corresponding to the second and third cycles of elementary school (now 4th to 9th grades).

In its general aspects, that discussion has been enlarged in Historical-Cultural Psychology, e. g. Martins (2011). The author states that it is important to recognize higher mental functions and study their development in the formation of individuals as essentially cultural beings, knowing that the development of theoretical thinking corresponds to the appropriation of cultural signs. For the author, "the substratum of all higher formation is lower formation, which it negates and preserves, that is, it transforms by continuous confrontation between their cultural and natural expressions respectively" (MARTINS, 2011, p. 72). Thus, we understand that the old, just like representations of gymnastics, does not disappear when the new is born; it is rather overcome by it and, by being denied by the new, it is transported to it and exists in it.

Martins (2011) examined the role of education in psychological development, discussing and relating the conception of man and knowledge, of learning and teaching in their psychological relations. For the author, man as a social being has his own development conditioned by work that links him to nature, but his practice, production and achievements characterize him as a humanized human being. That is, legitimacy in school education requires the fundamental need for appropriation of humanity's cultural heritage, whose function is to

[...] promote socialization of universal knowledges that represent the highest scientific and cultural achievements of mankind, in the absence of which it is impossible to capture the laws governing the historical development of all phenomena (MARTINS, 2011, p. 215).

By relating interdependencies between teaching and the development of functional processes, Martins (2011) confirmed that the development of human psyche is identified with the formation of higher psychological functions and that, in school education, such formation is ascribed to teaching systematically oriented to transmission of non-daily, scientific concepts. Therefore, not all actions and contents develop those functions.

We understand that the arguments of the authors above underlie learning in all content worked in pedagogical practice in general, including the specifics of Physical Education, learning cycles, and gymnastics. About the latter,

[...] the fundamental problem posed to the subject of gymnastic action is to challenge the very possibility of exercising aimed at theoretical thinking. In this way, gymnastics becomes a sign which is in subjects and mediates between them

and the object of study, thus producing the formation of initial representations and moving to generalizations. (LORENZINI, 2013, p. 109).

With the arguments presented in the theoretical basis of this research we identified that gymnastics has the potential to be one of the contents and a sign of Physical Education, which enables the establishment of nexuses and relationships with the theoretical framework presented here.

3 METHODOLOGICAL DECISIONS

This study is aligned to the Marxist theoretical approach, emphasizing the material phenomenon with its multiple determinations, describing 1st-cycle learning and revealing meanings and significances that underlie principles and categories. Its theoretical basis was specialized literature on the object of study and its explanations.

The instrument used to collect empirical data was a field diary resulting from experiments on the process of continuing education of PE teachers in state schools, produced by two teachers of that discipline working in the school investigated.

One group of 1st-cycle students was selected at the school. They were observed during their 1st unit of the 2nd and 3rd years of primary school. That is, PE classes were taught in two teaching-learning units of gymnastics, in two consecutive years, always in the 1st unit of the institution, which followed the theoretical and methodological guidelines of the curriculum of their State.

Classes were planned, applied, evaluated, recorded and transcribed by PE teachers, complying with the ethical research principles by seeking permission from the school and those responsible for the children to collect data showing comforts, discomforts and benefits, including those for children, according to the resolution for ethics and research with human beings No. 466/2012.

The study relied on bibliographic and documentary sources to answer the question-synthesis; data collection and treatment instruments and techniques; organization and systematization of results, coming to the analysis of the material and arguments. (SÁNCHEZ GOMBOA, 2008).

The empirical source was our field diary with 61 single-spaced pages. The instrument covered registration and description of data on the systematization of gymnastics in Physical Education classes, including: teaching plan, definition of general and specific objectives, content, teaching methodology classes, assessment of student learning, among others. It recorded 28 lesson plans (class, workshop, seminar, festival)⁸ given to a single class with 23 students, which were included because they were finishing the 1st cycle of learning and had been having PE classes with one of the school teachers for over a year.

To analyze the material collected, we used the method of rising from abstract to concrete, from general to singular, in constant movement. The method is based on Davydov's (1982) research on knowledge about the dialectical approach in the formation of concepts, emphasizing the principle of adequate activity that changes the object and the subject of learning by rising phenomena perceived as concrete to substantial abstraction, thus expressing the inner and original contradiction of the object investigated. Abstraction proceeds to concrete generalization, deducting the several particular manifestations of its development base. Thus, the true theoretical concepts explain the inner qualities of the objects and guide practical activity.

In real movement, such as gymnastics in our research, according to Cheptulin (2011), the similarity of the phenomenon investigated is expressed by the general and objects or confronted manifestations are distinguished by the particular. The singular is the property that is not repeated in material formation, since it is formation itself, and the particular one includes singular and general in a totality.

According to Cheptulin (2011), the properties and the links that are repeated in the objects and processes constitute the general dimension. Each object represents the unity of singular and general, of what is not repeated and of what is repeated. Singular and general manifest themselves in the particular. The correlation between singular and general in the particular dimension also manifests itself in the change from singular into general and vice versa, in the process of movement and development of material formations.

For Kosik (2011), the method of progression requires appropriation of matter through mastery of the material; analysis of each form of development of the material; research of internal coherence. Under this logic, we now approach empirical data, results and discussion of research.

4 DISCUSSION AND ANALYSIS

In this topic, we focus on gymnastics in the cycle of organizing data on reality. According to the field diary, the general objective listed in the teacher's plan was students' action to identify knowledge/content: Gymnastics, Game, Dance, Wrestling, Sport, contextualizing them, relating them to daily life, reflecting on definitions, attitudes, procedures and actions put into practice (skills), reorganizing knowledge approached in classes, workshops, seminars and festivals, as well as focusing on reality data and forming representations in each topic of Body Culture, extrapolating knowledge to the school community.

We note that this objective translates fundamentals that guide the materialization of the references of Body Culture (SOARES *et al.*, 2012) incorporated into learning cycles, developing curricular experiences that address the contradictions of negation of knowledge and the reduction of human beings' ontological capabilities.

Based on the general objective of the cycle, general and specific objectives were defined to address gymnastics in a single class, worked in two thematic units and two consecutive years, totaling 28 constitutive classes of the school's curriculum. We outlined in Table 1 the quantitative results in the set of PE classes dealing with gymnastics, in the following formats: class, workshop, festival and seminar.

Table 1 – Record of 28 classes

TIME	CLASS-HOUR	WORKSHOP	FESTIVAL	SEMINAR	TOTAL
1 st CYCLE	2 nd year – 11 h	-	2 class/hours	-	13 class/hours
	3 rd year – 9 h	2 class/hours	3 class/hours	1 class/hour	15 class/hours
TOTAL	20 class/hours	2 class/hours	5 class/hours	1 class/hour	28 class/hours

Source: First cycle field diary.

By analyzing the initial eight lessons of the 2nd year of elementary school, we found that the PE teacher emphasized that gymnastic exercise demanded a careful attitude not to hurt others,

guiding the class to identify the meaning of gymnastic fundamentals. The 9th lesson was held at the city zoo, exploring possibilities of gymnastic action on materials that did not exist at school. In that pedagogical time, lessons enabled students to explain the visible real and the appearance of gymnastics actions, producing definitions such as: spins mean turns with the body; balances mean not falling; in jumps we can rise a little in the air and then fall (land) without getting hurt; among others.

We inferred that in the abovementioned learnings, students formulated definitions of representations of gymnastic activity typical of the 1st learning cycle in SPE. They materialized Vygotsky's (1984, 1989) explanations about the sign as a tool that mediates the subject regarding the object. We understand that in the 1st cycle, because of its primarily sensory nature, students grasp external manifestations of the object studied, its pseudo-concreteness, its representations (KOSIK, 2011), which are specific to the condition of that cycle while they are the contradiction necessary for the development of students' thought.

Between the 10th and the 13th lessons, content was reorganized and shared in the 1st School Gymnastics Festival, evaluating and closing the teaching-learning unit. Students' verbalization records highlighted the contents worked and shared in the Gymnastics Festival – jumps, rolls, stars and vela. For students, rolling and stars are spins; vela is balance; gymnastics was identified for studying jumps, spins, balances, exercising.

Through the field diary, we found that, at the festival, children observed other classes and, on being asked about the content they cited: human pyramids, rollings, jumps, jump rope, throwing the ball, bridge, candlestick, "potato chips" 1, 2, 3, saying it is a game of balance with a statue. They also voiced that gymnastic exercise can happen on the street, in the square, on the beach, at the fitness center, at home, in zoo's toys, and it can be practiced with their aunts and uncles, with their grandmothers and grandfathers, with their parents. When asked about the concept of festival, they explained that it is a party, film presentation, gymnastics, dance, music, and the class presentation was gymnastics, but they said that the festival is not only performance; it is also evaluation because they observed their colleagues doing gymnastics and the content learned in class.

We noted that in the 1st learning unit, the 2nd year ended with the definition of what a festival is and what gymnastics is, establishing relations between exercise and study and leisure time. The contents were treated with definitions prior to concepts, not isolated, and syncretism was overcome by experiences and experiments in class. The work dealt with the fundamentals expressed in different possibilities of bodily actions of children, who were questioned in order to identify similarities and differences in the content (jumping, spinning, balancing, swinging, climbing).

Students' representations make up and exceed syncretic thinking (KOSIK, 2011; MARTINS, 2011; SOARES *et al.*, 2012; LORENZINI, 2013) that captures circumstances, the appearances of reality, that is, they are forms of knowledge that allow us to find content on related and matching traits, thus identifying sensory data from reality, but which will later serve as the substrate to start forming concepts.

In the 14th lesson of the cycle – the 1st lesson of the gymnastics unit of the 3rd year, the content worked in the previous year was reviewed. Written records were distributed by the PE teacher to all students in order to review knowledge already seen, thus organizing data on reality. In short, for students, one learns gymnastics in order to play, to relax at leisure, in times of rest and games, but school is a place to learn by studying.

After the classes, and at the end of 40 minutes of continuous gymnastic exercises feeling distinct heart rhythms, students showed curiosity and appropriation of knowledge about vital

functions, addressed through gymnastic games such as “Jump Rope”, “Statue”, etc. (these are activities that enable experiencing technical fundamentals of gymnastics). The children felt the pulse in different parts of their bodies and demonstrated understanding in a synthesis, relating gymnastics exercise with the functioning of breathing and heartbeat, saying that during the practice of gymnastics, the heart works better, pumping blood and making it circulate through the body.

We found that students related gymnastics with their own vital functions, and it aroused curiosity and the possibility of interdisciplinary work with other area of school knowledge (Science) and the relationships with health-related care (underlying the content of gymnastics). This reveals multiple determinations of the object (KOSIK, 2011).

We found that, between the 17th and the 27th lessons, learners identified Artistic and Rhythmic Gymnastics, and investigated possibilities for gymnastic action in a park, ending with the reorganization of content shared in the second school festival. The final seminar took place at the 28th lesson studied in the 1st cycle, in the 3rd-year classroom. They watched video synthesis about the content addressed in the unit, reviewing the gymnastic games, the study of vital functions, the experience in the park and the class production shared at the festival. The return to the images was intended to achieve objectives in the final synthesis of the unity, thus materializing their learning.

When analyzing knowledge, we found that, in general, the specific contents worked in two consecutive years in the gymnastics unit included: technical fundamentals; gymnastic games and play; Artistic and Rhythmic Gymnastics; vital functions. Practical activities resulted in content that enabled reflecting on emotions and values such as respect, cooperation and the right to learn, creating a positive self-image before exercises. The contents were experienced, lived, learned in lessons, festivals and seminar.

Based on Cheptulin (2011), we infer that the learning process was generally marked by thoughtful gymnastic exercise, through dialogue and body and verbal participation, with the experience of different possibilities for walking and jumping, for balancing oneself and objects, for spinning/rolling, swinging, climbing, exploring primarily built space as well as mobile and fixed materials in the school.

We recognize that, by the end of the 1st cycle students had identified: the main technical fundamentals of gymnastics (jumping, spinning, balancing, swinging, climbing, among others); that Rhythmic Gymnastics includes devices such as bows, ribbons, balls, and with those devices we practice jumping, turning, balancing, swinging; children remembered that they used the tape to do “little snake, spiral, an eight.”

We found that, when exercising at school, children also start feeling/knowing the signals of vital organs (heart, lung), the position of their bodies in relation to space – standing, sitting, lying, crouching, suspended, the execution of bodily actions – jumping, spinning, balancing, among others, and related them to sports that use materials/mobile devices such as Rhythmic Gymnastics and fixed apparatuses in Artistic Gymnastics. In this context, the formation of representations related to gymnastics was demonstrated in students’ explanations about regarding the content.

Based on Cheptulin (2011), we infer that in the 1st cycle the general dimension in gymnastics was found in repeated properties and connections, which represent the similarity of the object and its process, and emerged from the fundamentals (general techniques that, in exercise, generated curiosity, challenges and emotions); of different body positions; of

the required exercise position; of vital functions with their organic rhythm; of co-educational, cooperative, supportive values that emerged from learning and sharing content.

The particular in gymnastics, in turn, made the synthesis between the singular and the general, constituting the tripod of specificity, distinguishing objects confronted and establishing their difference. It presented with a type of body effort that sets the performance needed for exercise/gymnastic expression, practiced without materials or with different mobile and fixed devices, thus establishing differences between types of gymnastics and relating them to the object of study in general and in its uniqueness.

The singular in gymnastics lies in gymnastic action, in quality as it is, in itself, naked, singular as a practice with its own essence and which identifies the phenomenon, with its own object and its historical process, its space, distinguishing it from other bodily practices. Gymnastic action requires the subject's full attention and concentration in order to know and practice the exercise itself, naked, interacting with itself and others, in the space and time for reflection and pedagogical intervention.

5 CONCLUSION

In sum, in order to investigate gymnastics in the 1st learning cycle in the Critical-overcoming perspective of Physical Education, it was necessary to describe a sequence of learning experiences that guide students towards mastering the matter – gymnastics – generating the development of cognoscitive skills necessary to form representations by changing learners' consciousness in the cycle investigated.

Gymnastics is a content and a sign of SPE that increases levels of thinking in 1st cycle students by forming representations. That is, gymnastics' mediation entered the inter-relations between the essential properties of matter and consciousness.

We believe that this study helped us think about the transformative pedagogical practice of gymnastics learning in SPE, but further research is needed on elementary and high school. Deepening and broadening the discussion can generate more contributions to pedagogical practice.

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