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Ludic and Interdisciplinarity as Teaching Practice in the 4th Grade

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Abstract: This research is in progress and analyzes the extent to which ludic is applied in Elementary School teaching practices in a school of Santos Municipal Educational System, within an interdisciplinary approach, taking as example a 4th grade group. To emphasize the importance of ludic, it is based on authors such as Huizinga, Brougère, Caillois and Piaget. Since elementary school teachers in Santos teach most of the school subjects, it is important they work integrating disciplines, using the interdisciplinarity, which in this research is based on Gatti, Pombo and Santomé. We suggest, through this research, a lesson planning previously used during two years in the Pedagogical Experience classes of the Total School Program, which consists of three main points: icebreaker referring to the central theme of the lesson; expository class and ludic activity (games) linked to the central theme. For this research we will make a qualitative analysis through interviews, questionnaires and observation, seeking to understand to what extent ludic is interdisciplinary inserted in the teaching practices of the analyzed group.

Key words: ludic, interdisciplinarity, dynamic classes, planning

1. Introduction

This decade is being marked by technology evolution and a globalized world, where everything happens in a dynamic and practical way. Following these changes, today's children and teenagers no longer have the same characteristics as before. Whether at home or at school, their activities are differentiated and they seek what attracts their attention.

On the other hand, the school has not been following this dynamism. This is evidenced by the fact that elementary school in Santos still has characteristics of the traditional educational method, with fully expositive classes and classrooms with desks throughout the room, facing the blackboard.

As if that were not enough, not all teachers use planning and intentionality in their practices, basing their classes only on textbooks and other written content, providing a time-consuming lesson and often with disconnected activities both because they are not linked among themselves, and because they rarely present interdisciplinarity.

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And with this, we see more and more students in the classroom who are restless, discouraged and without focus on the content taught by the teacher.

Thus, the problem delimitation of this research was based on the extent to which ludic is planned and inserted in an interdisciplinary and intentional way in the curricular content of the 4th grade of elementary school, in a school unit of Santos Municipal Educational System.

Our hypothesis is that ludic, when inserted in a planned, intentional and interdisciplinary way in the curricular content, brings dynamism to the classes and helps in the assimilation and accommodation of knowledge, allowing the teacher to evaluate the acquisition of these by the students. In addition, ludic provides an atmosphere of interaction and motivation.

This research aims to suggest a lesson planning in which each content is intentionally planned in an interconnected sequence, where ludic permeates the actions through "ludic productive activities"¹, motivating teachers and students to a pleasant and stimulating class.

The lesson planning we suggest was applied during two years in the Pedagogical Experiences classes, in one of the Centers of the Education Program "Escola Total", of Santos Education Department, and was given to children between 6 and 14 years old, therefore, we wish to investigate its application for the 4th grade of elementary school regular education, where we hope to obtain the positive results obtained previously.

This method consists of three moments: 1) icebreaker activity; 2) dialogued exposition of the "subject" (main content) of the lesson; 3) ludic application of content through games.

The research aims to determine if it is possible to implement the lesson planning in an interdisciplinary way, within the format of the fourth grade of elementary school, based on the premise that dynamic, creative and interdisciplinary classes should be part of the teacher's style. He must have a ludic style of teaching, captivating and attracting the student to his classes, and this is achieved through ludic attitudes.

Soares, Porto (2006) mention that the devaluation of ludic activities only occurs because, "in general, teachers are unaware of the innumerable contributions to the pedagogical process."

Ludic activities previously planned, with intentionality and linked to the content being taught, have much to offer both the pedagogical richness and the charm it causes in everyone, even in older children and teenagers. It makes possible an acquisition, understanding and greater fixation of the content, besides making the class attractive and pleasant, as we noticed through bibliographical research.

Ludic, permeating the creative style of the teacher, motivates and inspires those who are inserted in this context, since it goes beyond the activities, is in perceiving the ludic possibilities in each learning, in all situations.

According to Santos (2006), "the pedagogical make of every educator must be planned; the inclusion of ludic in education must also be organized with objectives, means and ends to be achieved."

Therefore, we need to be motivated teachers and also motivators, because the ludic climate only occurs where there is pleasure and lightness. To do this, we need to be open to innovations, to creative methods for our classes, without getting caught up in the self-indulgence or sameness of everyday life.

It is necessary to see opportunities to transform simple activities and attitudes into dynamism and creativity. For in ludic there is pleasure, motivation and involvement. In the words of Horn et al. (2014), "what is sought in education by playing? Learning with pleasure."

¹ Expression used by the authors Ressurreição; PORTO (2006).

2. Literature Review

2.1 LUDIC

According to the Michaelis Dictionary, Ludic means: "related to games, toys or fun; relating to any activity that distracts and amuses; pedagogy: concerning jokes and fun as an educational tool."

According to Roloff (2010), the word ludic comes from the Latin *Ludus*, which means play, fun, joke, school. For her, this play also relates to the conduct of the player, who plays and has fun. The author affirms that the educational function of the game allows the learning of the individual, his knowledge and his understanding of the world. According to her, in the history of our development the human being received numerous names: *Homo Sapiens*, because it has as function the reasoning to learn and to know the world; *Homo Faber*, because he makes objects and utensils; and, *Homo Ludens* because he is able to dedicate himself to the ludic activities, that is, to the game. It states that the act of playing is as old as humanity itself, playing is a natural activity of the human being and through play and games, it reproduces and recreates the world around him.

Caillois (2017) describes the types of games and separates them into categories, according to their characteristics. For him, social schemes are developed through play, since cordiality, respect and resilience must be present at the moment one plays. According to him "games to which, without exaggeration, a civilizing virtue can be attributed, they illustrate the moral and intellectual values of a culture and still contribute to its definition and development". Caillois describes that the game is a free activity (cannot be required); separated (with limits of space and time); uncertain (its result is not predicted); unproductive (neither creates goods nor wealth); ruled (submitted to conventions) and fictitious (different reality, or frank unreality in relation to everyday life).

Gentile (2005) and Maria et al. (2009) state that exciting situations, such as plays and games, activate the limbic system, part of the brain responsible for emotions. The author cites that the release of neurotransmitters then runs and with this, the brain circuits become faster, facilitating the storage of information and the rescue of those that are stored.

Brougère (1998) talks about the play culture, which is inherent in children, that "it has a number of references that allow interpreting as a game activity that could not be seen as such by other people". For Brougère, playing is not an inherent activity of the individual, that is, it is not innate, it must be learned. He says that play culture takes over elements of the culture of the child's environment.

Almeida (1994) discusses the role of the educator and the different stages of development (based on Piaget) about the play. He states that the real, true, and functional sense of playful education will be guaranteed if the educator is prepared to do so. Almeida says that nothing will be done if he does not have an in-depth knowledge of the essential foundations of playful education, sufficient conditions to socialize the knowledge and the predisposition to carry it forward. The author states that a great educator makes the game an art, an instrument to promote education for children. He believes that the best way to get the child to activity, self-expression and socialization is through games.

Through ludic, social schemes are developed. According to Caillois (2017):

The game certainly supposes the will to win by making the best use of these resources and by refusing the prohibited blows. But it demands much more: one must be very courteous to the adversary, trust him on principle and fight him without animosity. It is also necessary to accept in advance any failure, lack of luck or

fatality, to accept defeat without anger or despair. Whoever becomes angry or whines becomes discredited. Indeed, as every new game appears as an absolute beginning, nothing is lost, and the player, instead of reproaching himself or discouraging himself, must redouble his efforts.

Through the learning that ludic provides, it is possible to enjoy its benefits to teach and to emphasize knowledge of several areas. According to Wadsworth (1977):

[...] because the game is such a powerful means for children's learning, wherever it can be turned into reading or spelling initiative, it is observed that children fall in love with these occupations before as dull.

Roloff (2010) agrees with this statement and states that play can be seen as a mediating resource in the teaching-learning process, making it easier. The author states that play enriches the dynamics of social relations in the classroom and enables a strengthening of the relationship between the person who teaches and the person who learns.

For Santos (1997), the development of the ludic aspect facilitates learning, personal, social and cultural development, collaborates for good mental health, prepares for a fertile inner state, and facilitates the processes of socialization, communication, expression and knowledge construction.

Kishimoto (1994) makes a study about the meaning of game, and that its conception varies according to each culture. The author states that play is one of the main activities of the child, not only because of its frequency, but also because of the influence it causes in its development and learning. It also states that in the way the child plays, we can analyze their social relationships and behavior. For her, the joke is the action of playing in a ludic way, where there is pleasure, being fun and can teach, depending on its context of application.

Huizinga (2000), in his work *Homo Ludens* written in 1938, considers the game - within the same concept of ludic - a cultural manifestation. For him, ludic plays a fundamental role in learning. According to the author, in the game there are rules, order. There is also the discovery of self, the possibility of experiencing and modifying reality.

Luckesi (2004) defends the ludic as a helper in the formation of a healthy human being, for himself and in the coexistence with others. For him, "playing, acting ludically requires a total surrender of the human being, body and mind at the same time. The play activity does not allow division". He affirms that play activity, because it is active, offers the learner the possibility of discovering their limits, surpassing them. For him, ludic is an internal phenomenon with manifestation on the outside, and that propitiates the learning to be. He proposes that any activity can be a ludic experience, if there is pleasure and feeling of fulfillment in it.

According to Gasparim (2003 *apud* RESSURREIÇÃO; PORTO, 2006), we broaden our perception of the importance of elucidating the ludic dimension in the teaching work from the integration of the principles of play with pedagogical principles, according to the "historical partner of the construction of knowledge".

For Roloff (2010), the educational institutions have still very little exploited the game, even for some time that the investigations related to the theme have been giving prominent value to ludic as leverage learning. According to her, we have to end this useless concept, that after we grow up we can no longer play, and enjoy each new situation to learn something. She states that if this can be done through playfulness it is even better.

According to D'Ávila (2006), every class is ludic as teachers and students are pleasantly integrated and focused on the content that one has to work with.

For Roloff (2010), ludic can bring to class a moment of happiness, whatever the stage of our lives, adding lightness to the school routine and making the student better record the teachings that come to him, more

significantly. It can be used to leave the teenager student "on alert", ready to receive information, and the teacher should have the conviction that this is possible. A teacher who does not believe in ludic as a method of work can be lost in speech, making access to knowledge difficult rather than facilitating it. For the author, it is not only the teacher's duty to arouse the learner through play, but to help him effectively build his or her knowledge. She states that the teacher should use the play as an important factor of mediation and integration of the student with reality, because the student does not only learn in school.

Ressurreição Porto (2006) mention that considering that ludic plays a fundamental role in the stages of psychological and sociocultural development, we recognize that the practice of play pedagogy is only one dimension of the teaching work that can make it more alive and engaged in its objectives and therefore other dimensions need to be elucidated for this purpose.

According to Luckesi (2000), a recreational education has in its base an understanding that the human being is a being in movement, permanently constructive of itself.

2.2 The Elementary School Teacher and the Interdisciplinarity

The elementary school education in Santos counts on a professor who teaches a great part of the disciplines, such as Portuguese, Mathematics, Geography, Sciences, among others. To these teachers, over the years and even today, some nomenclatures are attributed to their function in the classroom, but the commonly used is "multipurpose".

Lima (2007) defines a multipurpose teacher as the educator who acts in the initial years, being able to appropriate the basic knowledge of the different areas of knowledge that currently make up the common base of the national curriculum of the grades of Elementary School and is able to articulate them, developing an interdisciplinary work.

According to the Michaelis Dictionary (2018), the term "multipurpose" means: 1) Which has several functions or possibilities of use; multifunctional; 2) Which has several values; 3) Which is effective in varied tasks; versatile; 4) Which involves different fields of activity.

Barros (2016) mentions that polyvalence must be ensured by the development of general competences, based on technological, scientific and human as well as creative, autonomous, critical and capable. The author states that the elementary school teacher needs to appropriate the basic knowledge of the different areas of knowledge, articulating them in an interdisciplinary way. For her, a multipurpose teacher is a professional capable of forming human beings in all its dimensions.

Due to her multiple knowledge of different areas and to teach a large part of the curricular subjects of Elementary School, the polyvalent teachers have great interdisciplinary potential in their hands, since they teach most of the disciplines and can plan them in an interdisciplinary way. However, it is of the utmost importance that these teachers be stimulated to this look through continuous formations, but also, in their initial formation. Gatti (2009) points out that — in relation to the preparation of the future teachers — it is necessary "a more in-depth reflection on the sufficiency or adequacy of the polyvalent perspective and the interdisciplinary perspective, as recommended in the CNE Guidelines document" (p. 38).

Pombo (1994) states that in the literature specialized in interdisciplinarity there is no univocal definition of its concept. As an example, the author cites the statement of Jean Luc Marion (1978; Pombo, 1994), which defines interdisciplinarity as the cooperation of several disciplines in examining the same object. For Piaget (1973; Pombo, 1994), interdisciplinarity appears as mutual interchange and reciprocal integration among various disciplines

resulting in reciprocal enrichment. According to the author, Palmade (1979; Pombo, 1994) goes further, proposing that by interdisciplinarity one understands the internal and conceptual integration that breaks the structure of each discipline to construct a new and common conclusion to all of them, in order to give a unitary view of a sector of knowledge. According to the author, on the basis of only these three definitions, we can realize how the meaning of the word interdisciplinarity "[...] is subject to significant fluctuations: from the simple cooperation of disciplines to their mutual exchange and reciprocal or, yet an integration capable of breaking the structure of each discipline and achieving a common axiomatic" (Pombo, 1994, p. 10)

Santomé (1998) states that at the beginning of the twentieth century, the cultural contents that formed the school curriculum were often decontextualized, far from the experiential world of students, and school subjects were worked in isolation. With this, it was not propitiated the construction and the understanding of meanings that allowed its structuring based on the reality. He affirms that the school institution betrayed its authentic raison d'être, which was to prepare citizens to understand, judge and intervene in their community, in a responsible, fair, supportive and democratic way. The author points out that, insofar as the fragmentation of cultural content and tasks also became a reality here, students faced rather insurmountable obstacles to understanding the authentic meaning of teaching and learning processes.

Although much research and legal documents address the importance of interdisciplinarity in teaching practices, it is not a reality in schools, disciplines continue to be addressed in a fragmented way. Teachers find it difficult to change their practices, since they are a reflection of the way they have learned, but also of the lack of a continuous interdisciplinary formation - for a very important question to be raised is: however much one agrees with the theories already constructed about interdisciplinarity, do teachers know how to apply it? Since they do not have formations that help them, they need to seek knowledge by themselves, through studies and research.

Based on this, the teacher can work the disciplines in a way that does not disintegrate the real, so as not to mutilate or reduce reality, but contextualizing its specificity, addressing all the aspects in which other disciplines are inserted. In this context, the polyvalent teacher has in his hands a wealth of opportunities, because, within his daily multidisciplinary, different areas of knowledge pass, but what he needs is to articulate these areas in an interdisciplinary way. From the practical point of view, the polyvalent teacher has the advantage of not depending on any other teacher for an interdisciplinary project.

It is necessary that the teacher seeks knowledge about the benefits of an interdisciplinary practice, since it cooperates for a quality education, providing students with motivation, interaction and involvement, as well as training people who, according to Santomé (1998), will be more open, flexible, solidarity, democracy and criticism.

3. Problem Delimitation

To what extent is ludic inserted in a planned, interdisciplinary and intentional way in the curricular content of the 4th grade Elementary School in a school of Santos Municipal Educational System?

4. General Objective

Investigate how ludic and interdisciplinarity occur in a daily routine of the 4th grade Elementary School in a school unit of the Santos Municipal Educational System, if there is a teaching practice focused on creativity and play, through planning and intentionality.

5. Specific Objectives

- Identify teaching practices through observation, interviews and questionnaires;
- Observe the challenges encountered by the teacher in the application of his/her classes;
- To ascertain the teacher's organization in relation to the planning of the curricular content to be worked;
- To suggest ludic practices, in an interdisciplinary way as a process of teaching practices.

6. Methodology

This research has an exploratory character because, according to Gil (2002), "it aims to provide greater familiarity with the problem, with a view to making it more explicit" and will involve "a bibliographical survey, interviews with people who had practical experiences with the problem researched; and analysis of examples that 'stimulate understanding'" (Selltiz et al., 1967; Gil 2002). It is also qualitative because it involves instruments such as interviews and questionnaires, with data reduction, which according to Gil (2002), consists of a process of selection, simplification, abstraction and transformation of the original data from the field observations; data categorization — which Gil (2002) describes as organizing the data in order to draw conclusions — and interpretation of these data.

A field study will be carried out, since direct observation of the activities of the studied group and of interviews will be carried out in order to obtain explanations and interpretations of what occurs in their daily life.

The subjects participating in the research will be the teacher and students of a 4th grade class of Elementary School, at Municipal Educational Unit Pedro II, from Santos Municipal System.

The research is in the bibliographic survey stage and references are being drawn from authors who have researched about the theme of ludic application in classes, interdisciplinarity, planning, dynamic classes and others pertinent to this research.

For the next step, we intend to begin the field study in the selected group, through observation and application of the questionnaires.

At the end of the surveys, field studies, analysis and results, we will propose to teachers of the 4th grade from Santos Municipal System a teaching practice focused on the application of a teaching practice based on creativity and play, through planning and intentionality, integrating the disciplines by the interdisciplinarity.

7. Final Considerations

Since this research is under development, there are no results to be presented yet.

What is expected is that through the observation of the conventional classes of the fourth grade, we will be able to conclude that it is possible to plan classes in an interdisciplinary way, adopting a ludic lesson plan, initiated by an icebreaker that involves the students in the central subject matter — which is based on interdisciplinarity, followed by an expositive dialogued class and, finally, using plays and games about the central theme of the class. This ludic and interdisciplinary lesson plan aims to involve students in a motivating and pleasurable way. This is a hypothesis; however, we will observe and analyze if this application is possible.

Through bibliographical research it is already clear to affirm that some teachers are resistant to the use of

ludic and interdisciplinarity in their classes. This research has as main focus to observe how the classes of the fourth grade are held in a specific school in Santos and analyze to what extent it is possible to make them ludic and interdisciplinary.

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