# WORKING WITH PLAY IN THE CLASSROOM: POLIMINÓ

WORKING THE PLAYER IN THE CLASSROOM: POLIMINÓ

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#### Summary

This project focuses mainly on the issue of play in the classroom, and the benefits and difficulties that exist when working with this methodology. Games and play appear as ways of working with play. It is essential that the teacher is available to prepare his/her classes and seek to use methodologies that are considered essential for the development of quality activities for students. It is also essential to understand the student's process so that the search for a more enjoyable and attractive class is not given up.

Keywords: Playful. Teaching-learning. Education.

#### Abstract

This project has as main focus the question of playfulness in the classroom, the benefits and difficulties existing when working with this methodology. The game and play appear as ways of working the ludic. It is essential that teachers are available to prepare their classes and seek to use methodology that is considered essential for the development of quality activities for students. Realizing, also, the student's process is fundamental so that one does not give up looking for a more pleasant and attractive class.

Keywords: Playful. Teaching-learning. Education.

#### 1 Introduction

Polyomino is a playful game adapted from dominoes, with the purpose of developing various mathematical contents, making classes more attractive, motivating and participatory, to be developed with students in Elementary School II, with the aim of fixing first-degree equations, exponentiation, rooting and geometric figures, which will greatly contribute to the identification and resolution of areas, perimeter, point, line, edge, etc.

This project addresses the issue of playfulness in the classroom, considering games and play as ways of working on playfulness. It also addresses the importance of playfulness for the acquisition of knowledge, the challenges encountered and faced to achieve the goal of bringing playfulness to the classroom, such as the importance of ongoing research and training.

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of teachers. In addition to bringing the need for the school to become increasingly enjoyable for everyone who spends their time there, whether students or staff.

Given the need to find ways to include students in the context and make them assimilate the content, I am looking for a way to attract and motivate students at the Professor Divaldo Suruagy Municipal Basic Education School, emphasizing the content to be covered in the classroom, so as not to forget the main focus, which is learning. This learning, when I ask my students to provide feedback, can be effective and students can demonstrate, through practice, the performance they have learned during the project.

In this way, in order to join efforts for meaningful learning, the participation of all students is essential so that we can achieve success, through a game, which comes with geometric shapes, equations, roots and exponentiation, in addition to having to form a "magic figure" which is the polyomino.

The general objective is to raise awareness and motivate students to study by providing mechanisms that develop in students an investigative character with a critical awareness of local reality, showing the importance of the content and its use in their daily lives.

Specific objectives: develop content based on a didactic sequence; make learning meaningful through the situation investigated and experienced; know and recognize first-degree equations, roots and powers; discover the geometric figures that we can form from the game pieces and work on the area and perimeter of the figures formed.

## 2 Methodological actions

- Making an EVA Polyomino;
- Formation of pairs;
- Enlargement of the polyomino on wood paper or 40 paper;
- Information about the implementation of the project;
- Classroom discussions about students' prior knowledge of content in their daily lives and local reality;
- Classroom work involving the studied content;
- Production and presentation of reports;

• Raising awareness about the importance of content for students, awakening their sensitivity to the social facts that surround them on a daily basis and that in a certain way constitute them;

Socialization of tasks;

#### **2** Theoretical Foundation

### 2.1 The Teacher's Work with Play

The teacher who is interested in promoting change may find in the playful proposal an important methodology, which may even contribute to reducing the high rates of academic failure and dropout observed in schools, because from the moment the student becomes involved with learning, the chances of him failing or dropping out of school decrease considerably.

However, the true meaning of playful education will only be guaranteed if the teacher is prepared to carry it out, has knowledge of its foundations and a desire to continually learn and renew, since bringing in activities that interest students requires research, study, observation of the students with whom one works, among other efforts on the part of the educator. It is not enough to just give any game because it is educational or propose a game; the teacher needs to mediate this process and, even if he or she does not participate effectively, must be very attentive to what is happening in order to know where to intervene.

The role of the pedagogue and the teacher is of fundamental importance for the dissemination and application of playful resources. When the teacher becomes aware of the advantages of play, he will adapt it to certain teaching situations, using it according to his needs. The pedagogue, as a researcher, will be in search of effective educational actions so that the same pleasure that the student has when leaving for recess, when going to Physical Education classes or when leaving school, is present in the classroom. (NEVES, n.d.)

But teachers, in addition to all this, must be aware of another very important issue that affects the role of the teacher and, despite the many discussions about the need to change this role, to deconstruct certain beliefs, it is still very strong. [...] in a playfully inspired classroom, one coexists with randomness, with the imponderable; the teacher renounces centralization, omniscience and omnipotent control and recognizes the importance of the student having an active stance in teaching situations, being the subject of his/her learning; spontaneity and creativity are constantly stimulated. We can observe that these attitudes, in general, are not, in fact, stimulated at school. (ALMEIDA, s/d)

Therefore, the teacher must also give up and modify some already incorporated postures and attitudes, which becomes more difficult, because dealing with change and differences is challenging and not everyone is open to it. It is important to consider that playful education is not only important for the student, but also for the educator, because it allows him to know himself as a person, to know his possibilities, to overcome resistances and to have a clear vision about the importance of games and toys for the life of the young student and adult. (SANTOS, 1997; KISHIMOTO, 1999)*apud*ALMEIDA, s/d) but, if it is still complicated to include playfulness in the classroom for students, in the case of adults, in teacher training it becomes an even more distant reality.

To work in a playful way, one must be attentive to working in and with the group, as interpersonal relationships will be more constant and will demand special care, and the teacher should also have some basic knowledge about types of groups, group phases (inclusion, control, affection and separation), personalities, the various roles played in a group, communication, feedback, conflicts, group cohesion, norms and rules, beliefs and values, among other knowledge that helps in working with groups.

Group work creates a climate of cooperation within the classroom and facilitates relationships that will develop within that space, in addition to the group becoming more responsible for its process and resolving its problems and conflicts in a clearer and more open manner among its members. If students start to participate in recreational activities but still feel isolated and not included among themselves and have not built a relationship of friendship and affinity among their peers, as well as involvement in the activities, they become more egocentric and distant from each other. Exchanging with others can be very enriching, in addition to being part of our entire lives, since we will be living and interacting with others at all times.

It is essential that educators receive ongoing training, also in relation to the methodological aspects of play, and that they understand the importance of developing playful activities for young and adult students. They should also be able to increasingly work on their creativity to bring better activities and dynamics to the classroom. Through the exchange of experiences with other professionals, they should always be renewing and innovating their practice, ensuring that their students become increasingly interested and involved in the teaching-learning process.

# 2.2 Playful knowledge

Play is extremely important for human development, so it can help in the acquisition of new knowledge in the classroom, greatly facilitating the teaching-learning process. It is through playful activities that "students explore their creativity much more, improve their behavior in the teaching-learning process and their self-esteem". (NEVES, n/d). And, the most important thing in this process was the teacher realizing the importance and need to work in a playful way with their students, so that they could more easily appropriate the knowledge. He showed us an activity that he had done with the students to teach fractions and said that it yielded much more than if he had tried to explain it in the traditional way. He realized that the students produced, learned and developed more when they did the activities more freely and spontaneously in teaching mathematics. The teacher in question already seeks to work in a playful way with the students and demonstrated that he values playing and games for the students at other times as well. Observation and intervention are in line with Chaguri's terms (2006, p. 2):

> Games help to create enthusiasm about the content to be worked on in order to consider the interests and motivations of students to express themselves, act and interact in the playful activities carried out in the classroom.

But a class inspired by play is not necessarily one that teaches content through games, but one in which the characteristics of play are present (free, creative, unpredictable activity, capable of absorbing the person playing, not focused on productivity), influencing the teacher's way of teaching, the selection of content and the role of the student. According to Lucci (undated) "teaching cannot be boring and tedious: *fastidium* is a serious obstacle to learning."

However, since playfulness is a human need at any age, it cannot be seen only as entertainment. The development of the playful aspect must, in addition to entertaining, facilitate learning, personal, social and cultural development, contribute to good mental health, prepare for a fertile inner state, facilitate the processes of socialization, communication, expression and construction of knowledge. (ALMEIDA, n/d.). Ultimately, playfulness provides a broader understanding of the world and knowledge for the student's learning. (CHAGURI, 2006, p.11).

2.3 Making classes more enjoyable and meaningful

Snyders (undated) defends joy in school, seeing it not only as necessary, but as possible. The author says, "Most students who fail are from the working class, and they need to enjoy studying; otherwise, they will give up, drop out of school, if they can. [...]" (p. 37). The more students face physical and economic difficulties, the more school must be a place that brings them other things. This joy cannot be a joy that diverts them from the struggle, but they need to be stimulated to enjoy. Joy must be a priority for those who suffer the most outside of school. (NEVES, undated)

Volpato (2002) also shows great interest in this issue of school becoming more enjoyable. In his book "Jogo, brincar e brinquedos" (Game, play and toy), he presents two chapter sub-items dealing with this theme.

We reiterate that school is culturally seen as a place where there is no time for pleasure, where we have to fulfill our duties and wait for it to end. Many people spend the week waiting for the weekend, the year waiting for vacations and adulthood to leave school. But each time we advance in the level of education we see that studying never stops, or rather, it should never stop, we should always be in continuous training, because knowledge is not static or immutable, it is constantly changing and renewing and in order to be up to date as professionals we need to be always studying. But how can we do this if studying has always been seen as tiring and hard work? Many people have found educators in their lives who motivated them and showed them the importance of studying in a pleasurable way, but many have not been able to have this awareness and want to stay away from the classroom. This situation can only be changed if today's teachers make classes more enjoyable, lighter and more playful for students, thus making school a more enjoyable environment and studying, learning simple and natural. May people enjoy learning and studying, and indeed, may they learn and study effectively in their schools.

#### 2.4 Summary of experience

The Professor Divaldo Suruagy Municipal Basic Education School is located in the village of Fazenda Nova, Olivença-Alagoas, in the heart of the backlands of the state of Alagoas. Our target audience is very special, as they come from a day of work in the fields from which the only source of income for families is obtained or the incentive offered by the programs government social programs. Every day we come across unmotivated students, often tired from helping their parents in agriculture and with no prospects for a better future. We have to focus on actions that stimulate these students and motivate them to want to participate in class and make them learn something. Faced with such situations, I tried to change my methodology so that I could stimulate and integrate these students into the classes. So I looked for Polymino, a game made up of 14 triangles, which aims to form a "magic figure" that is an eight-sided polygon. The game is an adaptation of a domino with the purpose of consolidating various mathematical contents in Elementary School II, among them first-degree equations, roots and exponentiation, among others. I made the game in EVA and asked them to form pairs in the classroom. I gave a piece to each pair, and the pieces contained equations, roots or exponentiation for the pairs to develop. I enlarged the game onto 40-page paper to make it easier to help the pairs when necessary and displayed it on the board and followed them through the procedure to reach the final result.

Each pair found the result in their own way, and then I corrected it on the board so that the other students could access the equations of the other pairs. Afterwards, I asked each pair to come to the desk to fit the equation into the result they had found. At the end, I called the whole class to see what shape they had formed. From there, we began to explore geometry, where they said that they had formed an octagon, that is, a figure with eight sides. We began to disassemble the pieces. Then, I took a piece and asked a student to measure it to see the size of each piece. Then, I asked him to put two pieces together and the class to analyze what they had formed. From then on, we began to work on the area of the two pieces and the perimeter. Afterwards, I asked if we put two more pieces together, what would the area and perimeter be? And so on, until they found the area of the octagon. When they found the total area of the octagon, they questioned whether it was easier this way, because how would they calculate the area of a figure with eight sides if it was not divided into parts.

#### 2.5 Evaluation

Assessment is a continuous process, where the student will be assessed throughout the entire process stage according to the following instruments: Group work, individual work, observation, through and of all tasks assigned within the classroom. As an auxiliary instrument for the educator's work, assessment will be carried out continuously, through observation of the work developed (research, participation, group interaction, analysis of data obtained, presentations and reports), where the student's abilities and difficulties in constructing their knowledge will be verified. Therefore, it should serve as a guiding instrument in the reflection of teaching practice, since this is the true meaning of evaluation: to diagnose in order to have a plan focused on the student's real needs.

## **Final considerations**

However, I realized how important it is to work using different, innovative methodologies, that is, playful ones, but it requires time and encouragement for teachers so that they feel motivated to want to do it, do not feel pressured and discouraged, much less overwhelmed, but encouragement is necessary and with a little effort we can reverse the quality of teaching offered in our schools.

Understanding and valuing the importance of play in the classroom is essential for this practice to become increasingly common and present in schools. And the main role of implementing and cultivating this methodology lies with teachers, in their planning and class programs, providing students with a lighter, more fun and enjoyable way of learning. Play is the difference for education that needs change, novelty, stimulation and encouragement. Providing teenagers with learning that is meaningful and at the same time light and enjoyable is renewing the school model we have, changing the vision of a serious and boring place, making it a more welcoming place for those who spend so much time there. This can be a small and initial step towards overcoming the outdated vision of school as being uninteresting.

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