The game in multigrade classes at rural schools: aid to the adoption of essential rules to life

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Abstract
The purpose of this article is to disseminate some of the actions developed during the execution of the project “Didactic resources: games as auxiliary tools for the transversal teaching of rules to the development of meaningful values to life in the rural world”, developed in 2018, at Campus III of the Federal University of Paraíba. In order to contribute to the education of the rural world, in particular those who studied in multigrade rural schools, we used authors such as Freire (1983), Macedo (2008), Santos (2013), Tarouco (2004), among others, focusing on use of games as auxiliary didactic teaching resources. The target audience included teachers and students from rural schools in Pirpirituba, Paraíba. After the development of this work, it was possible to perceive the importance of games as facilitators in solving problems/difficulties and overcoming challenges that arise in teaching multigrade classes, demonstrating the importance of activities and respecting the singularities of each subject.

Keywords
Rural education. Games. Multigrade classes.

O jogo em turmas multisseriadas de escolas rurais: auxílio à adoção de regras essenciais à vida

Resumo
O presente artigo tem a finalidade de divulgar algumas das ações desenvolvidas durante a execução do projeto “Recursos didáticos: os jogos como instrumentos auxiliares do ensino transversal de regras à formação de valores significativos à vida do mundo rural”, desenvolvido, no ano de 2018, no Campus III da Universidade Federal da Paraíba. Para contribuir com a educação do mundo rural, em particular aqueles que estudassem em escolas rurais multisseriadas, recorreu-se a autores como Freire (1983), Macedo (2008), Santos (2013), Tarouco (2004), entre outros, focalizando o uso de jogos como recursos didáticos auxiliares do ensino. O público-alvo incluiu professores e alunos de escolas rurais de Pirpirituba, Paraíba. Após o desenvolvimento desse trabalho, foi possível perceber a importância dos jogos como facilitadores da resolução de problemas/dificuldades e da superação de desafios que surgem no ensino em turmas multisseriadas, demonstrando a importância das atividades e respeitando as singularidades de cada sujeito.

Palavras-chave
Educação rural. Jogos. Turmas multisseriadas.
El juego en las clases multiserias de escuelas rurales: ayuda a la adopción de reglas esenciales a la vida

Resumen
Este artículo tiene como objetivo difundir algunas de las acciones desarrolladas durante la ejecución del proyecto “Recursos didácticos: juegos como instrumentos auxiliares de enseñanza transversal de normas para la formación de valores significativos para la vida del mundo rural”, desarrollado, en 2018, en el Campus III de la Universidad Federal de Paraíba. Para contribuir a la educación del mundo rural, en particular los que estudiaron en escuelas multiseriales rurales, se recurrió a autores como Freire (1983), Macedo (2008), Santos (2013), Tarouco (2004), entre otros, centrándose en el uso de juegos como enseñanza de recursos didácticos auxiliares. El público objetivo incluía profesores y estudiantes de escuelas rurales en Piripíruba, Paraíba. Después del desarrollo de este trabajo, fue posible percibir la importancia de los juegos como facilitadores de la resolución de problemas/dificultades y la superación de los desafíos que surgen en la enseñanza en clases multiserie, demostrando la importancia de las actividades y respetando las singularidades de cada asignatura.

Palabras clave
Educación rural. Juegos. Clases multiserie.

1 Introduction
This article aims to discuss the results obtained during the development of the project “Didactic resources: games as auxiliary tools for the transversal teaching of rules to the development of meaningful values to life in the rural world”. Approved in the selection process carried out according to the Internal Statute of the Teaching Program (Prolicen, in Portuguese) of the Teaching Department at the Federal University of Paraíba (UFPB, in Portuguese), the aforementioned project was executed between May and December 2018. Its main objective was to implement a teaching proposal to subsidize the use of didactic resources in the classroom, especially games, in order to foster formative experiences to students in teaching programs at the Center of Human, Social and Agrarian Sciences (CCHSA, in Portuguese), located in the municipality of Bananeiras, Paraíba (PB), aiming to provide an understanding about the planning, implementation and evaluation of a teaching project contextualized in the rural area.
According to Freire (1983), education is permanent, and, through it, everyone learns. There are degrees of education, relative, through which human beings, unfinished, incomplete, are always learning. In Freire’s perspective, “[…] knowledge comes from ignorance. There is no absolute ignorant. If in a group of farmers we talk about harvest, we need to be prepared for the possibility that they know much more than us”1 (FREIRE, 1983, p. 14, our translation).

This project focused on the use of games as essential didactic resources in the teaching process of students from the rural area of the municipality of Pirpirituba-PB (see the map on Illustration 1), based on activities which used/produced those tools, considered important to the improvement of quality in educational services.

Illustration 1 – Location of the municipality of Pirpirituba-PB

In 2017, the average monthly income of Pirpirituba-PB inhabitants was 1.7 minimum wage, which put the city in the 51st position when compared to the average income of the other cities of Paraíba. In addition, around 6.6% of the population have employment. “Considering households with monthly income of up to one half minimum wage per person, 51.6% of the population fit those conditions, which placed it 88th out of 223 cities in the state and 1073rd out of 5570 cities in Brazil”2 (IBGE, 2010, our translation).

Concerning education, 96.6% of children and teenagers between 6 and 14 years of age are in school. The Basic Education Development Index (Ideb, in

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1 Originally: “[…] a sabedoria parte da ignorância. Não há ignorantes absolutos. Se num grupo de camponeses conversamos sobre colheitas, devemos ficar atentos para a possibilidade de eles saberem muito mais do que nós”.

2 Originally: “Considerando domicílios com rendimentos mensais de até meio salário mínimo por pessoa, tinha 51,6% da população nessas condições, o que o colocava na posição 88 de 223 dentre as cidades do estado e na posição 1073 de 5570 dentre as cidades do Brasil.”
Portuguese) for public Elementary School is 4.2. Regarding Elementary and Middle School, in 2018, there were 1,396 enrollments, with 98 teachers working (IBGE, 2019). We emphasize that, despite living in the rural zone, there are families whose members mostly work in the urban zone, or need to use the “[...] urban infrastructure and services, such as public transportation, schools, health clinics, hospitals, commerce and leisure”³ (SAULE JÚNIOR, 2004, p. 45, our translation). The importance of the rural world takes place in a process in which:

The urban development policy, grounded on the principle of sustainable development, means a development model based on the guarantee of a healthy and ecologically balanced environment for current and future generations. City development, in these terms, depends on the development of the rural area.⁴ (SAULE JÚNIOR, 2004, p. 45, our translation).

Despite that, education in rural schools is still precarious. That happens because it’s an “often forgotten education modality” and because teachers, during their professional practice, face many difficulties, which discourage them and lead to a “[...] change in their pedagogical practices, so that rural education take place in a significant manner in country institutions”⁵ (SANTOS et al., 2016, p. 200, our translation).

Thus, the choice of municipality and project participants wasn’t random, resulting from the analysis of reports made by teachers from rural schools, during the phase when researchers and other members of the Nucleus of Multidisciplinary Extension for Rural Development (NEMDR, in Portuguese)⁶ developed research, extension and teaching activities in 2015, 2016 and 2017.

It is important to emphasize that every educational activity is grounded on pedagogy, which only comes into existence when it becomes practice. When that doesn’t happen, there is the risk of falling into a “great theoretical accumulation”, which leads education professionals to think and plan strategies for big interventions. However, they

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³ Originally: “[...] infraestrutura e serviços urbanos, como o transporte coletivo, escolas, postos de saúde, hospitais, comércio e lazer”.
⁴ Originally: “A política de desenvolvimento urbano, fundamentada no princípio do desenvolvimento sustentável, significa um modelo de desenvolvimento baseado na garantia do meio ambiente sadio e ecologicamente equilibrado para as presentes e futuras gerações. O desenvolvimento da cidade, nestes termos, depende do desenvolvimento da região rural”.
⁵ Originally: “[...] modificarem suas práticas pedagógicas, para que a educação do campo aconteça de forma significativa nas instituições campesinas”.
⁶ For more details about NEMDR, access https://nemdr2017.galoa.com.br/.
don’t enter the next step, which would be putting into practice what was devised. In this case, they fall into a:

[…] dead pedagogy, which isn’t really born, as if it were possible to stay forever in a gestational process. More than that, it’s an abstract pedagogy, separate from the world of work, in which real people, with their lives, their challenges and their cultures are absent, replaced by an idea of ‘universal student’, ‘universal school’, which hides the processes that produce social inequalities.\(^7\) (FERNANDES et al., 2008, p. 28, our translation)

The schools where the project was implemented are rural and offer education based on a pedagogical practice grounded on a traditional approach, which opposes the rural workers’ way of being, way of producing food and culture, in a disconnect between their life and school education, which is noticed by farmers (RIBEIRO, 2005). Therefore, we sought to contribute, as much as possible, to the process of empowering those involved, in order to foster the adoption of rural pedagogy, which “[…] dialogues with progressive pedagogy, which seeks an omnilateral education of human beings and social equality”\(^8\) (SOUZA et al., 2008, p. 52, our translation), based on a Freirean pedagogical matrix, in which culture, labor and critical conscience are valued.

To execute the proposed actions, some steps were followed, such as: forming study groups, coordinated by members of NEMDR (scholarship holders and volunteers); contacting the Secretariat of Education of the municipality to have access to data like the number and contact information of teachers who worked in rural schools; seeking more information about the groups they taught; making, organizing and executing games in multigrade classes.

The importance of interventions aimed at activities of this nature can be considered, when carrying out a brief query in the Theses and Dissertations Catalogue of the Coordination for the Improvement of Higher Education Personnel (CAPES, 2019)\(^9\), through which we demonstrate that there are, at the moment of the research: 1,188,082 studies that mention terms such as “multigrade schools” and “rural education”; 33,126

\(^7\) Originally: “[…] pedagogia morta, que não chega a nascer, como se fosse possível ficar sempre em processo de gestação. Mais do que isso, é uma pedagogia abstrata, separada do mundo do trabalho, na qual os sujeitos reais, com suas vidas, seus desafios e suas culturas estão ausentes, substituídos por uma ideia de ‘aluno universal’, de ‘escola universal’, que oculta os processos de produção das desigualdades sociais”.

\(^8\) Originally: “[…] dialoga com a pedagogia progressista, que busca a formação omnilateral do ser humano e a igualdade social”.

\(^9\) Available at: https://catalogodeteses.capes.gov.br/catalogo-teses/#!/ Access on: 10 Jan. 2020.
results for “rural education”; 431 theses or dissertations in which we find the term “rural education”; and 53 results for investigations concerning “multigrade schools”. It is important to highlight that, as Cardoso and Jacomeli (2010, p. 270, our translation) emphasize:

Differently from school groups, multigrade schools were organized in a single room, without separation, in which students in the first, second, third and fourth grades are grouped under the tutelage of one teacher. If, in their origins, multigrade schools assisted both the suburban and rural populations, nowadays they are located almost only in the rural area.¹⁰

It is also important to mention that, in a Brazilian context, many education institutions use the multigrade system. It is possible to notice that in the number of enrollments and schools classified by size between 2002 and 2006, in which education institutions:

[… ] from 1st to 4th grade with up to 50 students increased from 9,244 to 61,269 and enrollment went from 275,216 to 1,455,738 students! This means that so-called ‘isolated’ schools, ‘single-teacher’ schools or ‘multigrade’ schools are still an important reality in Brazil.¹¹ (BRASIL, 2013, p. 269, our translation).

Using the data from the 2013 Basic Education Census as a reference, we notice that, regarding the number of classrooms in Brazilian public schools, there were 24,710 (around 16.3%) establishments with only one classroom and 20,795 (representing 13.7%) with two classrooms (INEP, 2013). We cannot forget the great challenge for teachers working in that context: making the school institution a “space for knowledge construction and for the development of criticality”¹², in which individuals can be educated as active agents, building on “bodies and identities”. This is the only way to ensure a school is “[…] a reference for the acknowledgement, respect, welcoming, dialogue and coexistence with diversity. A place to question power relations and analyze social processes that produce differences and their translation into inequality, oppression and suffering”¹³ (BRASIL, 2007, p. 9, our translation).

¹⁰ Originally: “Diferentemente dos grupos escolares, as escolas multisseriadas foram organizadas em uma sala única, sem separação, na qual se reúnem alunos pertencentes à primeira, segunda, terceira e quarta séries sob a regência de um único professor. Se, no seu nascedouro, as escolas multisseriadas atendiam tanto à população periurbana quanto à rural, atualmente elas se concentram quase que somente na zona rural.”

¹¹ Originally: “[…] da 1ª à 4ª série [como eram antigamente denominados] com até 50 alunos cresceram de 9.244 para 61.269 e a matrícula foi de 275.216 para 1.455.738 alunos! Significa dizer que as denominadas escolas ‘isoladas’, escolas ‘unicoletas’ ou escolas ‘multisseriadas’ continuam sendo uma importante realidade no Brasil.”

¹² Originally: “espaço de construção de conhecimento e de desenvolvimento do espírito crítico”.

¹³ Originally: “[…] uma referência para o reconhecimento, respeito, acolhimento, diálogo e convívio com a diversidade. Um local de questionamento das relações de poder e de análise dos processos sociais de produção de diferenças e de sua tradução em desigualdades, opressão e sofrimento.”
The support provided by CCHSA management was fundamental, providing transport and drivers for the journey to the rural schools. We need to mention how difficult it was to physically access those institutions, especially in the winter months, highlighting that the distance between the campus, located in Bananeiras-PB, and the schools, located in Pirpirituba-PB, is 21.3 kilometers (see illustration 2).

Illustration 2 – Distance between the municipalities of Bananeiras-PB and Pirpirituba-PB

It is important to emphasize that part of the material used to make the games couldn’t be made available by Campus III of UFPB. This happened because, at the time, they didn’t have enough resources for such acquisitions, due to the lack and/or reduction – due to the educational policy adopted in the country – of funding. In this light, the support provided by members from NEMDR and external collaborators was fundamental in obtaining donations of necessary pedagogical materials/resources, including recyclables.

2 Development

In this topic, activities developed during the project will be discussed. The games were carried out with students from rural schools, usually in multigrade classes of Elementary School (2nd to 5th grade) in the municipality of Pirpirituba-PB. Macedo, Petty and Passos (2008) state that games allow participants to play in a context of rules with predefined objectives. In this process, they highlight that playing right, respecting determined rules and objectives:

[…] is different from playing well, that is, from quality and effect of decisions or risks. Playing is toying with ideas, feelings, people, situations and objects in which
objectives and regulations aren’t necessarily predetermined. In games, you either win or lose.¹⁴ (MACEDO; PETTY; PASSOS, 2008, p. 14, our translation).

During June 2018, we carried out games in classrooms of two educational units of Pirpirituba-PB: Municipal School of Basic Education (EMEF, in Portuguese) Antônio Sinésio dos Santos – located in Sítio Itamataí –, on June 7th 2018, with nine students from the 2nd and 3rd grade; and EMEF José Fortuna – located in Sítio Nica –, with 12 students from the 3rd to the 5th grade on the day of the intervention. Subsequently, we describe the activities that took place in the schools.

2.1 Educational experiences with games at the schools Antônio Sinésio dos Santos (E1) and José Fortuna (E2)

EMEF Antônio Sinésio dos Santos – referred to, in this article, as E1 – is located in Sítio Itamataí, in Pirpirituba-PB, where the activities started at 8h30 on a day in June 2018. Members from NEMDR had been at that institution in 2017, intervening through actions related to teaching, research and extension projects. Concerning the number of students in the class, previously, through a phone call, the class teacher informed us that there were 14 students in total, four in 2nd grade and ten in 3rd grade. When we arrived at the school, she went with us to the classroom, where the team met the students.

Illustration 3 – EMEF Antônio Sinésio dos Santos

Source: Authors’ personal archive (2018).

As for the students that participated in the games in the other institution, EMEF José Fortuna – referred to, in this article, as E2 (see Illustration 4) –, initially, we realized

¹⁴ Originally: “[…] diferencia-se de jogar bem, ou seja, da qualidade e do efeito das decisões ou dos riscos. O brincar é um jogar com ideias, sentimentos, pessoas, situações e objetos em que as regulações e os objetivos não estão necessariamente predeterminados. No jogo, ganha-se ou perde-se”.
that some of them already knew us, because they participated of games we developed in 2017. At E2, the class was divided in two groups, denominated teams “Brazil” and “Magic”. Members had the utmost care when choosing the games.

Illustration 4 – EMEF José Fortuna

Source: Authors’ personal archive (2018).

During the games, the class at E1 was divided into two teams. Since it was a multigrade class, they formed two groups with students in the 2nd and 3rd grade. Since that day there were only nine children, one team had five participants, and the other had four. Then, each team was asked to choose a name. The names chosen by the children were “Rabbit” and “Bird”.

Initially, at school E1, we played the Animal Memory Game (see Illustration 5), in which we asked students to observe a set of pieces displayed in two columns, where one had a picture/image of an animal and the other had the animal’s identification.

The students had a set amount of time to observe/read and memorize the pairs of animal image/name. Then, the pieces were shuffled and players were asked to pair the image and identification. We highlight that they were asked whether they knew the animals whose names were on the pieces.

Illustration 5 – The moment when children were playing the game

Source: Authors’ personal archive (2018).
The winner of this game was team Rabbit, gaining one point in the score. In each experience with games, participants experienced moments which could be:

[...] well explored, researched, guided, questioned by educators, constructive, creative, participative. [...] they can involve children in building their own toys, enhancing their creativity and valorization of self. [...] To reinforce the development of the children’s autonomy, they need to have opportunity to exercise it.15 (JUCHEM et al., 2008, p. 90, our translation).

Both teams at school E1 also played with the Fit Game. In Illustration 6, it is possible to see a moment of that game, in which there were cards in an envelope with one syllable in a vertical position and another in a horizontal position. The students' task consisted of making different/several words using those cards. Among the rules, only words that actually exist in Portuguese would be accepted. The teams received blank paper and pencil to write them down as they constructed words joining the syllables. For each correct word, they gained a point. The group with the most points in less time was the winner.

During this game, the students were eager for their team to win. Therefore, they started asking their classmates to find words faster, paying attention to the correct construction of the words. All the time, they asked the mediators – their teacher and the NEMDR members responsible for the game – if the word they found was written correctly.

In the end of the game, team Bird was the winner, with 20 points. In that process:

Illustration 6 – Mediating the Fit Game

Source: Authors’ personal archive (2018).

15 Originally: “[…] bem explorados, pesquisados, orientados, questionados pelos educadores/as construtivos, criativos, participativos. […] podem envolver as crianças na construção do próprio brinquedo, potencializando a criatividade e a valorização de si mesmas. […] Para reforçar o desenvolvimento da autonomia da criança é preciso que ela tenha oportunidade para exercê-la”.
Games can be effective educational tools, because they entertain while motivating, facilitate learning and increase the internalization of what was taught, exercising the player's mental and intellectual abilities. In addition, they also enable acknowledgement and understanding of rules, identification of the context where they are being used and invention of new contexts for their modification. Playing is participating in a make-believe world, being open to uncertainties and facing challenges for entertainment. Through the game, they reveal autonomy, creativity, originality and the possibility to simulate and experiment dangerous and forbidden situations in everyday life.16 (TAROUCO et al., 2004, p. 1-2, our translation).

During each game, the NEMDR members helped the children with some doubts that emerged as they carried out the activity. For example, they valued the importance and the method/moment/manner to correct a student who made a spelling mistake in the word “massa” (“dough”) – spelling it “masa” –, going beyond simply telling him that he should use “ss”, as happens when following the traditional approach. We sought interventions grounded on interactionism, in order to further challenge the students at both schools with questions that lead to cognitive imbalance, valuing the active search to solve problems that are meaningful for them. From this angle, it is up to the education professional to plan, execute and evaluate opportunities to develop “cooperative environments”, which, according to Marques (2012, p. 42-43, our translation), are “estratégias para criar espaços de convivência saudáveis”.

16 Originally: “Os jogos podem ser ferramentas instrucionais eficientes, pois eles divertem enquanto motivam, facilitam o aprendizado e aumentam a capacidade de retenção do que foi ensinado, exercitando as funções mentais e intelectuais do jogador. Além disso, também permitem o reconhecimento e entendimento de regras, identificação dos contextos que elas estão sendo utilizadas e invenção de novos contextos para a modificação das mesmas. Jogar é participar do mundo de faz de conta, dispor-se às incertezas e enfrentar desafios em busca de entretenimento. Através do jogo se revelam a autonomia, a criatividade, a originalidade e a possibilidade de simular e experimentar situações perigosas e proibidas no nosso cotidiano”.

17 Originally: “[...] estabelecer vínculos de confiança, de respeito, de afetividade e construir ideias e conceitos compartilhados, com base em princípios que considerem o bem-estar comum, superando o individualismo, o egoísmo ou o desejo de levar vantagem sobre o outro ou de querer ser melhor que o outro. O propósito maior é se tornar uma pessoa melhor, capaz de despertar o que há de melhor no outro”.

18 Originally: “[...] estabelecer vínculos de confiança, de respeito, de afetividade e construir ideias e conceitos compartilhados, com base em princípios que considerem o bem-estar comum, superando o individualismo, o egoísmo ou o desejo de levar vantagem sobre o outro ou de querer ser melhor que o outro. O propósito maior é se tornar uma pessoa melhor, capaz de despertar o que há de melhor no outro”.
In the end of the Fit Game at E1, group Bird won, gaining another point. However, they were told that the other game would only be introduced when everyone finished the activity. Based on that, some students from the winning team decided to help those in team Rabbit, helping to form some words, but team Rabbit didn’t really like that. One of the children said:

C3 E1: *What are you doing here; your group is there!*
C4 E1: *I'm helping. Make this word… there's another, look!*
C3 E1: *You can go back.*
PR: *They're only helping you find the words to finish the activity faster. It's all right.*

It is possible to notice, in these moments, that the competition between the children, in games like the Fit Game, at E1, although not the focus of the activity, became relevant for the participants, probably because:

School has been associated to the values of individualism, competition and dependence, peculiar to the capitalist mode of production that defines its principles and objectives. However, it is necessary to consider that the changes that happen in the world of work and in the configuration of the State, on one side, and cooperative forms of labor associated with community organizations and popular social movements, on the other, show a society in movement, in which the possibilities of change aren’t given, but are slowly constructed. It is necessary to consider, still, that school, in this context of changes, isn’t an abstract entity; it groups teachers, parents and students in a mix of interests, cultures, knowledge that research showed is impossible to homogenize.

With the students from School E2, after the Fit Game (see Illustration 7), there was a Portuguese Language activity aimed at stimulating dialogue. There were two questions: in the first, we established the challenge of seeking words; and, in the second, we invited them to choose adjectives and nouns in order to make sentences based on an image.
While the children in the group did the activity, one of the students, who participated in the other visit by the NEMDR team, talked to one of the members from that nucleus about some of the games developed in 2017. He expressed: “That day was really good”\(^{21}\). When the mediator asked about which game he liked the most, he said it was the one “[…] that had some bottles and rings… it was so good”\(^{22}\). In addition, the student explained the method – the rules – how it worked. He complained, however, that he couldn’t play more, since his teacher that year “[…] went and put it all on the other side. Teacher never wanted to let us play with the one with the caps again”\(^{23}\). That was another game executed with that class.

At school E1, we also executed the game Number Race, in which we use a cardboard with a path, which begins in the letter “A” and ends in the letter “B” (see Illustration 8). Along the path/road, there are 40 spaces/segments to traverse. Thus, each participant rolled two six-sided dice at the same time and added the two numbers on the upper face of the dice. The value resulting from that addition represents the number of “spaces” they should move in the path, numbered from 1 to 40. Each child’s place in the path was represented through a bottle cap. We emphasize that there were also “segments” of the path where there were “orders”, such as “Advance 2 spaces” or “Go back 5 spaces”.

We explained to participants that the game would take place in three rounds and that the group with most points would win. The game began and, after a few minutes,

\(^{21}\) Originally: “Foi bom demais aquele dia”.

\(^{22}\) Originally: “[…] que tinha umas garrafas e umas argolas… foi bom demais”.

\(^{23}\) Originally: “[…] pegou e botou tudo do outro lado. A tia nunca mais quis fazer com a gente aqueles das tampinhas”.

Illustration 7 – Explanation of the game

Source: Authors’ personal archive (2018).
someone in team Bird yelled: “I won!” At that moment, the game started over in the second round. The students started to get anxious to beat the adversary group. One of them said “Go on, hurry. They’re almost at the end!”\(^{24}\) (C1 E1). Team Bird won the three rounds.

Illustration 8 – Model of the game Number Race, carried out with the children

At E2 (EMEF José Fortuna), in the game Number Race, after a few minutes, team Brazil won the first round. We present excerpts of the dialogue during the second round, with two other people from the group:

PR: Advance two spaces.
PR: Go back 5 spaces.
C3E2: C'mon, c'mon, c'mon! Go!
PR: 6+2? [participants in team Magic suddenly begin to get euphoric].
All of Team Magic [yelling]: Yeeaaahhh… We won!\(^{25}\)

In the third round, team Magic was really happy to win, when their members yelled to celebrate the victory. In this moment, the teacher admonished the students because of the yelling. Another round took place, which team Brazil won.

At E1, the students also played the Ring Game, as shown in Illustration 9. Ten PET bottles were used in the game, numbered from 0 to 9, and three rings were given to each team. The activity took place in the quad. The teams had to throw the rings and hit the bottles. The team with most points would win.

\(^{24}\) Originally: “Vai logo, cuida. Eles já estão quase no final!”.  
\(^{25}\) Originally: “PR: Avance duas casas.; PR: Volte 5 casas.; C3E2: Bora, bora, bora! Vai!; PR: 6+2? [De repente os integrantes do grupo Mágica começam a ficar eufóricos]; Todos do Grupo Mágica [gritando]: Ééé… Ganhamos!”. 

### Illustration 9 – Model of the Ring Game

![Illustration of the Ring Game](image-url)

Source: Authors’ personal archive (2018).
Illustration 9 – Execution of the Ring Game

Source: Authors’ personal archive (2018).

Continuing the work at E1, after the Ring Game, everyone went back to the classroom, where they received a Math activity related to the game (see Illustration 10). Then, we explained how to do the activity. In the end, team Bird gained another point for finishing the activity in first place.

Illustration 10 – Execution of the Math activity related to the games

Source: Authors’ personal archive (2018).

At school E2, we used Noun and Adjective Tic-Tac-Toe (see Illustration 11), which is similar to classic Tic-Tac-Toe, but participants have to write three words of the same class, noun or adjective, vertically, horizontally, or diagonally.
Initially, we noticed that the students didn’t know what adjectives and nouns were. Everyone had difficulty to answer. This, in a way, isn’t surprising, not because they are from a rural area, but because of the deficits characteristic to the entire Brazilian educational system. If there are difficulties in differentiating/characterizing adjectives and nouns among university students or even professors, let alone among students in basic education, which is often obsolete. Therefore, the mediators decided to explain the meaning of nouns and adjectives, based on the words of the game itself.

During the game, we noticed that the participants actually wanted to win, but without expressing if each word in the envelope was a noun or adjective, probably because they still didn’t understand their meanings, as well as the aspects that differentiate them. There were several rounds, until there weren’t any more words in the envelope. Both teams gained points.

At school E2, we also executed the game Cover the Difference (see Illustration 12). In this game, the children had to subtract numbers. In the beginning, they were told that four participants would be necessary to restart it after the subtractions, until everyone participated. After that explanation, each child was handed a card with the numbers between 0 and 5. Rolling two six-sided dice, they obtained two numbers, which should then be subtracted. The operation and the result should be marked in the card with a chip. If the number obtained through the dice had already been marked, the player conceded the turn to a classmate. This way, everyone had the chance to play before the group filled the card. The team who finished first would be the winner. Here is an excerpt of the rich moments that marked this activity:

Illustration 11 – Mediation of the game with the groups

Source: Authors’ personal archive (2018).
Illustration 12 – Execution and mediation of the game

Source: NEMDR members (2018).

During the game Cover the Difference, students from school E2 (see illustration 13) subtracted the numbers and marked the cards. Due to their euphoria and eagerness to win, they often confused the values and got the wrong answer. Therefore, in some moments we intervened in order to help them obtain the results. Team Brazil won the first round and celebrated, making noise. Then they were told that the last round of Cover the Difference would be played after reorganizing the groups. In the second round, a new dialogue happened:

[...]
C2 E2: I got a 5! Hallelujah, baby!
C3 E2: I already have 0, miss.
C2 E2: Miss, haha!
PR: No problem, 5-5?
C2 E2: Mateus doesn’t know how to play, no. Man, this time, it’s lucky.27

26 Originally: “[...] C1 E2: É de menos?; PR: Sim, é de menos.; PR: 3 para 1?; C1 E2: 2.; PR: 3 para 2?; C2 E2: 1, já tenho.; PR: Passa a vez”.
27 Originally: “[...] C2 E2: Consegui o 5. Aleluia, meu filho!; C3 E2: Já marquei o 0, tia.; C2 E2: Tia, haha!; PR: Não tem problema, 5-5?; C2 E2: Mateus não sabe jogar, não. Rapaz, dessa vez, tá dando sorte”.
In this round, team Brazil won again. Then, each student received an activity related to the Math games (see Illustration 13). The children considered the activity easy and finished it without difficulty. Since they finished at the same time, both teams gained points. The final score was: 45 points for team Brazil and 44 points for team Magic.

3 Some considerations

Using as a reference the activities developed with students from rural schools in Pirpirituba-PB, along with their teachers, we conclude that using games as a facilitating/mediating resource of the teaching process provides rich moments both for the mediating team responsible for the activities and for the target audience, evoking motivation and interest in winning the games, which only took place through activities related to carrying out didactic tasks involving concepts from the fields of Portuguese Language and Math, for example. It is important to highlight that all games played with teachers and students had accessible and low-cost material, allowing teachers to recreate them later and/or create new ones when necessary.

The biggest challenge faced in this project concerned the lack of transport and drivers to take the researchers to the schools, since – as previously mentioned – Campus III went through budget cuts, being forced to limit the number of authorizations for outside trips. This severely limited the visits to schools. For that reason, we emphasized results obtained only in two visits to rural education institutions in the municipality of Pirpirituba-PB.
Knowing the difficulties that the rural world still faces, such as those related to possible lack or bad distribution of resources, we demand a greater need for interventions grounded on public policies for a contextualized education, so that there can be quality education. To that end, it is necessary to seek equity that guarantees educational services adequate to the reality and particularities of that context and those students, respectively.

The adoption of measures for that end by public managers contributed to those students’ permanence in school. We believe that activities like those executed contribute, as much as possible, for that process, on the path to an education adequate to the rural reality, that is, education that is contextualized and compatible to what is experienced by people in rural areas.

Thinking of quality education for rural schools is thinking of an education that respects rural values and habits; it’s understanding that rural doesn’t equal obsolete. Rural people need not only schools that respect and construct their identities, but also good educators, and an education that prepares not only for life in the city, but especially that acknowledges the different forms of existence, manifestations of life and relations both social and with nature.28 (SANTOS et al., 2013, p. 268, our translation).

Therefore, we can say that the actions carried out through the use of games were very significant for all participants of this project, especially the undergraduate students, including the author of this article. That’s because it allowed everyone to understand essential themes to intervene, in order to contribute to pedagogical processes that aim to reach pedagogies such as earth pedagogy, catering to different realities, especially when it comes to rural schools, for which we aim to offer education of/on the field. We emphasize the relevance of education that takes into consideration the singularities and different ways of life of the people in a rural context.

28 Originally: “Pensar em educação de qualidade para as escolas do campo é pensar em uma educação que respeite os valores e costumes campesinos; é entender que o campo não é sinônimo de atraso. Os povos do campo necessitam não apenas de escolas que respeitem e construam suas identidades, mas também de bons educadores, e uma educação que não prepare somente para a vida na cidade, mas sobretudo que reconheça as distintas formas de existência, de manifestações da vida e de relações sociais e com a natureza”.

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