

Comparative analysis of motivation and perception of learning between lectures and a didactic game in ecology teaching for students of Youth and Adult Education (YAE)

ABSTRACT

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The Federal Constitution of 1988 establishes that it is the duty of the State to offer free basic education to all Brazilians, regardless of age. The challenge of quality education transcends guaranteeing a sufficient number of places in schools, and involves reflection on teaching processes and contents, as well as policies that guarantee the training of teachers, so that they are able to adopt the most appropriate strategies to train citizens and professionals with critical thinking and reflective thinking. In this context, Youth and Adult Education (YAE) comprises one of the most complex and challenging State policies in the field of Education. The most used teaching method in YAE is the traditional expository theoretical class, however, considering the reflections on the benefits of using alternative strategies to expository classes, which value teaching through investigation, proactivity and interaction, it is urgent to encourage teachers to diversify their teaching activities. Associating lectures with interactive activities, such as educational games, can have a positive impact on critical thinking and self-confidence, in addition to encouraging peer dialogue and teamwork. However, as they are students over 18 years of age, it is questioned whether the use of this type of interactive activity in teaching could harm motivation, given that many of them associate such activities with early childhood education. In this work, we present the history of Youth and Adult Education in Brazil and discuss the use of play as a teaching strategy for this audience. In order to discuss the use of playing, we carried out a survey in high school to compare the motivation and perception of learning of YAE high school students after a lecture on Ecology contents in contrast to the use of a didactic game. In order to achieve this objective, 84 YAE high school students were invited to participate in the research, performing self-analysis using a questionnaire developed for this purpose. All students were submitted to the same teaching activities, however, while 50% answered the questionnaire on motivation and perception of learning after the lecture, the others answered the same questionnaire after the ludic activity. Data were compared using Fischer's Exact test with Yates correction (95% CI). In our results, no significant differences were observed in terms of motivation and perception of learning, considering the students' point of view. We conclude that it was possible to insert didactic games in Ecology teaching for YAE students without prejudice to the motivation and perception of learning.

PALAVRAS-CHAVE: Youth and Adults Education. Didactic Games. Biology.

1 INTRODUCTION

In contemporary society, the development of a nation is directly related to everyone's right to quality education, which, according to Dourado, Oliveira and Santos (2007) occurs when the learner becomes pedagogically, technically, and politically engaged in the educational process, despite the teaching conditions and inequalities. Among the factors that influence the quality of education and that can constitute tools for teachers to positively impact student motivation and learning, are the different teaching strategies and methods, which:

[...] refer to the means to achieve general and specific teaching objectives, that is, to the "how" of the teaching process, encompassing the actions to be carried out by the teacher and by the students to achieve the objectives and contents. Thus, we have the characteristics of teaching methods: they are oriented towards objectives and imply a guided and systematized succession of actions, both by the teacher and the students. (LIBÂNEO, 1994, p. 140).

In view of the complexity of the subject and the importance of guaranteeing quality education for all, many nations have public policies aimed not only at teaching children and adolescents, but also at young people and adults who did not have access to school in the regular period, or who evaded it before completing their studies (HANEMANN; SCARPINO, 2015).

In this article, we will chronologically describe the public policies aimed at the Youth and Adult Education (YAE) in Brazil, with the aim of understanding and contextualizing its challenges, problems and advances throughout history. In addition, we also report a teaching experience, from which the motivation and perception of learning of YAE students submitted to two different strategies in Biology teaching were compared: the lecture and the didactic game.

1.1 Policies in a chronological/historical context for Youth and Adult Education in Brazil

At the beginning of the colonization in Brazil, adult education was aimed at the literacy and catechization of indigenous and black people through the educational project of the Jesuit priests, who arrived from Portugal in 1541 as members of the Society of Jesus, a religious order of the Catholic Church whose mission was to spread Catholicism throughout the world (PAIVA, 1983). The teaching method of Jesuit education was influenced by the theories of Aristotle and São Tomé de Aquino, and the curriculum consisted of teaching Portuguese language and Christian doctrine, in addition to music, professional and agricultural learning (SHIGUNOV NETO; MACIEL, 2008). In this way, Jesuit education ended up strengthening the hierarchical power structures that interested the Portuguese settlers, justifying the inequalities between social classes, subservience, and slavery considered a way to salvation.

The Jesuits were expelled from Brazil in 1759 as a result of the Pombalina Reform and, for more than a century, there were no actions by the Portuguese government aimed at the education of illiterate adults in the colony. Although the Imperial Constitution of 1824 provided, in its article 179, for free primary education for all Brazilian citizens, the lack of policies for adult education can be justified, since the Imperial Constitution did not consider slaves, who were mostly

illiterate, citizens. Only in 1876 was night schooling for adults instituted in Brazil, although with little demand given that a large part of the population lived in rural areas and did not feel that instruction was necessary (AMARAL, 2003).

The institutionalized process for adult education, however, emerged decades later, only after the independence. The Constitution of 1934 contained the National Education Plan (PNE), which established the right of adults to attend free primary education. In the late 1940s, a general census indicated that 56% of Brazilians over the age of 18 were illiterate. In view of this, in 1947 the first initiative of the republic was created, exclusively focused on the education of young people and adults: the Campaign for the Education of Adolescents and Adults (CEAA), induced by the Union and coordinated by the federative entities (COSTA; ARAÚJO, 2011).

CEAA was a movement of the Adult Education Service (Serviço de Educação de Adultos - SEA), linked to the Ministry of Education and Health, and prioritized the implementation of adult education schools in the country (SILVA; LIMA, 2017). Considering the historical context, it is possible that such action took place in addition to the objective of reducing the percentage of illiterate citizens, but also to increase the number of voters eligible to vote, since the Saraiva Law, enacted by Imperial Decree n. 3,029, of January 9, 1881, the vote was restricted to those who could "read and write".

In 1958, during the government of Juscelino Kubitschek de Oliveira, the National Campaign for the Eradication of Illiteracy (CNEA) began, which lasted until 1963. The actions of the CNEA were restricted to a few municipalities chosen as "guinea pigs" of the government's federal action plan, so although with relative success the experience was nothing more than a pilot project (GUTTSCROW, 2011). Years later, in 1963, educator Paulo Freire was tasked with designing the new national literacy program for young people and adults, which was planned from the conception of liberating and awareness-raising popular education, in which reading the world should precede reading the word. This model, however, was not implemented, since in 1964 the military coup began the dictatorship in Brazil, interrupting a series of projects that were underway in the preceding democratic period (HADDAD; DI PIERRO, 2000).

At the beginning of the military government, popular education policies came to be seen as a serious threat to order. However, pressured by the United Nations Educational, Scientific and Cultural Organization - UNESCO, and aiming to reduce the illiteracy rate, the Brazilian Literacy Movement - MOBRL was created on December 15, 1967, by Law n. 5,379. This movement, however, was implemented only in 1971, remaining until 1985, when the period known as the New Republic began, due to the redemocratization of Brazil.

MOBRL aimed to functionally literate adults from 18 to 30 years old, without worrying about the students' critical training, following the political ideology in force at the time (BORGES, 2009). According to Santos and Pessoa (2016) the literate subject by MOBRL could not interpret and question the world around him, but only the possibility of joining syllables. It also meant that the reading of the world was not carried out, only the reading of the word.

On November 25th, 1985, as of Decree n. 91,980, the objectives of MOBRL were redefined and its name was changed to National Foundation for Youth and Adult Education (EDUCAR. It was not the objective of this foundation to directly

develop educational actions related to the literacy of young people and adults, but rather to finance and supervise these actions in the states and municipalities (SOUZA JÚNIOR, 2012).

In the 1990s, with the objective of fulfilling the duties of the State foreseen in the federal constitution of 1988 and considering the political, social, and economic scenario of the nation, new initiatives in favor of the education of young people and adults re-emerged in Brazil. In 1996, Law n. 9,394 came into force, which established the Guidelines and Bases of National Education (LDBN), emphasizing the need to reorganize Basic Education in order to face the challenges imposed by global processes and by social and cultural transformations generated by contemporary society. Regarding the education of young people and adults, the LDBN explains in Article 4, Chapter III, Section I, that

the State's duty with public school education will be carried out by guaranteeing basic, compulsory and free education, including for those who they did not have access to it at the proper age (BRASIL, 1996, art. 4).

In 1997, the policy for YAE advanced from two publications: the Curricular Proposal for Youth and Adult Education and the Guidance Manual for the Implementation of the Education Program for Youth and Adults in Elementary School (PIERRO; HADDAD, 2015). In the same year, the Solidarity Literacy Program began, which stimulated partnerships between citizens, companies, universities and municipalities, with the aim of reducing the illiteracy rate, primarily among young people aged between 12 and 18, although interested adults could also participate (BARREYRO, 2010).

In 2000, the National Curriculum Guidelines (DCN) for Youth Education were published and in 2002 the Solidarity Literacy Program reached the mark of 3.6 million literate. Although there have been important advances, Barreyro (2010) says that the program disregarded the need for formal education beyond mere literacy and was more linked to the government's social-assistance sphere than to the educational one.

In 2003, the Solidarity Literacy Program was replaced by the Literate Brazil Program, which continues to this day and aims to universalize basic education in the country. In 2005, meeting the demand of young people and adults for offering technical professional education to those who have already completed elementary school, the Federal Government created, through Decree n. 5,478, the Program for Integration of Vocational Education to High School in Youth and Adults Education (PROEJA).

On July 3rd, 2007, as of Resolution n. 033 of the Ministry of Education, the Literate Brazil Program made it possible for volunteer literacy teachers to work with scholarships, who, even without exercising the functions of public or private teachers, began to receive scholarship to teach young people and adults.

More recently, on June 25, 2014, Law n. 13,005 concerning the National Education Plan was approved. This plan reaffirmed Brazil's commitment to eradicating illiteracy, and included among its guidelines the universalization of school attendance and training for work and citizenship, with an emphasis on the moral and ethical values on which society is based.

Although progress has been made, the rate of illiterate citizens in Brazil remains high, amounting to 6.8% of people over 15 years of age in 2018 (IBGE,

2018), so the advances consolidated so far have not been enough to universalize literacy. Frigotto, Ciavatta and Ramos (2005) emphasize that the education of young people and adults has not been treated as an area of priority interest for the Brazilian State.

Studies by Friedrich *et al.* (2010) point out that it is necessary to rethink the training of teachers who work in the YAE, modernize teaching spaces and develop policies capable of changing the distorted understanding of what the youth and adult education policy is. This teaching modality is often understood as a mere compensatory action, when, according to Freire (1987), it should be treated as an action of emancipation and liberation.

In Freire's perspective, the educator must adopt a role of engagement, which transcends the classroom and extends to the immersion of students' daily lives. To educate is to propose changes, in gestures, attitudes and behaviors, Paulo Freire defended that education must have a revolutionary character, through which the oppressed can recognize themselves as oppressed, awakening conscience and autonomy, which will lead to their liberation and humanization. Therefore, the educator cannot reproduce one more facet of oppression, directing, manipulating, adapting men to the world, but must adopt a dialogic and responsible posture. The author criticizes the "banking" conception of education, where the educator is the subject and the student is the object of education and considers that for education to be transformative, educational action must be guided towards the humanization of both, (FREIRE, 2005). Therefore, he suggests that education be problematizing, critically inserting itself into reality, establishing an authentic way of thinking and acting, being themselves and being in the world.

Youth and Adult Education in Brazil carries this troubled historical process in its legacy. The right of everyone to quality education, which prepares them for the exercise of citizenship and qualifies them for work, although it is the duty of the Brazilian State and families, as provided for in article 205 of the Federal Constitution of 1988 (BRASIL, 1988), remains on the horizon of the challenges to be faced and overcome.

In view of the above, from a historical perspective, we can see the positive evolution of the reach of Brazilian educational policies with regard to access to YAE, which made it possible for thousands of young people and adults to complete basic education. However, it is evident that education as a fundamental and universal right in Brazil is still a huge challenge, given the number of Brazilians who have not completed basic education at the expected age and/or are not literate. Thus, the present study, in an attempt to contribute to overcoming this scenario, now starts to think of a school space in the specificity of Biology teaching that provides conditions for YAE students to remain and complete their studies, making use of diversified teaching strategies.

1.2 The Biology teaching in Youth and Adult Education and the potential of using interactive strategies

Teaching Biology to YAE students requires the teacher to understand the characteristics that differ such students from those of regular education. Despite the different realities that can be found in a country the size of Brazil, the profile that characterizes most YAE students is that of workers of various age groups who

seek to break the limits imposed by educational systems that are often excluding (MORAES; CUNHA; VOUGT, 2019).

This fact, however, can represent an excellent opportunity to diversify educational practices that provide dialogic learning among the different, valuing and enhancing the sociocultural experiences of these students (VOLTAS; SANTOS; SILVA, 2017). The Biology teacher, knowing the importance of mastering biological aspects to promote critical reflections and to solve day-to-day problems, has the possibility of associating scientific knowledge, technology and the various teaching methodologies to promote the motivation of the students to learn and apply their knowledge.

Currently, the most used methodology to work on Biology for young people and adults is the lecture, through which many teachers limit themselves to repeating the contents of the teaching materials, while students passively listen, take notes and answer questionnaires. According to Geglio and Santos (2011), teachers tend to privilege theory, especially the study of concepts, without the use of resources such as practical and interactive activities, which enable students to learn more and better.

It is known, however, that the passivity of students can be demotivating during classes conducted through lectures (KRASILCHIK, 2016). Thus, the use of investigative teaching strategies is recommended, which promote scientific literacy through activities in which students are themselves responsible for the search for knowledge based on dynamics tutored by the teacher. Among the interactive activities that can be associated with investigative teaching are didactic games, which can favor the teaching of a concept or a particularity, as long as it is applied in a planned and correct way.

For Soares (2008), the skills acquired during a game are training tools for work and for living in society. Considering the adversity imposed by the complex relationships that are established from everyday problems, it is emphasized that the use of games can be an important and different tool to make the teaching and learning process more enjoyable and motivating. According to Krasilchik (2016), the motivation for scientific knowledge is strongly related to the insertion of practical and recreational activities, and the absence of these can make learning inefficient for the interpretation of reality.

According to a study by Knowles (1973) about adult learning, he believes that adults are stimulated to learn, especially when the contents are approached valuing the social context and culture of the student. The central dynamics of the learning process can be perceived from the students' experience; experience being defined as the interaction between individuals and their environment. Learning is influenced by the quality and quantity of interaction between students and their environment and by the educational potential of the environment, so the teacher's role, therefore, is to create a rich environment from which students can extract learning (KNOWLES, 1973).

In the present work, the motivation and perception of learning with the use of expository classes and a didactic game were compared from the self-analysis of high school students of the EJA modality. Within Biology, ecology themes were selected for the proposed activities.

2 METHODOLOGY

This was a cross-sectional study involving 84 YAE students, enrolled in high school, at Colégio Estadual Criança Esperança (Palmas, Tocantins). The dynamics was applied in the second half of 2019, where information about the motivation and perception of learning was collected through questionnaires applied by the evaluators in the model proposed by Santos et al. (2017).

The responses of students exposed to two different pedagogical practices were compared: 1. traditional lecture; and 2. didactic game. All students participated in the same pedagogical practices and answered the same questionnaire, consisting of the five questions listed below, four of them multiple choice and one discursive:

1. Regarding the topic you recently discussed, how motivated do you feel to study after class?
() much; () neither too much nor too little; () little;
2. Still in relation to the subject you recently addressed, do you feel motivated to talk about it with your colleagues outside the classroom?
() Yes; () no; () maybe;
3. Do you consider yourself capable of teaching on the subject recently addressed?
() Yes; () no; () maybe;
4. If you had to be evaluated on the topic you recently addressed, how many questions do you think you would get right?
() the majority; () the minority; () the half;
5. In the lines below you can criticize, praise and make suggestions regarding the work developed and the teaching strategies used.

*Discourse question.

Based on the answers to questions 1 and 2, we sought to assess the students' motivation in relation to the study and dialogue on the topics addressed. The perception of learning was measured through questions 3 and 4. Question 5 allowed the student to write, from his point of view, about the teaching method used by the teacher.

To avoid biased answers and mitigate confounding factors in the comparison, students were randomly divided into two groups, with 50% responding to the questionnaire after the traditional lecture and the others after the didactic game. The division of students was carried out by means of a simple draw, with each student responding to the questionnaire only once.

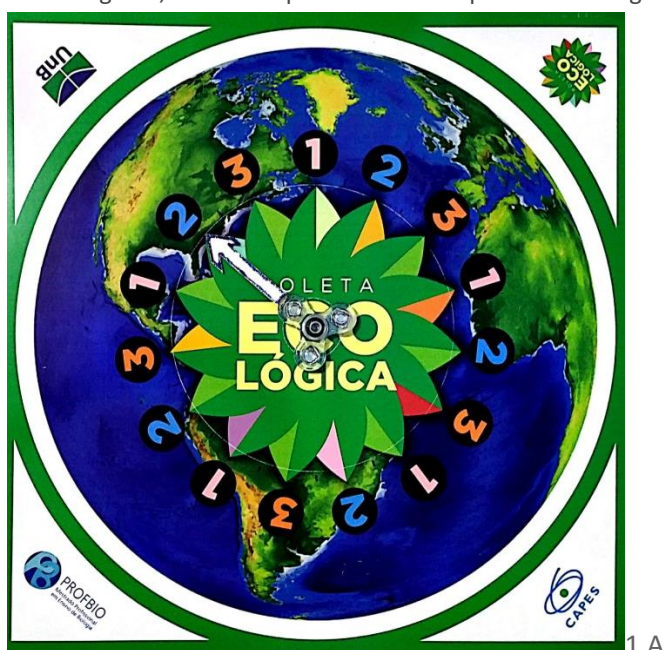
Data tabulation was performed in Microsoft Excel and Fisher's Exact test (95% CI) was used for interpretation and comparison, with Yates correction, using the tools VassarStats: Website for Statistical Computation (<http://vassarstats.net/fisher2x3.html>)

The theme addressed in class and in the game was Ecology, one of the content contained in the National Common Curriculum Base of High School (BRASIL, 2018). The first stage consisted of lectures, which took place in a classroom teaching

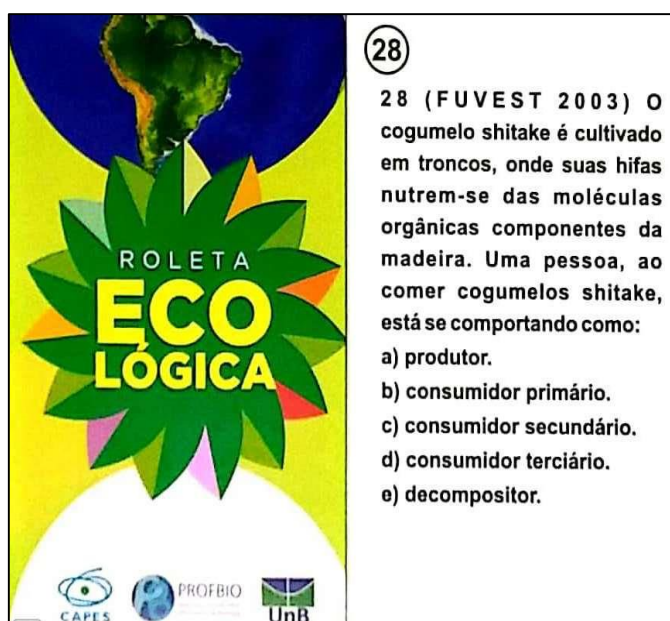
environment with multimedia resources. The second stage consisted of a didactic game in the board format built for this activity, which was called Ecological Roulette (Figure 2). For this game, 65 cards were created containing objective questions related to ecology.

The questions were mostly adapted from entrance exams since according to Law n. 9,394, which established the Guidelines and Bases of National Education (LDBN), it is up to high school to prepare for higher education (BRASIL, 1996). To design the game board and cards, Microsoft® Office Word 2010 and Corel Draw® 5.0 were used. Figure 2A shows the board and 2B illustrates one of the cards, with a question and the logo specially designed for the game.

Figure 1 – Ecological Roulette (Roleta ecológica) educational game. 1.A - Board of the didactic game; 1.B - Example of card with question and logo.



1.A



1.B

To encourage dialogue, the dynamics of the didactic game were carried out in groups of six students. The groups were encouraged to research and solve the questions in an interactive and dialogic way. The dynamics of the game happened as follows:

1. One student-player at a time, sequentially, rotated the roulette wheel contained on the board with the aim of stopping it at one of several bases. Each base was composed of three possible scores: 1, 2 and 3 points that together formed the board. For each base there was a set of letters with objective questions about ecology;
2. Next, the student-player who spun the roulette would read the question to the other members of the group and everyone was given time to research the subject;
3. The student-player would then answer the question to the group's colleagues, justifying the alternative he considered correct. The other members of the group judged the student-player's answer, awarding points to him if the answer was correct;
4. The student who first reached a total of 10 points was considered the winner of the game.

RESULTS AND DISCUSSION

This research evaluated the motivation and perception of learning from the self-analysis of 84 biology students from YAE carried out after the use of teaching methodologies lecture and didactic game in approaching Ecology contents. The observed data regarding the students' motivation allows us to affirm that, in relation to the variables 1. motivation to carry out in-depth studies of the studied content and 2. motivation to talk with colleagues about the content outside the classroom, no statistically significant differences were observed (Fischer's Exact Test; $p > 0.05$) between the results of the questionnaires after the lecture and after the didactic game (Table 1).

Table 1 – Motivation of YAE high school students to study and talk with colleagues about ecology contents, after lecture (G1) and after the didactic game (G2). Both G1 and G2 are made up of 42 students each. Values are expressed in percentage of responses and p is due to the probability calculated using Fisher's exact test (95% CI).

Measured variables	G1	G2	p
Motivation to study the topic addressed outside the classroom			
Much	89%	86%	
Neither too much nor too little	9%	12%	
Little	2%	2%	
			0,177
Motivation to talk to peers about content outside the classroom			
Sim	50	60	
Talvez	38	33	
Não	12	7	
			0,336

Source: The author (2022).

When starting this study, we raised the risk of having little motivation on the part of the adult students to use educational games as a teaching dynamic, as we feared that they might not have the same acceptance as the younger ones and that they would complain about the absence of lectures. However, the positive perception in relation to the students' motivation during the learning process by both methodologies used was evidenced in the results of this research, highlighting the possibility of teaching activities focused on the diversification of teaching methods. Motivation is an important ally in the learning process, as well as helping students stay in school.

According to Escremin and Calefi (2018), interactive practical activities tend to alleviate the stress imposed by the complex world in which we live. These authors emphasize that games can be important and different pedagogical tools to make the teaching and learning process more enjoyable and motivating.

Following the methodology of this research, the data were collected so that the anonymity of the students was preserved. Of the essay questions that allowed students to report observations and criticisms about the activity developed during the game, the following reports were highlighted:

- 1: It was a very good experience. I'm coming home more motivated, because it's fun since I spend all day working and have little time to study. It would be great if more classes took place like this.
- 6: The game is very good because it is a different way of learning.
- 8: Great class, we learned a lot and were able to clarify our doubts a lot, in addition to having fun.
- 17: Regarding the game, I liked it. It was good because I interacted with colleagues and helped me learn about things I didn't know.

From the analysis of the reports and the observation of the students' behavior during the game, we found that they were stimulated both by the challenge imposed and by the possibility of interacting with colleagues, testing their knowledge and learning about new content. In view of all these observations, In view of all these observations, we consider that the students signaled the acceptance of the practice and development of skills and competences in the

teaching-learning process. According to Kishimoto (2011), didactic games tend to enhance the exploration and construction of knowledge, due to the internal motivation typical of the ludic.

After comparing different pedagogical methods, Pereira *et al.* (2018) concluded that when YAE students are encouraged to engage in teaching practices that contain playful traits, there is a tendency for their motivation to improve, including in subsequent lectures. In this way, we defend the application of didactic games as a teaching methodology for YAE students, demystifying the idea that play would be a methodological strategy applicable only to children. Based on the observations made during the application, the students showed commitment and enthusiasm for the competition and, at the same time, it was possible to observe exchanges of information and debate.

According to Rondon-Melo and Andrade (2019), the possibility for students to manipulate learning tools has the potential to induce them to study longer, to keep their attention on the objectives proposed by the teacher and to be more engaged to find the answers, which, consequently, can generate better results in the motivation and perception of learning. The same authors believe that in this way students feel more confident, since, when they are in the search for knowledge, they have the possibility to pause, summarize and retake the ideas presented.

Garcia and Nascimento (2017) emphasize that the use of didactic games in the classroom stimulates specific skills, as the dynamics of competition impose on players the need for knowledge in order to be winners. According to the authors, the game “embeds in the student the ability to act, giving him autonomy to take certain attitudes, enabling the use of competences”. Associated with skills, the game tends to stimulate skills, such as visual, motor, social, interpretive, leadership, concentration and reasoning (KASHIWAKURA, 2008, p.76).

To measure the perception of learning, we compared the percentage of students who felt able to teach on Ecology contents covered in the lecture and in the didactic game, and we observed a slightly higher percentage among those who answered the question after the didactic game. We had a similar result when comparing the groups of students in terms of the number of questions that they would probably get right if they were evaluated, although the differences found were not statistically significant ($p > 0.05$) (Table 2).

Table 2 – Perception of YAE high school students' learning after lecture (G1) and after the didactic game (G2). Both G1 and G2 are made up of 42 students each. Values are expressed in percentage of responses and p is due to the probability calculated using Fisher's exact test (95% CI).

Measured variables	G1	G2	p
Ability to teach on the content presented in class			
Yes	24%	33%	
Maybe	43%	45%	
No	33%	22%	
			0,454
Number of questions that you would probably get right if you were evaluated			
The majority	43%	50%	
Neither few nor many	29%	24%	
The minority	28%	26%	
			0,795

Source: The author (2022).

The analyzed data allow us to infer that didactic games, when compared to expository classes, can be used as strategies for teaching young people and adults without demotivation or less perception of students' learning, which they come from traditional teaching experiences.

Young people and adults have the ability to learn autonomously, based on their personal experiences, according to their expectations and possibilities, even learning from their own mistakes, being able to carry out analyzes on the information received. For Oliveira (2007), the use of diversified methods in teaching young people and adults should be encouraged and tends to favor the learning processes. According to the author:

Considering the uniqueness of the connections that each one establishes, due to their previous experiences and knowledge, and also the multiplicity of possible connections, it makes no sense to assume a single and mandatory path for all subjects in their learning processes. Each one has its own unique way of weaving knowledge through the ways in which it assigns meaning to the information received, establishing connections between previous and new threads and weaves. This understanding places new demands on those who intend to formulate curricular proposals that can dialogue with the knowledge, values, beliefs and experiences of the students, considering them as threads present in the networks of social groups, schools/classes, teachers and students and, therefore, relevant to pedagogical action. (OLIVEIRA, 2007, p.87).

In addition, the teaching of young people and adults must occur not only to share knowledge of the past, but also to stimulate the production of new knowledge and for the student to understand himself as a social actor (FREIRE, 1989).

When education values differences, it expands the possibility of building knowledge. In the teaching-learning process, it is necessary that the different languages and cultures, ways of seeing and identifying themselves are recognized. In this sense, it must also be a commitment of the educator to keep himself constantly updated, to seek new perspectives of knowledge and new practices, so

that he can look for ways to establish a direct relationship between the theoretical knowledge applied to the educational practice.

FINAL CONSIDERATIONS

According to the results of this work, we concluded that the use of a didactic game to approach Biology contents in Youth and Adult Education was viable, as it did not discourage or harm the students' perception of learning. Considering that this method is associated with the promotion of creativity, dialogue, proactivity, leadership, and critical thinking, we encourage its use, since such characteristics are essential for the formation of individuals aware of their own value and qualified for work and for the exercise of citizenship.

Lectures, when adopted as an exclusive teaching method, are a reflection of the lack of public policies on promoting education of quality, in addition to the deficiency on training and qualification of teachers. Using active methods, investigative strategies, didactic games, and practical classes requires investment in the infrastructure and resources necessary for such activities to occur successfully, in addition to raising awareness and training of teachers on the most appropriate methods for the student's learning objectives to be satisfactorily achieved.

We believe that Biology teaching, whether in YAE or other modalities, should encourage student protagonism and allow students to build knowledge from challenges, dialogue with teachers and colleagues, observation of nature, and the active search for information in real and virtual libraries, characteristics that strongly differ from those observed when teaching occurs exclusively through lectures.

However, we understand that in view of the historical context and the current Brazilian scenario, changes in young people and adults' teaching must occur without fanfare and with medium and long-term policies. There is no denying the advances achieved in recent decades, especially with regard to access to YAE, nevertheless, in addition to ensuring access, it is necessary and urgent to rethink methodological issues, encouraging the adoption of diversified teaching methods. In this aspect, didactic games can be allied to the objective of stimulating curiosity, proactivity, and collaborative work, so important for the exercise of work and citizenship.

ANÁLISE COMPARATIVA DA MOTIVAÇÃO E PERCEPÇÃO DA APRENDIZAGEM ENTRE AULAS EXPOSITIVAS E JOGO DIDÁTICO NO ENSINO DE ECOLOGIA PARA ALUNOS DA EDUCAÇÃO DE JOVENS E ADULTOS (EJA)

RESUMO

A Constituição Federal brasileira de 1988 estabelece que é dever do Estado ofertar educação básica gratuita a todos os brasileiros, independentemente da idade. O desafio da educação de qualidade transcende garantir um número suficiente de vagas nas escolas, e passa pela reflexão acerca dos processos e dos conteúdos de ensino, além de políticas que garantam a capacitação de professores, para que estes sejam capazes de adotar as estratégias mais adequadas para formar cidadãos e profissionais com espírito crítico e pensamento reflexivo. Neste contexto, a Educação de Jovens e Adultos (EJA) compreende uma das mais complexas e desafiadoras políticas de Estado na área da Educação. O método de ensino mais utilizado na EJA é a aula teórica expositiva, entretanto, considerando as reflexões acerca dos benefícios do uso de estratégias alternativas, que valorizam o ensino por investigação, a proatividade e a interação, urge a importância de estimular docentes a diversificarem suas atividades de ensino. Associar aulas expositivas com atividades interativas, tais como os jogos didáticos, pode ter um impacto positivo sobre o pensamento crítico e a autoconfiança, além de estimular o diálogo entre pares e o trabalho em equipe. Porém, por se tratar de discentes com idade superior a 18 anos, questiona-se se o uso desse tipo de atividade interativas no ensino poderia prejudicar a motivação, tendo em vista que muitos associam tais atividades ao ensino infantil. Nesse trabalho apresentamos um histórico sobre a Educação de Jovens e Adultos no Brasil e discutimos o uso do lúdico como estratégia de ensino para esse público. Para a discussão do uso do lúdico, realizamos uma pesquisa em uma escola de ensino médio visando comparar a motivação e percepção da aprendizagem de alunos de ensino médio da EJA após aula expositiva sobre conteúdos de Ecologia em contraste com a utilização de um jogo didático. Visando alcançar esse objetivo, 84 alunos de ensino médio da EJA foram convidados a participar da pesquisa realizando autoanálise com o uso de um questionário desenvolvido para essa finalidade. Todos os alunos foram submetidos às mesmas atividades de ensino, porém, enquanto 50% responderam ao questionário sobre motivação e percepção da aprendizagem após a aula expositiva, os demais responderam ao mesmo questionário após a atividade lúdica. Os dados foram comparados por meio do teste Exato de Fischer com correção de Yates (95% IC). Em nossos resultados não foram observadas diferenças significativas quanto à motivação e a percepção de aprendizagem, considerando o ponto de vista dos alunos. Concluímos que foi possível inserir jogos didáticos no ensino de Ecologia para discentes da EJA sem prejuízo da motivação e da percepção da aprendizagem.

KEYWORDS: Educação de Jovens e Adultos. Jogos didáticos. Biologia.

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