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PERCEPÇÃO DOS DISCENTES DA LICENCIATURA EM QUÍMICA SOBRE A UTILIZAÇÃO DE ATIVIDADES LÚDICAS EM SALA DE AULA

PERCEPCIÓN DE LOS ESTUDIANTES DE LICENCIATURA EN QUÍMICA SOBRE EL USO DE ACTIVIDADES LÚDICAS EN EL AULA

PERCEPTION OF CHEMISTRY DEGREE STUDENTS ABOUT THE USE OF PLAY ACTIVITIES IN THE CLASSROOM

Presentation: Poster

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INTRODUCTION

Currently, education has undergone significant transformations, with the use of recreational activities being one of these transformations that provides the fixation of the content covered within the classroom. Chemistry is a science that studies the nature of matter and is present in the daily lives of students, going unnoticed by most of them due to the lack of contextualized and meaningful learning. However, given the relevance of this science to society, some Brazilian schools use teaching focused on the transmission-reception of content, making meaningful learning impossible, generating a lack of interest in learning, discouragement and blockage in learning Chemistry content.

One possibility for Chemistry classes to be more attractive and involve students is the use of playful didactic games as they stimulate and attract attention, making the construction of knowledge more meaningful, fun and enjoyable (SOUZA et al., 2020).

Therefore, the objective of the study was to verify the perception of graduates, future Chemistry teachers, regarding the use of games as pedagogical tools in the classroom.

THEORETICAL FOUNDATION

The use of innovative teaching methods in the classroom is necessary to stimulate students' interest so that learning is interesting and not monotonous, mechanical and tiring (Oliveira et al, 2018a). Teaching strategies in some Brazilian schools do not reduce or resolve the comprehension difficulties presented by students nor do they contribute satisfactorily to the

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quality of learning (Oliveira et al. (2018b).

This scenario can be transformed through the use of new teaching methods in the educational environment that enable motivating classes that include investigative problem situations, awakening the understanding of natural phenomena taking into account analysis and association with scientific knowledge (Carvalho, 2013; Sasseron 2013). Playful games applied to chemistry teaching can help the teaching-learning process, promoting an engaging and fun environment, with learning of various skills that can intensify and enhance performance, students' interest in content with learning problems, promote competitiveness, contributing and influencing the training of students, integrating practice with theory and reflection and construction of their knowledge (Gonçalves et al., 2019; Leão et al., 2019; Lobato et al., 2019; Santos et al., 2019).

METHODOLOGY

The study was carried out in the first and second semester of 2023, at the Federal Institute of Education, Sciences and Technology of Tocantins IFTO: Paraíso do Tocantins campus. The methodology used was quantitative descriptive exploratory (Severino, 2016), aiming to evaluate the students' perception of the use of organic domino games (figure 1) and cards on inorganic functions, nomenclature and chemical bonds (figure 2) produced in the discipline. of Instrumentation for teaching Chemistry.

Figure 1: Organic Domino

Figure 2: Inorganic Functions

Source: Authors, (2023)

The sample consisted of 20 students from the subject of Pedagogical Practice Workshops for teaching Organic Chemistry and General Chemistry of the Chemistry Degree Course (IFTO) Paraíso do Tocantins campus.

The research began in the classroom with explanations of the rules and division into

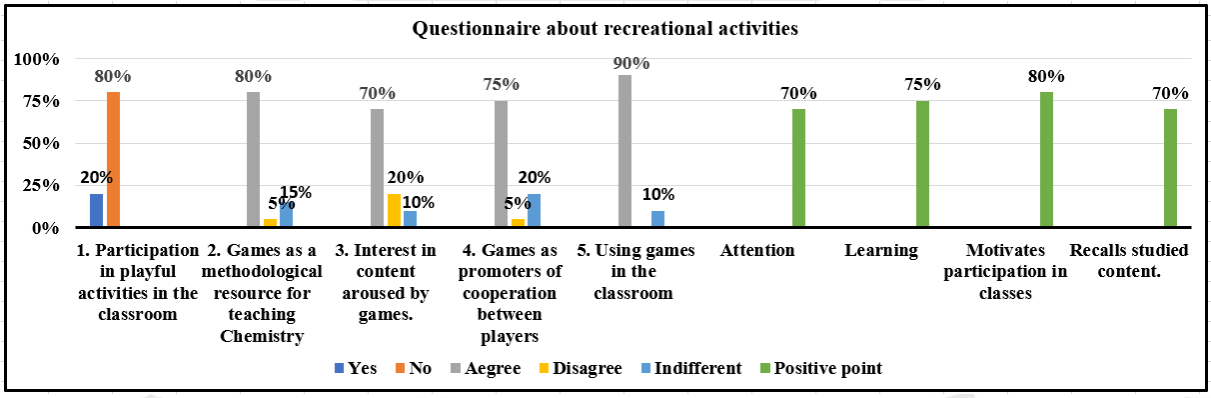
groups containing 4 members to start the games. The organic domino started clockwise, with the piece representing an ant (formic acid). The pieces must be fitted according to the functions they belong to, if the piece cannot be fitted the player will pass the turn. The winner of the game will be whoever fits all the pieces together. The card game about inorganic functions began with the formation of two piles (cations and anions). The cards were removed from each pile and the die was thrown to know what to answer, if you get it right you will win two (2) points and continue playing, if you get it wrong you will lose one (1) point and your turn will pass. The player who accumulates the most points in ten (10) rounds of the Game will win..

After using the game, a questionnaire was administered with five closed questions (1,2,3,4 and 5) and one open question (6): 1. Did you participate in fun activities in Chemistry in the classroom? 2. Are games a methodological resource for teaching and learning Chemistry? 3. Do games make Chemistry classes interesting? 4. Did the games promote moments of cooperation between players? 5. Would you future Chemistry teacher use games in the classroom? 6. What positive point(s) would you highlight when playing organic dominoes and card games about inorganic functions, nomenclature and chemical bonds?

RESULTS AND DISCUSSION

Graph 1 reports the students' responses in relation to the evaluation questionnaire applied to the perception of games in the classroom. Through the analysis of the application of the questionnaire, it was observed that the games presented values equal to or greater than 70% in all aspects evaluated after the application of the game, showing a good evaluation and acceptance of organic domino games and sheets on inorganic functions, nomenclature and chemical bonds by Chemistry students.

Graph 1. Game evaluation



Source: Authors, (2023)

According to the results observed in graph 1, 80% of students never participated in recreational activities in the classroom. The future of Chemistry must have experience with the use of didactic games in the classroom, as these resources help students' learning (Kishimoto, 2010).

Games were considered a good methodological resource for teaching in the classroom by 80% of those interviewed. According to Romero and Cunha (2018), educational recreational activities are useful pedagogical tools that, when used well in the school environment, can facilitate teaching and learning in a fun and enjoyable way.

When asked about games becoming interesting in Chemistry classes, 70% said yes. According to Matias, Nascimento and Sales (2017), Rêgo, Cruz Júnior and Araújo (2017), the game generates a pleasant environment, with lots of fun and dynamism, providing the student with a better understanding and arousing interest in the content taught in the classroom. classroom

The promotion of moments of cooperation between players was declared by 75% of participants. Ferreira et al. (2019), applying a high school game, reported fun classes, socialization among students, knowledge and relaxation in the classroom.

Regarding the use of the game in the classroom, 90% responded that they would use it in the classroom after completing their degree. The use of this playful instrument can provide the student with a greater absorption of knowledge, enable critical thinking and serve as a complementary resource. According to Souza, Salvador (2019), through games, a pedagogical instrument, teachers can promote the evolution of understanding using playful forms of teaching.

The positive points highlighted by the participants when analyzing the organic dominoes and card games about inorganic functions, nomenclature and chemical bonds were attention (70%), learning (75%), motivation (70%) and recall of the content taught. According to Souza et al. (2020), practice with playful activities represents a pleasurable possibility, favorable to increasing students' concentration and self-esteem, stimulating and motivating the process of building learning and assimilating new knowledge.

CONCLUSIONS

Given the satisfactory results of the students' perception of the IFTO Chemistry Degree

Course regarding the use of playful didactic activity, we believe that the game as a pedagogical resource can be used by future Chemistry teachers in the classroom as an alternative resource for learning content about organic and inorganic functions, positively impacting and enhancing student learning, providing a pleasant, collaborative, fun environment and creating new possibilities for teaching and learning Chemistry.

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