

Pedagogical practice with digital technologies: creating and sharing with Canva

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SUMMARY

The incorporation of digital technologies in education has revolutionized the way knowledge is produced, shared, and assimilated. For elementary school teachers, these tools offer significant potential to enrich pedagogical practices and meet the demands of a digitally connected generation. Among the most accessible and effective platforms in this context, Canva stands out as a versatile and intuitive solution. This article seeks to explore, in a theoretical and practical way, the possibilities of using Canva in education, considering its foundations and applications in the pedagogical environment. This is a didactic proposal using the Canva application, experienced in the city of Fortaleza with 6th grade Math teachers of Elementary School 2, with assertive results regarding the use of Canva in the context of Technology, obtaining, in general, recognition of the learning of these students.

Keywords: Canva, Multimodality, Digital Technologies.

ABSTRACT

The incorporation of digital technologies in education has revolutionized the way knowledge is produced, shared, and assimilated. For elementary school teachers, these tools offer significant potential to enrich pedagogical practices and meet the demands of a digitally connected generation. Among the most accessible and effective platforms in this context, Canva stands out as a versatile and intuitive solution. This article seeks to explore, in a theoretical and practical way, the possibilities of using Canva in education, considering its foundations and applications in the pedagogical environment. This is a didactic proposal using the Canva application, experienced in the city of Fortaleza with 6th grade Math teachers of Elementary School 2, with assertive results regarding the use of Canva in the context of Technology, obtaining, in general, recognition of the learning of these students.

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1. INTRODUCTION

In a world of contexts that involve diverse innovative strategies and integrated with technologies, a professional attitude focused on these becomes necessary

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knowledge. The teacher must be open to the demands of contemporary times, in this moment the evolution of strategies in the classroom is a point mentioned in this review article bibliographical study with a qualitative focus on practices carried out using the Canva application.

The subject is relevant due to the growing study carried out by teachers in search for greater knowledge for the practice of activities involving applications and resources with active methodologies, which stimulate the student's creativity, provide greater interest for everyday social issues that can be formative paths for their future professional. So, Canva was chosen because it is an easy-to-access application, free, also available for a fee, in which we have several models available to us, among different types of infographics, presentations, *posts*, mind maps, organizational charts, among others.

In this study, an activity was carried out in which students from the 6th grade class of a Public School of Fundamental 2 of the Municipality of Fortaleza, carried out an activity involving the Canva app in all parts of the activity, involving tables, organizational charts, and classroom practices, conducted by Mathematics teachers and students of a 6th grade class in the morning shift, totaling 23 students, 14 boys and 9 girls age between 11 and 12 years.

It is, therefore, a practical strategy involving several skills so that the student consolidates the learning of Mathematics with integrated technology, achieving assertive objectives regarding: analyzing data through tables, identifying through technology the contents covered in the Mathematics discipline, carry out the steps to complete the activity, evaluate your participation in the stages achieved, checking the learning obtained.

Digital technologies expand access to resources and promote interactivity in teaching-learning process, making the content attractive and interesting to the student.

They allow:

- Personalization of teaching, meeting the individual needs of students. tes; each student has a pace to acquire knowledge.
- The creation of multimodal content, which combines text, image, audio and video. deo; the student has the opportunity to combine different forms of content to show your learning.

Encouraging critical thinking and creativity by allowing students and teachers produce collaborative and innovative materials; thus, learn to work as a team, discussing opinions and alternatives for solving knowledge problems.

· The search for knowledge is present in everyday actions, both of the teacher as the student, both are active parts of the entire learning process and dependent among themselves. The new paradigm of science with the evolution of information and the speed with which arise, require professionals capable of dialogue, a comprehensive vision with a focus collaborative that contributes to the construction of a more just, humane society, with ethical principles.

According to Franco (1995), the teacher needs to recognize that the classroom, the students and themselves are embedded in a web of dynamic and uncontrollable relationships. Their function is engage in this ongoing process to contribute in the best possible way.

However, effective integration of technologies requires planning and understanding of how these tools can be used to achieve clear pedagogical goals. In this In this sense, Canva offers an opportunity to address challenges and explore possibilities for strategic way.

Canva is a graphic design platform that allows you to create different types of graphics. visual materials such as infographics, posters, slides, and even short videos. Your simplicity of use and extensive resource library make the tool particularly attractive for educators seeking to: make content more accessible and attractive; stimulate student participation through interactive visual resources; facilitate the dissemination of high quality teaching materials.

2 THEORETICAL FRAMEWORK

2.1 THEORETICAL FUNDAMENTALS OF THE USE OF TECHNOLOGIES

The theory of multimodality, widely discussed in language studies and education, highlights the importance of combining different modes of communication (text, image, sound) to improve student understanding and engagement. According to

Smoler (2007) the student can learn through multiple paths and use different means and methods of expressions (SMOLER, 2007). Canva, by allowing the integration of various elements visual and textual, offers practical support for the application of this theory in the classroom.

Another relevant concept is constructivist pedagogy, which emphasizes the active role of students in the construction of knowledge (Vygotsky, 1984). Canva can be used to propose activities that encourage collaboration, such as the joint creation of conceptual maps or multimedia presentations.

Some benefits of Canva for pedagogical practice carried out in the approach of Mathematics content in the classroom:

- a. **Flexibility and accessibility:** Canva is available for free and offers resources adaptable to the most diverse pedagogical needs.
- b. **Encouraging creativity:** Teachers and students can explore creative solutions for educational problems, developing materials that escape traditional models.
- c. **Digital Skills Development:** By using Canva, educators and students improve important skills for the digital world, such as design and communication.
- d. **Engagement:** Well-crafted visuals help capture attention of students and promote greater interest in the topics covered.

2.2 METHODOLOGY

The content covered in the 6th year Assessment of the Municipal School of Fortaleza covered the Mathematics themes: Percentage, Triangles, Angles, Lines, Polygons, Perimeter and Area, with the aforementioned skill codes in the National Common Curricular Base - BNCC. (BRAZIL, 2018)

BNCC CODES	DEFINITION
EF06MA18	Recognize, name and compare polygons, considering sides, vertices and angles, and classify them into regular and non-regular, both in their representations on the plane and on faces of polyhedra.
EF06MA19	Identify and understand the characteristics of the triangles and classify them in relation to the measurements of sides and angles.
EF06MA22	Use instruments such as rulers and squares, or software for representations of parallel and perpendicular lines and construction of quadrilaterals, among others.
EF06MA29	Analyze and describe changes that occur in the perimeter and area of a square when expand or reduce, equally, the measurements of its sides, to understand that the perimeter is proportional to the measurement of the side, which does not occur with the area.
EF06MA33	Plan and collect research data regarding the social practices chosen by the students and make use of spreadsheets to registration, representation and interpretation of information, in tables, various types of graphics and text.

Source: Common National Curricular Base, BRAZIL, 2018

Day 1 - Initial Moment

5

The assessment activity using the Canva resource was carried out in two moments, in first day they did the planning in the innovation resources room, time of the schedule Mathematics subject of the 6th grade of the Municipal School of Fortaleza. And they started the

construction of a table with the purpose of visually organizing the division of groups, using the Text feature to write the table topics and themes with the Leader's name of each team.

It is expected that by using interactive resources, integrated into the contents of the Mathematics, the student allows himself to reach knowledge more easily, as he is performing an activity for your learning through an application, developing your creativity, analyzing more precise options through tables, choosing the route methodological at your discretion based on an initial model and evaluating where you can improve the educational conduct. In turn, the teacher is able to verify the procedure he/she took right and the one that needs to be reformulated. It is clear that the two are connected in contribution of final learning.

GRUPO	QUANTIDADE	NOME DO LÍDER	TEMA
1	5	G. N.	Desenhos dos Triângulos: Equilátero, Isósceles, Escaleno
2	5	J. R.	Tipos de Retas: Paralelas, Perpendiculares, Concorrentes
3	5	I. P.	Polígonos de 3 a 10 lados
4	4	J. J.	Tipos de ângulos: Agudo, Obtuso, Reto
5	4	P. H.	Diferença entre Perímetro e Área

Atividade Avaliativa do 6º ano do Fundamental 2
— Conteúdos:
Porcentagem, Triângulos, Retas, Polígonos, Ângulos, Perímetro e Área

Figure 1 – Canva Model Table - Source: author

The creation of the graph was also done in the Canva application, so that students used percentage content in the context of technology.

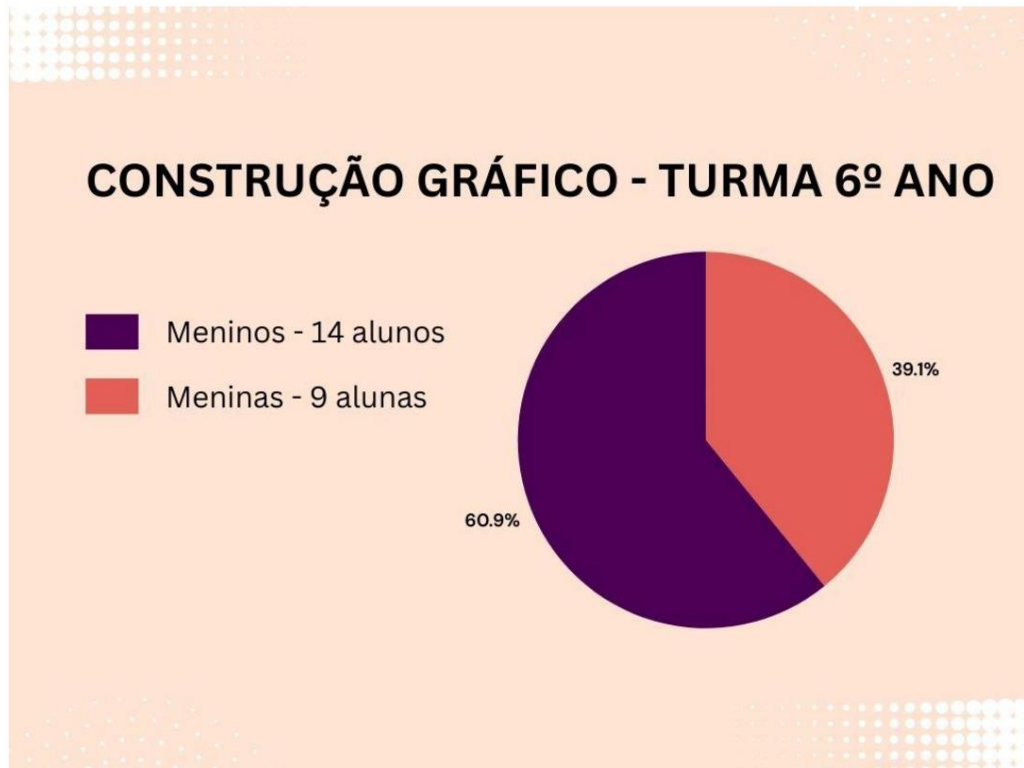


Figure 2 – Canva Model Chart - Source: author

Then, each team can meet and detail the next steps to be taken. for each member, the participation of the team leader is essential for the work to be carried out make it happen, convey security and encourage the group.

Day 2 – Presentation of the Work

The Leader of each team presents the work with a video, delimiting its theme, another resource that can be carried out with the aforementioned tool, Canva. The free criteria of each group, will lead the creativity of the members.

At this stage, the student proposes to research the topic, build his/her activity and share with your colleagues for later discussion and evaluation of the activities.

Some examples of the applicability of the Canva resource that students produced with the context of Mathematics are arranged below, as:

- Creation of infographics that represent complex concepts;
- Poster Proposal, presentations of interdisciplinary projects, such as

Mathematics and Portuguese Language;

- Request for visual summaries or graphic explanations to demonstrate understanding of a theme, among others.

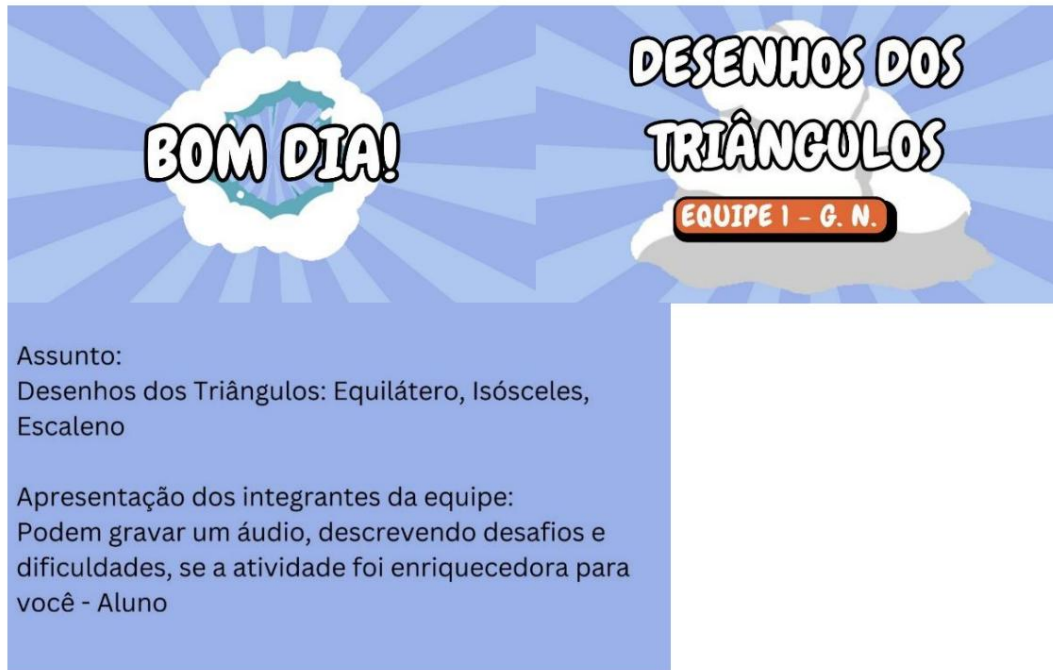


Figure 3 – Canva Presentation Template - Source: author



Figure 4 – Canva Infographic Template - Source: author



Figure 5 – Canva Infographic Template - Source: author

2.3 RESULTS

The 6th grade students, after completing the Assessment Activity, started discussions among themselves and the conclusions of Group 1 defined by the GN leader in his presentation they were,

“Triangles are fascinating geometric figures, each with its own characteristics distinct: equilateral, isosceles and scalene. The equilateral triangle has three equal sides and, consequently, three angles of the same value, providing perfect symmetry. The isosceles, in turn, has two equal sides, which gives it a single axis of symmetry, and two equal angles. The scalene angle is the most irregular of the three, with all sides and angles different, challenging us to perceive beauty in diversity.” (text adapted by the author ÁUDIO GRUPO 1, 2024)

“We faced some challenges, such as the accuracy in measuring angles and sides to ensure that the characteristics of each type were respected.” (text adapted by the author - student EE)



“However, the activity was extremely enriching, as it allowed us to apply theoretical concepts into practice, in addition to developing skills such as attention to detail and teamwork”. (text adapted by the author - student BG)

“The experience of recording an audio to report our learning also helped us to reflect on the process and the importance of clear communication. In short, it was a valuable opportunity for academic and personal growth for all of us.” (adapted text by the author - student AA)

The main challenges encountered in Group 2's theme included initial understanding of concepts, especially for those who had difficulty with spatial visualization. Another challenge was the practical application of the concepts to more complex problems, such as determine angles between intersecting lines or find perpendicular lines through the Artificial Intelligence from Canva's own tool.

Despite the difficulties, the activity was beneficial for the group. The progress was remarkable throughout the sessions, with participants gaining confidence in identifying and working with different types of lines. Group collaboration was an important factor, as it allowed the participants shared strategies and helped each other. In the end, the activity did not only reinforced mathematical understanding, but also promoted the development of problem-solving skills and teamwork. In Zabala's understanding (1998), learning content concerns the development of skills motor, affective, interpersonal relationship and social insertion.

When developing the activity on polygons with 3 to 10 sides, group 3 organized itself in collaborative way to explore the characteristics and properties of each figure.

“We start with the triangle, the 3-sided polygon, and move on to the decagon, 10 sides” (text adapted by the author - AP student). The activity included the identification of the internal angles, sum of angles, and the construction of each figure required research in Student Textbook.

“Finding the polygons to carry out the activity was not easy” (text adapted by author - student JP)

The activity was beneficial for the group, as it not only reinforced mathematical concepts important, but also promoted teamwork and communication. All members



had the opportunity to contribute, share ideas and learn from each other. In the end, the group felt more confident about the topic and appreciated the practical aspect of learning.

Develop an activity on types of angles, such as acute, obtuse and right angles, how the Group 4 theme can be an enriching exercise for both students and educators. The activity can begin with a brief theoretical explanation, followed by practical examples in which students draw or identify these angles on objects in the everyday life. According to Ausubel (1982, p. 55), "Meaningful learning occurs when the individual is able to relate new knowledge to existing concepts or information in its cognitive structure."

One of the main challenges is ensuring that all students understand the definitions and can clearly distinguish the different types of angles. Another difficulty may be keep students engaged, especially if the topic seems abstract. To make the more beneficial activity, you can incorporate interactive games or group activities that encourage collaboration and critical thinking. Overall, if well planned, the activity can be quite useful, helping students to consolidate their understanding of concepts fundamental geometric concepts and develop observation and analysis skills.

The difference between perimeter and area is fundamental in the study of geometry. The perimeter refers to the sum of the measurements of all sides of a figure, that is, it is the measurement of the contour of the figure. The area is the measurement of the internal surface of the figure, expressed in square units.

When developing an activity that explores these concepts, the main challenges may include understanding the specific formulas for different shapes geometric shapes, such as rectangles, triangles and circles, as well as the practical application of these formulas in real-world problems. Another challenge can be visualizing the differences between the linear measurements of the perimeter and the surface measurements of the area.

The activity mentioned in topic 5 can be very beneficial for the group, as it promotes spatial reasoning and the application of mathematical concepts in practical situations. The interaction in a group can also facilitate the exchange of ideas and strategies for solving problems, making more dynamic and collaborative learning. Furthermore, overcoming difficulties together can strengthen teamwork and communication between participants. According to Vygotsky (1984, p. 67), "Learning is most effective when it occurs in social contexts, because

interaction with other individuals provides opportunities for sharing knowledge and collaborative practice."

Although Canva offers a range of possibilities, it is essential that its use is planned according to the pedagogical objectives. In addition, it is important to reflect on the balance between time spent creating materials and time for classroom discussion class; there is a need to ensure accessibility, inclusion for all students and care to prevent the focus on the resource from overlapping with the pedagogical content.

To support an inclusive and diverse approach to education, build on the principles of Gardner (1999) may be essential. Gardner suggests that individuals do not have just one uniform form of intelligence, but rather multiple intelligences that must be stimulated in different ways.

So, the function of the Elementary School in Fortaleza fulfilled its function of provide skills so that the student can diversify his/her educational path through choices made, determining the best educational path, as each student is unique in their learning. Howard Gardner's theory of multiple intelligences invites us to look at intelligence in a broader and more complex way. By recognizing that each individual has a unique learning profile, we can offer richer and more meaningful experiences for all through technologies.

FINAL CONSIDERATIONS

Digital technologies like Canva offer a valuable opportunity to elementary school teachers to transform their pedagogical practices. Through creation and sharing of dynamic visual materials, it is possible to promote teaching more meaningful and connected to the students' realities. However, the integration of these tools must be made consciously and aligned with educational objectives, ensuring that they serve as means to enhance learning.

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