



Passo Project

Semiannual Report

Date	October 2, 2024
Location	Passo de Camaragibe, AL, Brazil
Goal	Report on the development of Projeto Passo from May to September 2024
Website	educall.org

The **Passo Project**, an initiative of **Education + AI in Action | The Nudelman Initiative**, aims to transform early childhood education in vulnerable communities by using Artificial Intelligence (AI) and technology as essential tools to enhance pedagogical practices and the professional development of teachers. This report details the main activities, progress, and challenges faced between May and September 2024, reflecting the project's ongoing commitment to educational innovation in Passo de Camaragibe.

Since the beginning of 2024, Projeto Passo has been working to integrate digital technologies into the teaching and learning process, focusing on personalized education and the continuous professional development of teachers. This semester was marked by important follow-up visits, impact assessments, training sessions, and necessary adjustments due to the local political context.



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Number of Schools, Teachers, and Students Served by Projeto Passo

The table below is based on information provided by the Municipal Education Department of Passo de Camaragibe and refers only to early childhood education.

Table 1. Number of schools, teachers and students by area (urban, rural or coastal) in 2024, in early childhood education.

Area	Schools	Teachers	Students
Urban	2	29	486
Rural	8	18	248
Coastal	2	12	182
Total	12	59	916

Teachers' testimonies

You can access excerpts from teachers' testimonies about the use of tablets and ChatGPT for their professional activities at the following links:

Ms. Emilly Luíza:



Ms. Júlia Gabriela:





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Ms. Júnia Matias:



Ms. Ladja:



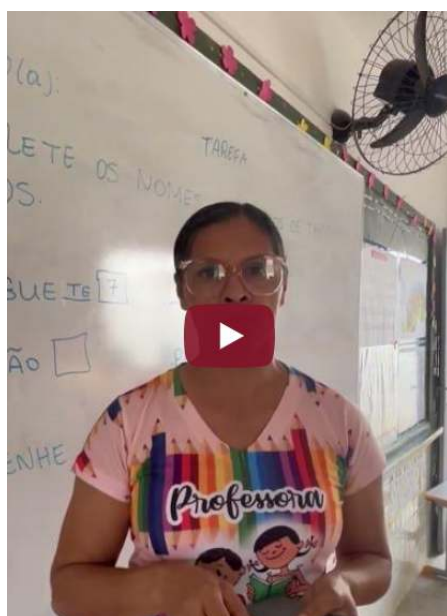
Ms. Maria Gabriela:



Ms. Rose:



Ms. Edtânia:





Passo de Camaragibe

Passo de Camaragibe is a small municipality located in the northeastern Brazilian state of Alagoas. The municipality had a population of approximately 13,804 as of 2021 and it covers an area of about 251 square kilometers (IBGE 2022).



Image 1. On the left: Map of Brazil with the State of Alagoas in red. | On the right: Map of the State of Alagoas with the municipality of Passo de Camaragibe in red. *Source: Wikipédia.*

Work and Income

In 2021, the average monthly salary was 1.7 minimum wages. The proportion of employed people in relation to the total population was 10.64%. In comparison with other municipalities in the state, it ranked 48 out of 102 and 37 out of 102, respectively. In comparison with cities across the country, it ranked 3962 out of 5570 and 3541 out of 5570, respectively. Considering households with monthly income of up to half the minimum wage per person, 50.8% of the population had these conditions, which placed it in position 67 out of 102 among the cities in the state and in position 1246 out of 5570 among the cities in Brazil (IBGE 2022).



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Economy

In 2021, GDP per capita was R\$22,090.3. In comparison with other municipalities in the state, it ranked 32nd out of 102 among the state's municipalities and 2933rd out of 5570 among all municipalities. The percentage of external revenue in 2015 was 88.9%, which placed it in position 57 out of 102 among the state's municipalities and 2445 out of 5570. In 2017, the total revenue generated was R\$42,381.76 (x1000) and the total committed expenses was R\$39,813.07 (x1000). This leaves the municipality in positions 51 and 49 out of 102 among the state's municipalities and in 2221 and 2133 out of 5570 among all municipalities (IBGE 2022).

Health and Environment

The average infant mortality rate in the city is 32.26 per 1,000 live births. Compared to all municipalities in the state, it is ranked 4th out of 102. When compared to cities across Brazil, this position is 395th out of 5570.

The city has 3% of households with adequate sanitary sewage, 18.9% of urban households on public roads with trees and 12.3% of urban households on public roads with adequate urbanization (presence of drains, sidewalks, paving and wire). When compared to other municipalities in the state, it is ranked 85th out of 102, 99th out of 102 and 39th out of 102, respectively. When compared to other cities in Brazil, its position is 5050 out of 5570, 5144 out of 5570 and 2558 out of 5570, respectively (IBGE 2022).

Education

In 2010, the school enrollment rate for 6 to 14 year olds was 97.3%. In comparison with other municipalities in the state, it was in position 23 out of 102. In comparison with municipalities across the country, it was in position 3221 out of 5570.

In 2021, IDEB (Index of Development of Basic Education) for the elementary school level in the public school system was 4.7 and for the middle school level, 3.8. In comparison with other municipalities in the state, it was in positions 76 and 97 out of 102. In comparison with municipalities across the country, it was in positions 4177 and 4524 out of 5570 (IBGE 2022).



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In addition to data from IBGE (Brazilian Institute of Geography and Statistics), the Passo de Camaragibe education department made some data available to us about education in the municipality: IDEB 2023, Municipal Assessments Results and Reading Fluency Assessment.

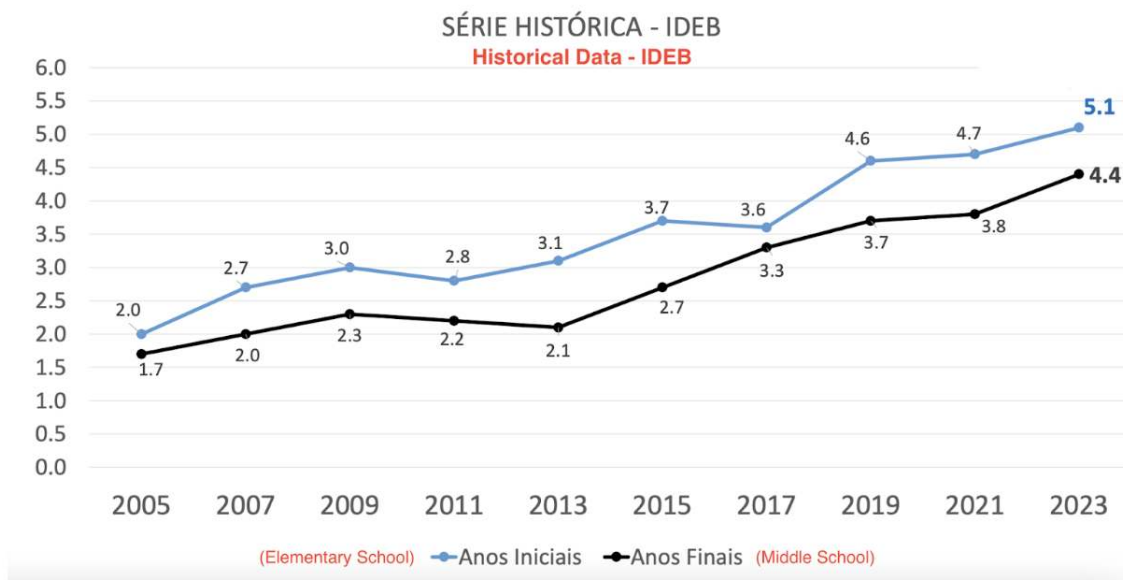


Image 2. Historical data of the Basic Education Development Index (IDEB) of elementary schools in Passo de Camaragibe.

According to the most recent IDEB data, there were improvements in the index for both elementary and high school levels, remaining at 5.1 and 4.4, respectively, in 2023.

Regarding the Municipal Assessment Results, since 2022, it is possible to see that both elementary school students in the early years (image 3) and students in the final years (image 4) scored less than 50% in the tests for Mathematics and Portuguese (elementary school) and in the tests for Mathematics, Portuguese, and Natural Sciences (high school).



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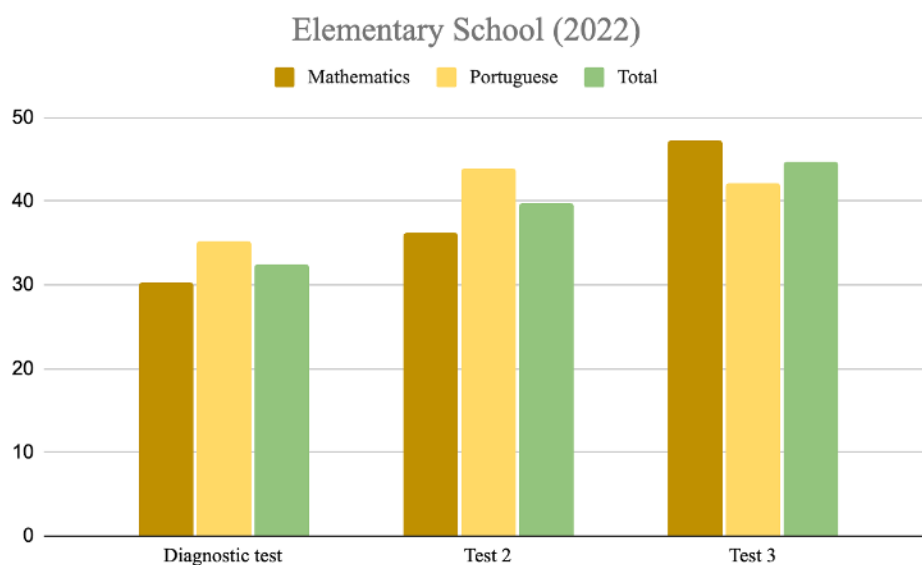


Image 3. Percentage of correct answers in Mathematics and Portuguese for 4th-grade students in three different tests conducted throughout the school year. Source: Municipal Education Department of Passo de Camaragibe.

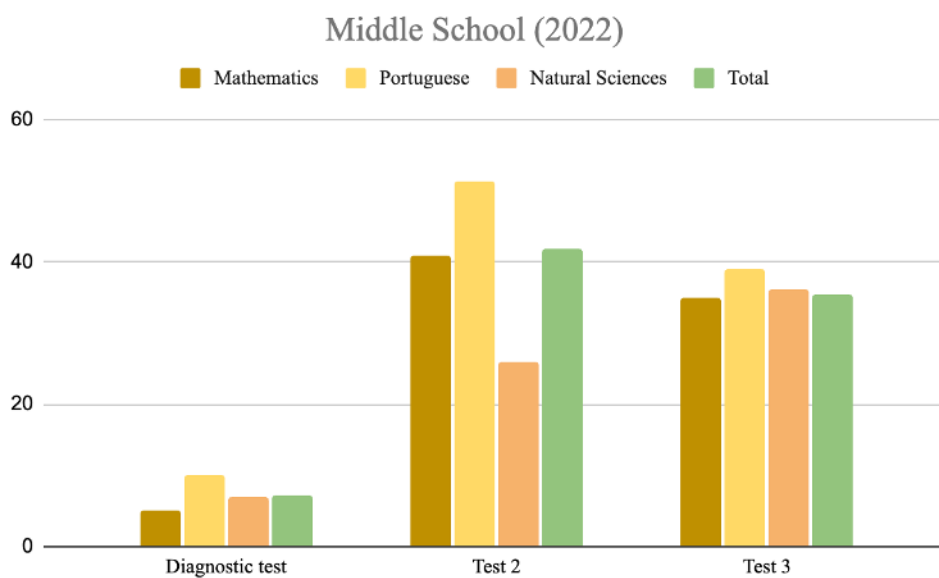


Image 4. Percentage of correct answers in Mathematics, Portuguese, and Natural Sciences for 8th-grade students in three different tests conducted throughout the school year. Source: Municipal Education Department of Passo de Camaragibe.



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The Reading Fluency Assessment shows that the majority of students from the second year of elementary schools in Passo de Camaragibe are considered “pre-readers” (represented by color yellow in the chart) or “beginning readers” (represented by light green color in the chart) with low reading fluency.



Image 5. Reading Fluency Assessment - Results by municipality - Comparison between editions. Yellow: pre-readers; Light green: beginning readers; Dark green: fluent reader. *Source: Department of Education of Passo de Camaragibe.*



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Main activities

In this section, we present a summary of the main activities carried out under Education + AI in Action | The Nudelman Initiative from May to September 2024.



¹ Technical support was provided continuously throughout all the months.

Image 6. Timeline of the main activities of the Passo Project from May to September 2024.

- **School Visits and Follow-up (May and June 2024):**

During May and June, periodic visits were made to schools participating in the Passo Project. These visits had three main objectives:

1. To monitor the progress of the implementation of some planned changes, the use of tablets, and the use of AI tools in teachers' pedagogical practices.
2. To directly observe classes and how technological resources are being integrated into daily activities.
3. To promote dialogues with teachers, allowing them to share feedback on tablet use and the difficulties they encountered.

These visits were essential in identifying how tablets were being used and what challenges arose. Despite the high demand from teachers due to federal training and other extracurricular activities, most reported that the tablets and AI tools, such as ChatGPT, have



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been instrumental in facilitating lesson planning and improving daily activities' efficiency. The exchange of ideas with teachers was also enriching, allowing an open dialogue on possible improvements in using technologies.

Conversations with school principals and coordinators during the visits were also of great importance to the project's progress. Through these dialogues, we identified the need to involve the pedagogical coordinators in the training and use of tablets. This engagement will be crucial to ensure a more effective implementation of technological tools, in addition to facilitating coordination between teachers and managers, promoting a more consistent alignment in pedagogical practices and project activities monitoring.

Additionally, to document all critical moments of the Passo Project, a photographer was hired starting in March 2024. This professional is responsible for documenting, in images and videos, all actions, training sessions, and activities in schools. We are now building a collection of photos and videos illustrating the project's impact and evolution over time. This documentation is available at the following link: [Passo Project Gallery](#).



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Image 7. Teachers using tablets in the classroom for activities with students.



Image 8. Newly painted school wall and activities created by teachers after interventions by Projeto Passo.



Image 9. Activity on “means of transport” planned and carried out by the teacher with the help of ChatGPT (see [video testimony](#) 5'10” and [video of the activity](#)).

Excerpts from teachers' testimonies during visits and conversations:

I use it a lot for reading time with the children. I show them the physical book and the digital book. Since everything is on screens these days, they end up being more interested in the story when I use the digital one. But I use it as a complement (...). I use the tablet to show images and I also use posters. I think this diversity is important (Teacher J.).

ChatGPT helps me a lot with ideas for activities. I often ask him to adapt or improve the answer he gives me. Then I go there and make it my own. And it's also great for adapting activities for my autistic student. I feel like I can better include him using ChatGPT (Teacher T.).



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- On-Demand Technical Support and Active Search (May to September 2024):

Since April 2024, the Passo Project has provided on-demand technical support for teachers, assisting them in using tablets and AI tools, as well as resolving technical issues. However, it was identified that, in some schools, even in the face of difficulties, teachers were not contacting the available technical support. This led to the need for a more proactive approach.

The "active searches" involved scheduled visits by the project's technical team to schools to identify teachers who might be facing difficulties but had not formally requested help. This strategy allowed the technical support team to find quicker solutions to problems impacting the proper use of tablets and AI tools but had not been reported.

This approach was particularly effective because many teachers reported that although they had faced challenges handling the devices, they did not feel the need to call for support, often solving problems with the help of colleagues. The "active searches" ensured that no issue went unnoticed and that all teachers received the support needed to fully integrate technology into their pedagogical practices.

- Results of the Tablet Use Survey (June):

The diagnostic survey applied to teachers participating in the Passo Project revealed important information about the use of tablets and the educators' perception of integrating technology into their professional activities.

- Help with Professional Activities:

Most teachers reported that using tablets has helped in their daily professional activities. They highlighted the ease of access to educational resources and the ability to plan lessons more efficiently.

- ChatGPT in Daily Activities:



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Many teachers indicated that they have been using ChatGPT for their professional activities, highlighting its usefulness in creating activities and planning lessons.

- Most Used Tools and Applications:

Among the most used applications and websites on the tablets are Google, YouTube, ChatGPT, and GEP (school diary site/app). Other mentioned apps include Pinterest, WhatsApp, and reading and counting tools.

- In-Service Teacher Training:

Most teachers expressed the need for another training session on technology, tablets, and tools later this year. Among the suggested topics for the next in-service teacher training are inclusive education and the enhancement of technological skills.

- Positive Feedback:

Several teachers praised the initiative, thanked the support, and highlighted the positive impact of the tablets on their pedagogical activities. They mentioned that the tablets have facilitated recording classes, filling out school diaries, and conducting research.

- Suggestions and Complaints:

Some educators suggested improvements, such as adding a chip slot in the tablets to create a WhatsApp account exclusively for work. There were also complaints about not having received the tablets and difficulty using the online diary.

Note: The number of teachers increased from 56 to 59 in 2024, resulting in a shortage of tablets for three teachers for a period. The purchase of additional tablets has already been made. Additionally, the acquired tablets differ from each other; half have a chip slot while the other half do not. In the future, we will aim to buy only tablets with a chip slot, as this is an important demand from the teachers. The issue of using the online diary was resolved by using the tool's online version instead of the app.



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Are you able to use the tablet for your daily professional activities?

34 responses

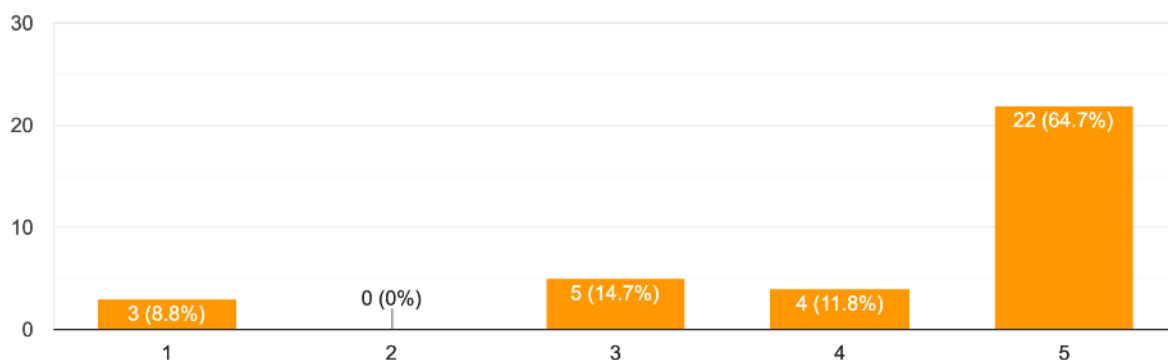


Image 10. Responses to the question "Are you able to use the tablet for your daily professional activities?" (consider 1: never, 5: always)

Do you think using the tablet helps in your professional activities?

34 responses

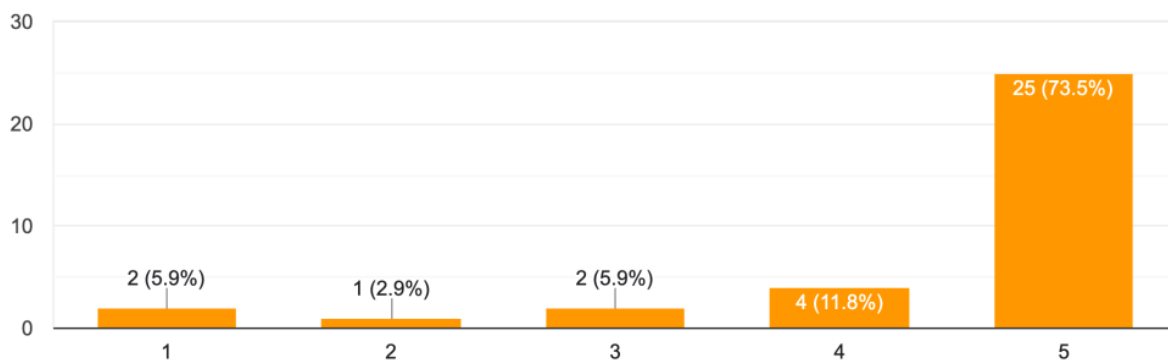


Image 11. Responses to the question "Do you think using the tablet helps in your professional activities?" (consider 1: a little, 5: a lot)



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Have you used ChatGPT for your daily professional activities?

34 responses

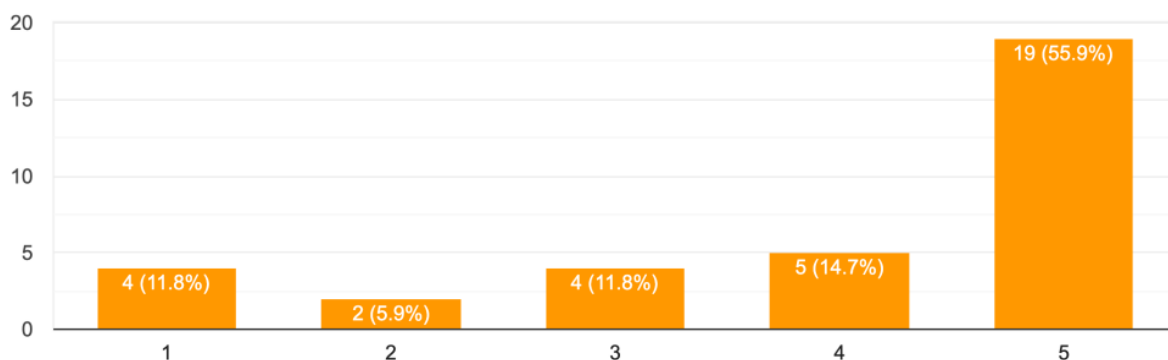


Image 12. Responses to the question "Have you used ChatGPT for your daily professional activities?" (consider 1: never, 5: always)

Do you think using ChatGPT helps in your professional activities?

34 responses

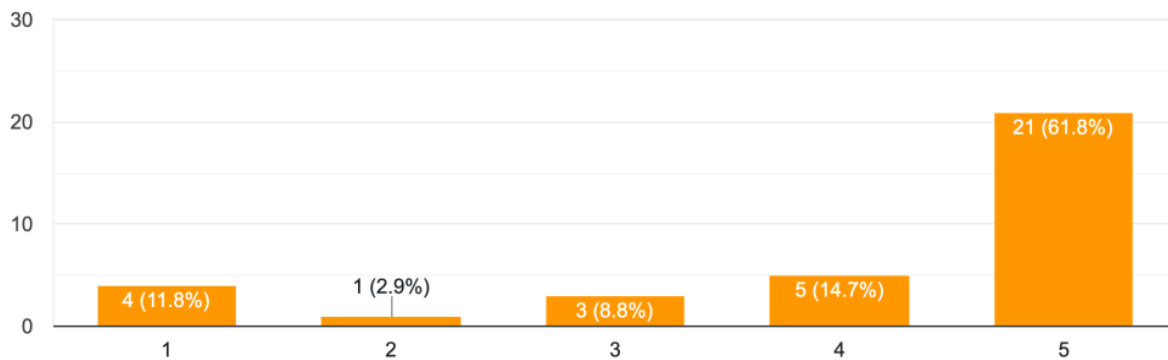


Image 13. Responses to the question "Do you think using ChatGPT helps in your professional activities?" (consider 1: a little, 5: a lot)



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How have you used the tablet?

34 responses

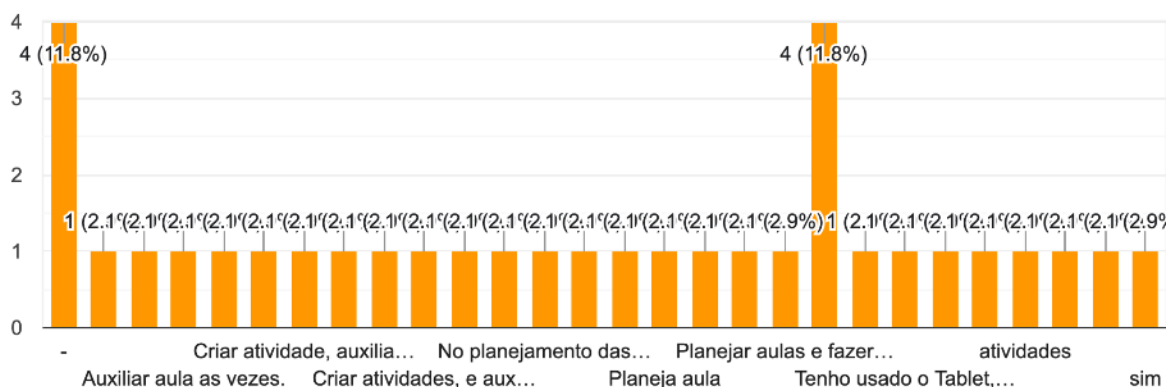


Image 14. Responses to the question "How have you used the tablet?"

List of responses:

Activities

Creating activities and watching stories with students.

In lesson planning, videos.

I use it on various occasions as support in my pedagogical work.

Planning lessons and recording notes.

Planning lessons.

Assisting in class sometimes...

Planning and filling out the diary.

I have used the tablet for activities with my student with ASD, creating lesson plans using GPT, and when I need to show an educational video or music.

Creating activities, planning lessons, and YouTube videos.

Creating activities, assisting in planning lessons, watching videos on YouTube, etc.

I haven't received the tablet yet.



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Which tools, applications, or websites do you use the most on the tablet?

34 responses

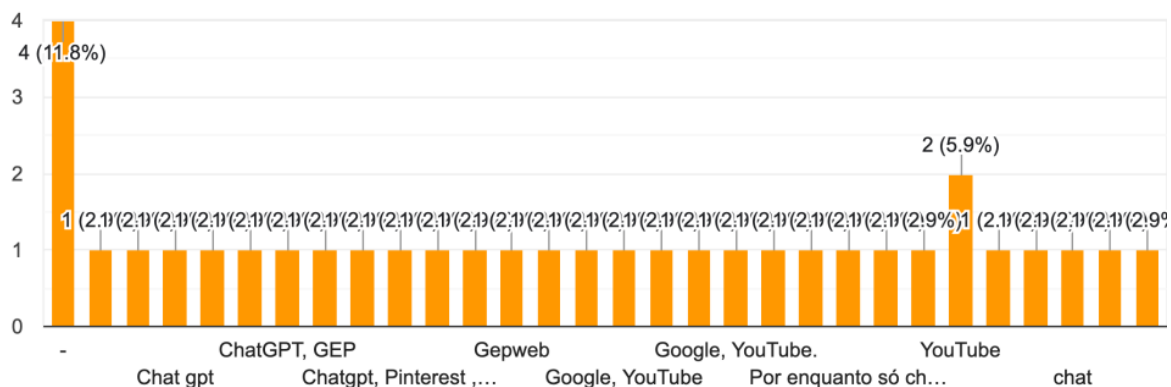


Image 15. Responses to the question "Which tools, applications, or websites do you use the most on the tablet?"

List of responses:

Google and YouTube

GEP, YouTube

ChatGPT, Pinterest, Reading and Counting, GEP (school diary)

I use ChatGPT, YouTube

YouTube, ChatGPT...

Google, YouTube, Instagram, and others

GEP school diary

ChatGPT and YouTube

ChatGPT

Gepweb

YouTube, ChatGPT

Google, ChatGPT, YouTube

Google, YouTube, Word

YouTube

Google

For now, only ChatGPT (sometimes).



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CHATGPT, GOOGLE

WhatsApp, Google, Etec

Google, YouTube

ChatGPT, YouTube

I haven't received the tablet yet

YouTube

Google, YouTube, and ChatGPT

ChatGPT

Do you think another training session on technology, tablet use, and tools is necessary this year?

34 responses

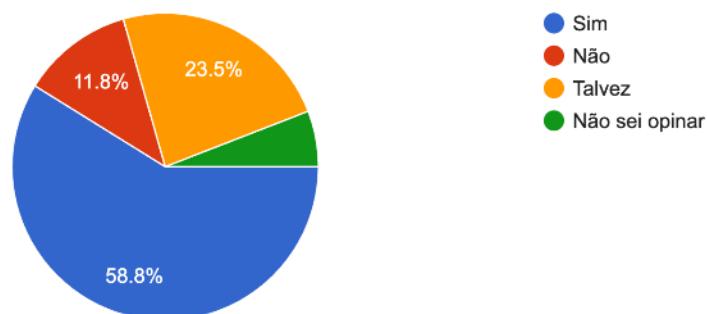


Image 16. Responses to the question "Do you think another training session on technology, tablet use, and tools is necessary this year?" (consider Blue: Yes; Red: No; Yellow: Maybe; Green: I don't know what to say).



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Among the topics below, which do you think is most important for the next in-service teacher training session?

34 responses

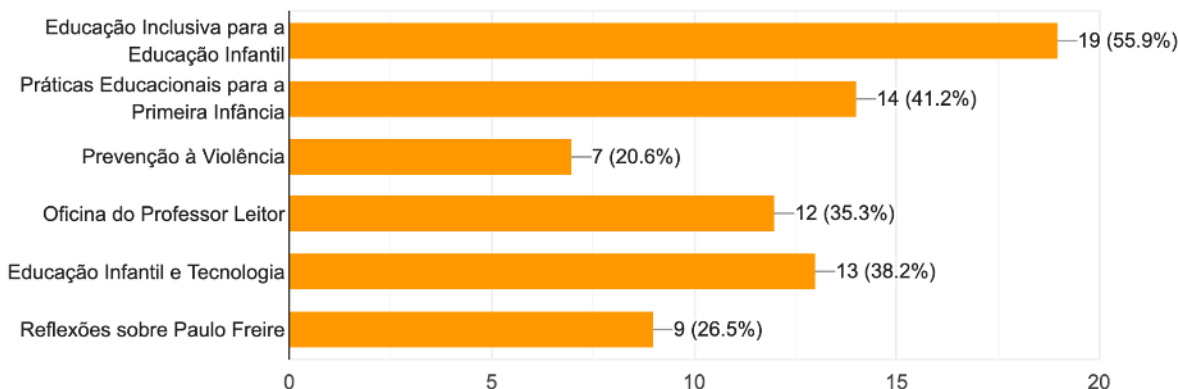


Image 17. Responses to the question "Among the topics below, which do you think is most important for the next in-service teacher training session?" (In order, from top to bottom: Inclusive Education for Early Childhood Education; Educational Practices for Early Childhood; Violence Prevention; Teacher Reader's Workshop; Early Childhood Education and Technology; Reflections on Paulo Freire).

- Distribution of Additional Tablets and Schedule Changes (July)

In July 2024, the Passo Project delivered two new tablets to the teachers hired after the project started. This delivery ensured that all educators in Passo de Camaragibe had access to the technological tools necessary to improve their pedagogical practices.

Due to the election calendar and the numerous federal training sessions occurring in the municipality, some of the training sessions planned for June and July were postponed. This adjustment was necessary to ensure full participation by the teachers, who had overloaded schedules.



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Image 18. Distribution of two additional tablets to teachers at Nossa Senhora das Candeias School

- In-service teacher training on "Inclusive Practices in Early Childhood Education" (August)

On August 9, 2024, the Passo Project held a training session titled "Inclusive Practices in Early Childhood Education," conducted by Professor Dr. Angela Di Paolo Mota. This topic was identified as the most requested by teachers in the diagnostic surveys conducted by the project. The training, held in a hybrid format (with the instructor participating remotely and teachers attending in person), focused on topics such as guaranteeing rights, inclusive curriculum, adapted pedagogical resources, support for children with special needs, and how ChatGPT can help.

Although there were initial concerns about the effectiveness of a hybrid training session, the event was considered a success. The teachers actively participated, and the feedback was very positive. The participants highlighted the knowledge exchange and the relevance of the topics addressed for their pedagogical practice.



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Would you recommend this training to a colleague?

15 responses



● Sim, com certeza
● Talvez
● Não

How relevant was this training to your professional practice?

Em uma escala de 1 a 5, o quanto a formação foi relevante para a sua prática profissional?

15 responses

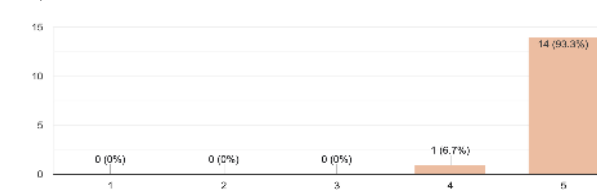


Image 19. Images from the in-service teacher training session held on August 9, 2024, with the theme "Inclusive Practices in Early Childhood Education" (in the pie chart, consider blue: yes; red: maybe; yellow: no.) In the bar chart, consider 1: not relevant and 5: very relevant).



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- In-service teacher training on "Teacher Reader Workshop" (September)

In September, the Passo Project promoted another stage of in-service teacher training with the "Teacher Reader Workshop," held on September 6, 2024. The topic was also previously identified as one of the most necessary by teachers and the education department. The workshop addressed the importance of training teachers as readers and included activities such as yoga, literary reading, individual reflections, and group discussions. The main objective was to encourage critical reading and the creation of an effective reading plan for teachers using ChatGPT.

The activities were conducted by Natália Ruiz de Oliveira and received excellent acceptance. The teachers emphasized the relevance of the topic and the importance of strengthening the reading practice among educators as a way to inspire their students and promote quality teaching.





20 responses



19 responses

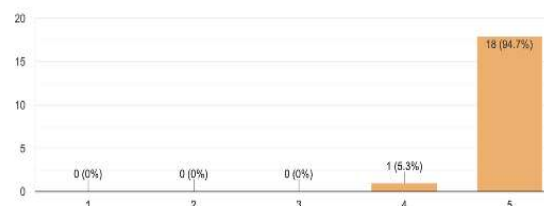


Image 20. Images from the in-service teacher training session held on September 6, 2024, with the theme "Teacher Reader Workshop" (Words in the word cloud: reflection, interesting, new ideas, productive, cool, great, experience exchange, learning, important, knowledge, dialogues. | In the bar chart, consider 1: not relevant and 5: very relevant).

Challenges

Despite the significant advances made by the Passo Project during this period, some challenges were identified, requiring adjustments and adaptations in the planning and execution of activities. These challenges were mainly related to the local political context and technical issues that impacted the use of technological resources in schools.

1. **Schedule Adjustments:** Due to the municipal elections, some activities and training sessions had to be postponed, as anticipated at the beginning of the project. This unusual political context affected the teachers' availability and the project's pace.
2. **Compatibility of Tablets with Municipal Applications:** At the beginning of the period, there were technical difficulties with the compatibility of the tablets with the new municipal application. The problem was resolved using the online version of the application.
3. **Lack of Integration Between School Management and Teachers:** One of the challenges identified was the lack of closer integration between school management and teachers in using tablets and implementing technologies. This disconnect hindered the coordination of activities, creating a barrier to the project's effective implementation. The greater inclusion of pedagogical coordinators in the training



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sessions is one of the strategies to mitigate this problem and create a more collaborative and aligned environment.

4. **Motivation of Some Teachers:** While most teachers have shown enthusiasm for the technological innovations brought by the project, it was noted that some professionals are demotivated in their profession. These teachers showed resistance to learning new tools and adopting innovative practices. This reinforces the need for actions that encourage and motivate the engagement of all involved in the educational process.
5. **Heavy Rains (April to August):** Intense rains between April and August caused flooding in several areas and left many regions without electricity. As a result, several schools had to close for a few days, hindering the project's progress and delaying some planned activities.

Next Steps

With the progress of the Passo Project and the necessary adaptations due to the challenges faced, some directions have been established to ensure the continuity and success of the initiative.

First, a new diagnostic survey, similar to the one conducted in June, will be applied to assess how teachers are using the tablets and what adjustments can be made to improve the pedagogical experience. The feedback obtained will be crucial to guide upcoming actions and training sessions.

Additionally, the focus of in-service teacher training will be expanded to include pedagogical coordinators. Including these professionals is seen as a key strategy for improving the management of technology use in schools, providing a more integrated and coordinated approach between teachers and their pedagogical leaders. This step will be crucial to consolidate the use of AI tools in the educational environment in a more structured and comprehensive manner.



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Finally, as the first year of the project draws to a close, a reassessment and strategic planning meeting will be held. This moment will be dedicated to reflecting on the successes and challenges so far, as well as outlining the next steps to expand the impact of the Passo Project. The team will seek to adjust goals, expand the technology's reach, and identify new opportunities for training and support for teachers and school managers.

Conclusion

Between May and September 2024, the Passo Project consolidated its role as an impactful initiative in early childhood education in Passo de Camaragibe. The activities carried out, including follow-up visits, training sessions, and technical support, were essential to strengthen the use of technologies such as tablets and ChatGPT in the teachers' daily routines. The positive feedback from educators, combined with improvements in pedagogical practices, highlights the success of the actions implemented so far.

However, the project faced significant challenges that required adjustments and flexibility. The political-electoral context, the intense rains that caused interruptions in the functioning of schools, technical difficulties with tablet compatibility, and the lack of integration between school management and teachers directly affected the pace of planned activities. Additionally, a lack of motivation was identified in some professionals, who were resistant to learning and implementing new classroom practices. These obstacles underscore the ongoing need for strategies that promote motivation, communication, and collaboration among all those involved.

Despite these difficulties, the Passo Project demonstrated resilience and adaptability. The actions taken, such as "active searches" for technical support, the inclusion of coordinators in training sessions, and organizing relevant training activities, helped minimize negative impacts and continue advancing the project's objectives. The training sessions on inclusive practices and critical reading were particularly successful, reaffirming the project's commitment to the professional development of educators.



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As the project moves into its next phase, with new training sessions and assessments planned, the expectation is that the impact will continue to grow, seeking new partnerships and consolidating Passo de Camaragibe as a model for integrating technology and innovation in early childhood education. The Passo Project team remains committed to continuous improvement and creating an educational environment that values the use of technologies to promote inclusive, high-quality education for all children.



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