THE INSERTION OF TECHNOLOGICAL RESOURCES IN THE TEACHING-LEARNING PROCESS OF STUDENTS IN THE EARLY YEARS OF A MUNICIPAL PUBLIC SCHOOL IN BENJAMIN CONSTANT, AM

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ABSTRACT

We live in a society with the marked presence of technological advances, in which new information and communication technologies are inserted in the daily lives of people in various sectors, including education, which in turn has sought to make use of technology to help in the teaching-learning process of students. This work presents a reflection on the insertion of technological tools in the educational context, specifically in the teaching of the early years, for this, it was dedicated to the objective of analyzing the insertion of technological resources in the teaching-learning process of students of the early years (I Cycle) of a municipal school, located in the municipality of Benjamin Constant, State of Amazonas. The research is exploratory in nature, in a qualitative approach and had as data collection techniques the interview and observation. The research showed that although the importance of the use of technological resources as a contributing element of quality education is recognized, limited access to these resources still prevents the more qualitative and potential use of this technological tool, as not all public schools provide such resources to assist teaching, and that this often ends up being one of the factors of technological and digital exclusion in the school context.

Keywords: Technology. Literacy teacher. Teaching and learning.

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INTRODUCTION

We live in a reality marked by technological advances, in which new information and communication technologies are inserted in the daily life of today's society in various sectors, including education, which in turn has the challenge of keeping up with the advances in technology and implementing them in the practices and pedagogical proposals in the teaching-learning process.

In this context, technologies acquire the role of a facilitating instrument of the education system, encouraging the interaction of the student with the digital world, the search for knowledge, research, and the right to technological information, as these effectively provide skills and competencies to students, improving their cognitive performance and expanding intellectual capacity.

From this perspective, ICTs - Information and Communication Technologies facilitate children's access to new knowledge. They seek to complement the teaching-learning process, expanding the individual's intellectual capacities, creating representations and articulations of thoughts, as well as a continuous evaluation of mastery and performance. And in this regard, the teacher assumes a special responsibility, since he works as an intermediary in the learning process through the mastery of technologies, as Almeida (2001, p.72) explains, as follows:

> The teacher who associates ICT with active learning methods develops the technical skill related to the mastery of technology and, above all, articulates this domain with pedagogical practice and with educational theories that help him to reflect on his own practice and to transform it, aiming to explore the pedagogical potentialities of ICT in relation to learning and the consequent constitution of knowledge networks.

In order for the student to be assisted by technology in the learning process, the teacher needs first of all to develop their technical technological skills, know how to relate the use of this tool with educational content and transform the use of this technology-education duet into pedagogical practice, as it is worth remembering that:

> It is necessary to educate for democratic, more progressive and participatory uses of technologies, which facilitate the evolution of individuals. When the child arrives at school, the fundamental learning processes are already developed in a significant way. There is also an urgent need for media education to understand, criticize and use them as widely as possible (MORAN (2000, p.50).

Here we can visualize the importance of the use of technologies, especially for students in the early years who are discovering themselves in society, being an opportunity to educate about the use of technologies, leading the student to understand and use it in a

responsible and educational way, promoting a better formation and preparation of the citizen for the society that is in constant technological evolution.

From this perspective, this work is justified by the relevance of discussing and reflecting on a current and very comprehensive theme, mainly because technological resources are already part of the daily life of the mass in general and are present in various sectors of society, with this, there is a concern about how children are being prepared to give it a current situation where technology is increasingly integrated into people's social lives. Thus, the main objective of this work is to analyze the insertion of technological resources in the teaching-learning process of students in the early years (I Cycle) of a municipal school. Specifically, it sought to: a) identify the conception of literacy educators in relation to the use of technology as a tool to assist in the teaching and learning of students in the early years (I Cycle); b) to verify the technological resources made available by the school and; c) describe the technological resources used by the teachers and their contribution to the teaching and learning of the students.

The research showed that although the importance of the use of technological resources as a contributing element of quality education is recognized, limited access to these resources still prevents the more qualitative and potential use of this technological tool, as not all public schools provide such resources to assist teaching, and that this often ends up being one of the factors of technological and digital exclusion in the school context.

This work follows the present structure: it is preceded by an introduction containing the contextualization of the theme, objectives, relevance, justification and objective; followed by the method and formalism section that describes the methodological procedures used in the research; In the section entitled Results and discussions, the data of the field research with theoretical support are presented and finally, the last section presents the final considerations about the research.

METHOD OR FORMALISM

The research was carried out in a public school in the municipality of Benjamin Constant, and was guided by a theoretical methodological conception focused on technologies in the educational context, specifically for literacy and literacy in the early years. This field of research was fundamental for an approximation of the school reality, especially the technological resources that the institution makes available to assist the learning process, thus resolving concerns as a researcher. In this sense, Marconi and Lakatos (2009) advocate that the field of research is:

> [...] That used with the objective of obtaining information and/or knowledge about a problem to which an answer is sought, or a hypothesis that one wants to prove, or even discovering new phenomena as they occur spontaneously, in the collection of data related to them and in the registration of variables that are presumed relevant to analyze them. (p.69)

In this context of observing, questioning and understanding educators and the school, the phenomenological approach method was adopted because it helps in the formulation of problems, in the construction of hypotheses and in the definition of concepts with a view to the theoretical foundation of research, that is, it leads us to understand what we propose to research, causing an interpretation of a given reality. Augusto Triviños (2008, p.43) states that "phenomenology is the study of essences and all problems, according to it, redefine essences: the essence of perception and the essence of consciousness". In this way, the phenomenological approach proposes a reflection on the investigated research object, leading it to interpretation and understanding.

The research was carried out in a qualitative nature because it sought to identify the use of technological tools used by educators as an aid in the teaching process and the quality provided due to its use. According to Triviños (2008, p.120), qualitative research "[...] on the one hand, it comprises research activities that can be called specific, on the other hand, it helps to have a clearer vision of what a researcher can achieve who aims to achieve an interpretation of reality".

It was necessary to make a bibliographic survey on the theme of the research before going to the field. The consultations were both through books and digital means. The sources provided adequate means for a better understanding of the theme in question, so that

as a researcher, guide and direct the research subjects to answer the questions posed in the research. Marconi and Lakatos (2009) list that:

> The phases of field research require, in the first place, the realization of a bibliographic research on the theme in question. It will serve as a first step to find out what state the problem is currently in, what work has already been done on the subject, and what are the prevailing opinions on the subject. Secondly, it will allow the establishment of an initial theoretical model of reference, in the same way that it helps in the determination of the variables and the elaboration of the general plan of the research (p.69)

The research is exploratory in nature, as it provides greater familiarity with the problem and an overview of a given fact, allowing the researcher to insert himself in the field of research. Marconi and Lakatos (2009) also explain about exploratory research stating that:

> These are empirical research investigations whose objective is the formulation of questions or problems, with a triple purpose: to develop hypotheses, to increase the researcher's familiarity with the environment, fact or phenomenon in order to carry out a research, [...] systematic procedures are generally employed either to obtain empirical observations or for data analysis (or both simultaneously). Both quantitative and qualitative descriptions of the object of study are often obtained, and the researcher must conceptualize the interrelations between the properties of the observed phenomenon, fact or environment. (p.71)

The technique used in the scope of the research was interview and observation. The number of participants in the research was six (6) teachers from the initial years (I Cycle) in which they contributed greatly to the research, the institution itself also provided information of great value for the conclusion of this research.

RESULTS AND DISCUSSIONS

This topic aims to present the results of this research, which had as its main focus, the objective of analyzing the conception of literacy educators in relation to the use of technology as a tool to assist in the teaching and learning of students in the early years (I Cycle).

A research was carried out with six educators from a public institution in the municipality of Benjamin Constant, in which the information obtained was through interviews and observation. In this way, the teachers were questioned about the **relevance of the insertion of technological resources as one of the tools for the literacy and literacy process.**

Chart 1 - Teachers' conception of the insertion of technological resources in the literacy and literacy process

	Answers
Professor A	Yes, technology is an important tool to teach students to read and write, you can innovate your methods, through technology the student makes more effort.
Professor B	Yes, this resource often helps, yes, the need is very great and the resources are few. Students do not have access to the computer, for example.
Professor C	Yes. Nowadays, these resources are of fundamental importance as a tool in the teaching-learning process of children.
Professor D	I believe it is of paramount importance so that students can be literate through technological means.
Professor E	Yes, because through some technological resources we can hold the attention of students. The children become more curious and it makes the class more dynamic.

Professor F	Yes, technologies greatly help the learning process of students, mainly because it is a way to implement and enrich classes, but unfortunately we cannot always count on this help.

According to the comparative table of answers, we can observe that all the teachers interviewed agree on the importance of inserting technologies in the teaching process and how relevant it is to complement their classes. This understanding, acceptance and recognition of how much technologies can contribute to the teaching and learning process of students is fundamental for technologies to have space in teachers' pedagogical practices, because as Stum and Gai (2016, p.20) argue:

> It is up to literacy teachers to understand the current situation and the real contributions of technologies to the teaching and learning process in children's literacy. Knowing how to organize, select and plan strategies during the study of various themes/contents are also necessary attributes for the new paradigms.

Although there is recognition of the importance of technological resources in the educational context, it is clear in the statements of teachers B and F that they are concerned with the difficulty of access to technological resources by both the teacher and the student in the school space. This is because the school has few technological resources to offer teachers and students, as can be seen in the teachers' response about **the existence of availability of technological resources in the school?**

Chart 2: Technological Resources made available at school

Research subjects	**Answers**
Professor A	Yes, data show, printer and speaker
Professor B	Yes, children's literature books, didactic games, television and date
	gig.
Professor C	Computer and television.
Professor D	It has a television, but it is not available for classrooms.
Professor E	Speaker, computer and data show
Professor F	Data show, printer to print activities and computer.

Currently, the school has only one (1) data show, two (2) desktop computers and two (2) printers, one in the teachers' room and one in the school office and one (1) speaker. The school does not have a notebook to assist classes in the classroom and no computer room and/or media room that allows access by students. As can be observed the insufficiency of

technological resources by the school has hindered the comprehensive use of technology in the school context, as can be observed through the teachers' statements about **which technological tools they used in the classroom as an aid to their classes?** We can follow the answers below:

Chart 3: technological tools used in the classroom by teachers

Research subjects	Answers
Professor A	Notebook, Data show, printer, speaker and cell phone
Professor B	My methodology is varied with didactic games, books, reading sheets, children's literature books, mobile alphabet, reading cards with illustrated figures.
Professor C	There are few, because in the school where I work we don't have these tools available. But data show, computer and television are always used.
Professor D	Computer and television
Professor E	Computer, speaker and data show
Professor F	Data show e notebook

The technological resources made available by the school are few, both in terms of variety and quantity, being insufficient to meet the demands of the entire school. This ends up limiting the insertion of technological resources to the pedagogical practices of teachers, who in turn do not use such resources so frequently and sometimes make use of personal technological resources. However, it is worth mentioning that it is not enough to have such resources if they are not properly applied. It is necessary to understand, first of all, that technology is comprehensive and in the school context it needs to meet the educational needs of today's society through differentiated teaching methodologies, contextualized with the syllabus and profile of the students. About this, Chaves (2004, p.2) explains that:

> [...] The use of technologies in teaching work requires conceptions and teaching methodologies different from the traditional ones, to meet contemporary educational needs. Therefore, it is necessary for teachers to develop a debate on the relevance of technologies in the teaching work and on the best way to use them, so that they are not seen and worked on as a merely technical resource (CHAVES, 2004, p. 2).

Thinking about the present day, methodical and traditionalist classes do not contemplate the demand and educational needs, since the changes resulting from globalization happen quickly and do not meet the momentary objectives. The teacher,

therefore, finds himself in a progressive context of updating and modifying the pedagogical work intertwined with the media and technologies.

Although with limitations in availability and access to technological resources in the school, the teachers seek to insert technologies in their pedagogical practices by recognizing their ability to assist in the intellectual development of their students, as observed in the teachers' statements.

Table 4: Contribution of technological resources to student learning

Research subjects	**Answers**
Professor A	In a pleasant, different and playful way.
Professor B	If the school had material for all classes it would be very good, but there are few technological resources to serve all classes in the school.
Professor C	With these resources we can show and transfer to students images and research on various subjects related to the content under study, making classes more dynamic and interesting.
Professor D	The technological resource is a means by which the student arouses more interest in learning to read, I say this because I show some activities on my cell phone to students who have difficulties in reading and I realize that they are improving.
Professor E	They contribute in an important way because children not knowing how to read and write make an effort and know how to handle these resources, a practical example is the cell phone that arouses curiosity is something different that always draws the attention of students.
Professor F	They contribute to making the class differentiated, dynamic, draws more attention from students and arouses interest, thus making students make more effort to learn mainly reading.

According to the perception of the teachers, the main contribution of technological resources is in their ability to arouse the interest of the student, being able to attract the attention and participation of the students more effectively, which directly contributes to better teaching and learning.

Although the relevance of technology in the educational sphere is recognized, the difficulties of its insertion and use cannot be neglected, which is reflected in several aspects, either by the lack of infrastructure and availability of technological resources in schools, or by the lack of technical skills on the part of teachers to handle such technologies, requiring training. A reality present in the research carried out, although the issue of the lack of

structure and technological resources in the school has stood out, through observations and informal conversations it was also observed the difficulty of some teachers in the use of the handling of educational technologies.

FINAL CONSIDERATIONS

We know that society today lives in the atmosphere of technology that has reached all areas of our lives. Technology is prospected to be a facilitator of human life, for which it needs to be made available and used appropriately and responsibly.

In the educational field, technological insertion has been increasingly stimulated and necessary given its potential to contribute to teaching and learning in a more contextualized, participatory, stimulating and attractive way for students.

This is because the teaching and learning method has undergone and still undergoes changes as means emerge to facilitate the teaching methodology. The work previously focused on memorization and decoding for cognitive development in the most diverse reading and writing skills, now aims to adhere to teaching innovative resources to facilitate learning performance.

The use of technological resources is of total relevance in any instance of education and is essential for a quality educational advancement, but unfortunately the reality is that not all schools provide such resources to assist teaching, and when they do provide in some cases technical skills on the part of teachers, requiring training.

It is necessary to take a more sensitive look at technological issues in the educational context so as not to view them only in the sphere of mechanical resources, but as methodological instruments to support pedagogical practices. The school must be a space to minimize the factors of technological and digital exclusion.

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