




## THE USE OF CELL PHONES IN THE CLASSROOM: A DIDACTIC RESOURCE OR DISTRACTION?

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**Selomi Bermeguy Porto<sup>1</sup> and Zandio Bermeguy Porto<sup>2</sup>**

### ABSTRACT

Informatics has undoubtedly brought innovations and development to various areas of society, including in the educational sphere. As a result of this technological evolution, the cell phone has become an indispensable resource in people's lives in the various contexts of human life: work, entertainment, studies, etc. However, the existence of divergences of opinions and heated debate on how to use such resources in the school environment is highlighted. Thus, our research in general sought to verify the perception of students and teachers about the use of cell phones in the classroom. In specific terms, it sought to describe how the cell phone has been used in activities in the teaching-learning process. The research presents a qualitative approach and, as an instrument of data collection, the interview form with open and closed questions was used and the observation preceded by the experience in curricular practices and supervised internship in high school. What is revealed is that technology has provided a great contribution to society in general. However, thinking of the cell phone as a pedagogical resource is still a debate that needs to be better explored and aligned for its better use in educational institutions. Finally, the research shows that the teacher has a fundamental role to insert computer science in the school environment, giving a new look to the student's learning, creating bridges of connections between theories and practices.

**Keywords:** Education, Technology, Cell Phone.

<sup>1</sup> Professor at the Federal Institute of Amazonas – IFAM, Tabatinga Campus  
PhD in Society and Culture in the Amazon

<sup>2</sup> Graduated in Portuguese Language, with specialization in Informatics in Education



## STARTING THE DIALOGUE

The society of the twenty-first century experiences the technological evolution glimpsed through the various technological resources within people's reach and use. In this we can see that information technology has undoubtedly brought innovations and development to various areas of society's daily life, including in the educational sphere.

The educational benefit that computer science provides to the student is much more visualized in relation to the skills that it enables to be developed. Computer use in the classroom, for example, provides children with the opportunity to learn skills such as typing and types of programs, word processing and spreadsheet applications, etc.

Brazil took its first steps on the path of educational informatics in 1971, according to the book *Projeto Educom*, when, for the first time, the use of computers in the teaching of physics (USP in São Carlos) was discussed, in a seminar promoted in collaboration with the University of Dartmouth/USA. (NASCIMENTO, 2007, p. 12).

Thus, Informatics in Brazilian Education was born in the early 70's with educators from some Brazilian universities motivated by what was already happening in other European countries.

Brazil sought to further consolidate informatics in Brazilian education by creating the Special Secretariat of Informatics, SEI which, according to DECREE No. 84.067 Art. 1 (1979) its purpose was "to advise in the formulation of the National Information Technology Policy (PNI) and to coordinate its execution, as a superior body of guidance, planning, supervision and inspection, with a view to, especially, the scientific and technological development in the sector".

After the first steps to materialize informatics in Brazilian education, it is emphasized that there were several steps to reach the main target, which was the scientific and technological development in the sector. Thus, ministerial guidelines were created in 1982 to support the use of educational technologies and computer systems, as well as the National Seminars on Informatics in Education, agreements for the beginning of activities for the implementation of pilot centers, among others.

We can see that the evolution of information technology in Brazil occurred gradually, but today it is possible to observe the great advances of computer science in the various segments of Brazilian education, it is also emphasized that the school is inserted in the context of the influence of new technology, with this, there is a need to educate students for a world in which technological evolution and all discoveries define the limits of knowing and learning.

In this scenario, it is important for schools to work and use technologies in the school environment, as such a resource will enable the student to know about the technological



world and help in the contextualization of various classes that better facilitate understanding and consequently teaching and learning in the classroom.

It is in this context that the use of cell phones in the classroom is discussed. It is true that the use of cell phones is present in the most varied contexts, whether business, academic or home. Since the cell phone is part of people's lives, it is no longer possible to escape this technological reality. However, the existence of divergences of opinions and heated debate on how to use such resources in the school environment is highlighted.

The use of cell phones in the classroom is controversial and often generates conflicts, as it is known that for a long time it has been unacceptable, both by teachers and by law. However, it is worth mentioning that access to communication and technology have grown a lot, so these transformations have provided profound changes from one generation to another, especially in relation to the use of cell phones.

In this context, this research was guided by the following guiding question: would the use of cell phones in the classroom be a didactic resource or distraction? This question seeks to instigate the perception of students and teachers about the use of cell phones in the classroom.

The issue is linked to the choice of the theme, which arose from the experience in Curricular Practices and during the Internship in High School, where it was realized that the use of the cell phone caused constant controversies and there was no methodology to use this technology as a pedagogical tool. Thus, in general terms, it sought through this research to verify the perception of students and teachers about the use of cell phones in the classroom. In specific terms, it sought to describe how the cell phone has been used in school activities in the teaching-learning process of students in the 3rd year of high school.

It is from this perspective that our work seeks to contribute to this contemporary debate involving the teaching-learning process with the help of technological resources, namely, the cell phone.

This work is organized preceded by an introduction containing the contextualization of the theme, problem, objective and justification, followed by the section that deals with the method or formalism that describes the methodological procedures that guided the realization of the research, then the analysis and discussion of the results is presented, finally the final considerations and references used in the work are presented.



## **METHOD OR FORMALISM**

The research was carried out in the municipality of Benjamin Constant, State of Amazonas, at the Immaculate Conception State School. The research had 21 participants, among them, 19 students, 2 teachers.

The research follows a qualitative approach in which the interview form with open and closed questions and the observation preceded by the experience in curricular practices and supervised internship in high school were used as data collection instruments. Prodanov and Freitas (2013, p. 70), contribute that the use of this type of qualitative approach differs from the quantitative approach in that it does not use statistical data as the center of the process of analyzing a problem, and therefore does not have the priority of numbering or measuring units.

The research favored the deductive method, which according to Figueiredo (2008, p. 93), "starts from the general to the particular, that is, through a descending chain of reasoning based on theories or laws, to reach a conclusion". Therefore, the research started from the analysis of a reality that permeates society in general, followed by a particular reflection having as reality the school context of a classroom of a State school in the municipality of Benjamin Constant, being guided by the question-problem of knowing if the use of cell phones in the classroom is conceived as a didactic resource or distraction by students and teachers.

## **RESULTS AND DISCUSSIONS**

This topic aims to present the results of this research that had as its main focus, the objective of verifying the perception of students and teachers about the use of cell phones in the classroom, as well as to describe how the cell phone has been used in school activities in the teaching-learning process of students in the 3rd year of high school. The research was carried out with two (2) professors and nineteen (19) students, totaling 21 participants in the research.

### **THE USE OF CELL PHONES IN THE CLASSROOM: A DIDACTIC RESOURCE OR A DISTRACTION?**

Technology is a reality in people's lives, today in all sectors the use of technological resources is perceived, whether in shopping or teaching, in relationships or in business, in all spheres of society there is a technological presence. This fact has contributed to creating the virtual generation in which they continuously use the cell phone in all activities of their lives. And this insertion has caused changes in the various sectors, including education.

In the perception of some experts, technology has provided a great contribution to society in general. Considering the insertion of technology in the educational sphere, Behrens (2002, p. 74) states that "[...] The teacher needs to use information technology as an instrument of his pedagogical practice, aware that the logic of consumption cannot surpass the logic of the reproduction of knowledge. From this perspective, the computer and the network must be at the service of the school and learning".

The author sees information technology as an instrument of pedagogical practice that needs and should be at the service of the school as a contributing element of knowledge production, even because "teaching, in general, cannot avoid the technological advances that are imposed on everyday life" (PEREIRA, 2007, p. 13).

The table below shows the students' perception of the use of cell phones in the classroom, revealing how they use this tool in their school activities.

Table 1: Questionnaire applied to students

Questions	Student responses
1. Do you have a cell phone? ( ) Yes ( ) No	17 Yes 02 No
2. What functions do you use the most on your phone. Rate on a scale of 1 to 5 (where 1 represents the most used function and 5 the least used). ( ) Social Networks ( ) Text Messages ( ) Internet Browsing ( ) Photography ( ) Video/music	( 10 ) Social Networks ( 5 ) Text Messages ( 3 ) Internet Browsing ( ) Photography ( 1 ) Video/Music
3-Have you ever used your cell phone to help you in any class activity?	18 Yes
4-Do you believe that the cell phone can be used as a possible tool to aid learning?	17 Yes 2 No
5-Is there a difference between traditional reading (printed) and digital reading?	16 No 3 Yes. If so, why:
6-Can cell phones be used in the classroom as a didactic resource to facilitate research on subjects in real time?	17 - Yes 2 - No
8-In which subjects have you used the cell phone in the classroom to assist in carrying out the school activity with the teacher's permission? ( ) in no discipline ( ) in the disciplines of: _____ It was used to:	9- Spanish Discipline 2- Chemistry Discipline 2- Physics Discipline 1- History Discipline 1 - Mathematics Discipline 4 - Did not answer Of those who responded, all used it for research

Source: Field Research (2018)

The data presented in chart 1 indicate that most of the survey participants have a cell phone, a consequence of the influence of the technology era in which we live today. In which communication takes on new forms and styles, with more colors and greater speed.

In addition, it is observed that most use their cell phones to connect to social networks, another fact that is due to the way people relate to each other today. Social



networks play an important role in people's lives, through them they connect with other people, no matter the distance.

The use of the cell phone is a striking characteristic of the new generations, it is with it that they spend the day, record their moments and stay connected with their virtual friendship cycle.

Technology is gaining more and more space within the daily lives of children and adolescents and has also been gaining strength in the school field, given that young people seek modernity, carrying with them the much-used media devices and then acquiring knowledge through research on smartphones, tablets and cell phones (KNACKFUSS, 2017, p. 6).

The data also show that most students have already used the cell phone to carry out some activity in the classroom, and believe that it can be used as a tool to aid learning. From this point of view, the cell phone assumes another function as a pedagogical resource.

The frequent use of technology makes everything common and customary, as the data show that students see no difference between a printed and digital reading.

The smartphone is inseparable in the daily life of the students of this new generation, because they want practically immediate answers, being a reality for most of them, when sending questions in forums, chat rooms and social networks. In the same way, it is integrated into their lives as they explore various applications to socialize, play and produce knowledge (SILVA, 2015, p. 44).

It is believed that the cell phone can be used as a pedagogical resource for real-time research, since the dynamics of the world require us to keep up with changes continuously.

The changes require new readaptations, the education system has undergone several transformations resulting from the use of new technologies in the classroom, stimulating the creation of new forms of learning. In this context, the teacher needs to be aware of these new changes and apply them in the best possible way in the classroom.

According to the students interviewed, the Spanish discipline was where the cell phone was most used, being the most cited among the students, which shows the flexibility of the teacher in allowing the use of this technology in classrooms, as many teachers still cannot see this bias for the use of cell phones in the classroom.

It should be noted that the role of the teacher is fundamental to insert informatics in the school environment, because with regard to teaching, the teacher is one of the most important actors in the school atmosphere for student learning, therefore, teaching practices should be promoted, creating bridges of connections between theories and practices for the intellectual development of students in the various segments of knowledge.



However, many teachers have found limitations in the use of the available technological options, especially the use of cell phones in the classroom. Among the two teachers interviewed, both reported that they rarely use cell phones in their classes, but recognize that cell phones can be considered as a pedagogical tool. Let's look at the teachers' speech:

The cell phone is a pedagogical resource if used for this purpose. However, many students use it only as a distraction and can harm teaching and learning if we do not have control over the situation (Teacher A).  
With technological evolution, the use of cell phones becomes a very effective tool for students and teachers, but unfortunately not all students use it with the intention of favoring their good education (Teacher B).

It is perceived that, although teachers recognize the cell phone as a pedagogical tool, they do not use it frequently, due to the inadequate posture of the students with regard to the handling of this technological resource.

The use of cell phones was suspended at school due to their use for illicit purposes (Teacher A).  
Most students use these tools to post inappropriate photos and messages and even to sell drugs in schools (Teacher B).

Teaching, explains Oliveira (2010, p. 30), "is the act of facilitating student learning, which means that the teacher needs to carry out concrete actions resulting from planning that presupposes some theoretical principles". This also applies to guidance on the use of cell phones as a didactic tool to facilitate the teaching-learning process, since with access to the internet in the palm of their hand, students can learn and share knowledge. This is what Silva (2015, p.25) explains, as follows:

Investigating the internet makes it possible to find sites that address common sense issues to scientific knowledge published in renowned journals. It is important, therefore, for the teacher to guide students on the importance of choosing credible websites, as well as the distinction between relevant and erroneous information (SILVA, 2015, p. 25).

Borges (2006, p.9) reminds us that "the difficulties for the integration of ICT in the school universe have their origin in several factors, and most of them are due to the absence of educational policies that organize and implement strategies for its implementation". This applies to the implementation of the use of cell phones in the classroom as a pedagogical tool. What is perceived is a serious difficulty for schools to adapt to this new reality of digital education, requiring school educational strategies and policies that enable the insertion of this resource in an educational way. This requires intense awareness-raising work with the entire school community.



The important thing is not to allow the harm to override the benefits that access to information technology enables to the educational process. But this management of technology in the school environment, especially regarding the use of cell phones, needs planning, organization and control combined with the pedagogical practices of teachers.

It is important to remember that educators, regardless of their area of knowledge, need to make use of the use and contribution of information technology to promote the school and citizenship education of students since "the teacher needs to be aware of the need to master certain theoretical knowledge in order to be able to make informed decisions with regard to lesson planning, the choice of activities to be carried out in the classroom and the evaluation process" (OLIVEIRA, 2010, p. 23).

Even in the face of the challenges that technology can cause due to its inappropriate use, experts still highlight its significant contribution to the educational process of students, let's see:

Education experts say that technology contributes to motivating students and modifying their behavior in the learning process, helps in the formation of special students, as well as stimulates teachers and frees them from certain administrative tasks to better use their time. (BRASIL, PROINFO/DIRETRIZES, 1999, p. 10).

It is true that technology has brought many benefits to society, but we cannot neglect its side effects as a result of its inappropriate use. However, if it has the possibility of improving the teaching-learning process and consequently the quality of teaching, we encourage schools to advance in the use of their benefits while they must neutralize their possible harms. The big issue is in the culture of the individual. The formation of the citizen also involves education in the proper use of what technology offers us and this applies to the use of cell phones.

## **FINAL CONSIDERATIONS**

Today's society is marked by the constant use of technology in all areas, which has transformed the way people relate, negotiate and even study. From this point of view, education is also transformed by changing its ways of learning. And the use of cell phones is one of the technologies that has been inserted in the educational field as a tool in the dissemination of knowledge.

The survey showed that there is an opening for the use of cell phones in classrooms, but that it is still incipient, as many teachers still do not have this practice. Most students have already used their cell phones to do some class activity, this shows the potential to explore this technology in their learning.





However, thinking about the cell phone as a pedagogical resource is still a debate that needs to be better explored and aligned for its better use, since it requires sensitization, especially of students, about the proper use of this tool and, on the other hand, better preparation of school management and teachers on how to use such technological resources as a pedagogical didactic strategy for teaching and learning.



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