

INSERTION OF TECHNOLOGICAL RESOURCES IN THE CLASSROOM ELEMENTARY EDUCATION I

THE INSERTION OF TECHNOLOGICAL RESOURCES IN A CLASSROOM OF FUNDAMENTAL EDUCATION I

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Summary

This report is the result of a study that investigates the relationship between teachers and the use of computers in their pedagogical practices, and how these professionals are appropriating this tool in the teaching-learning process. It reflects on the need for teachers to include Information and Communication Technologies during their professional activities with their students, given the importance that technology has in today's society. The aim was to identify the importance of including technological advances in the classroom among the teachers at the Professor Divaldo Suruagy Municipal Basic Education School, located in the village of Fazenda Nova, s/n, Rural Area of Olivença - Alagoas. A case study was conducted to verify the behavior of teachers in relation to the use of ICT and their daily work at school, and to gather information and needs of schools regarding infrastructure, continuing education and planning for the use of technological resources available at school. The need to promote ongoing training was highlighted in order to introduce teachers to the computer culture and provide them with the conditions to develop their mastery of technology to solve school problems and their professional practice, also enabling the development of ICT management projects. Teachers need to understand the significance of this work as a means to achieve educational objectives of a pedagogical nature, the ultimate reason for the existence of the school.

Keywords: Education; Technology; Professional Training; Planning.

Abstract

This report is the result of research that investigates the teacher relationship and the use of the computer in their pedagogical practices, and how these professionals are appropriating this tool in the teaching-learning process. It reflects on the need for teachers to insert Information and Communication Technologies during their professional activities with their students, due to the importance that technology has in today's society. With the objective of identifying in the framework of teachers of the Municipal School of Basic Education Professor Divaldo Suruagy, in elementary school I, located in Povoado Fazenda Nova, s/n, Rural Area of Olivença - Alagoas, the importance of the insertion of technological advances in the classroom of class. A case study was carried out to verify the behavior of teachers in relation to the use of ICT and their day-to-day work at school, and information and needs of schools were raised regarding infrastructure, continuing training and planning for use. Technological resources available at the school. The need to promote continuing education was evidenced, in order to introduce teachers to the computer culture and give them conditions to develop the mastery of technology

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to solve school problems and their professional practice, also enabling the elaboration of education projects. ICT management. Teachers need to understand the meaning of this work, as a means to achieve educational objectives of a pedagogical nature, the ultimate reason for the school's existence.

Keywords: Education; Technology; professional qualification; Planning.

1 Introduction

This research deals with the insertion of technological resources in the classroom, especially in the Initial series of Elementary Education I of the public network, of the Professor Divaldo Suruagy Municipal Basic Education School, that is, how should the teacher insert technological resources within the classroom, using them as a methodological procedure?

The aim is to identify the technological resources relevant to the teacher's work in the classroom; the pedagogical practices, mediated by technology, reviewing their advances and difficulties; recognize the technological resources existing in your school.

Given the need to include technological resources in elementary school classrooms and the perceived need for teachers to deal with ICT, we sought to emphasize this topic in an attempt to improve and involve students more in their classes. However, simply changing environments, such as taking students to the computer lab, is not enough to bring about a change that contributes to the construction of knowledge. More than a change of environment, it is necessary for teachers to reflect on their practice, attitude, and results achieved, since the inclusion of media and technologies in pedagogical work implies specific objectives and appropriate directions. This means not only a change in methodology, but a change in attitude linked to a concept of learning that leads them to be able to identify possibilities and strategies that contribute to the construction of students' knowledge.

To develop this study, a qualitative, descriptive research was carried out, with observation as a starting point. Integrative activities were provided where various resources were used, such as: calculator, cell phone, etc., and I set up the data show and showed how to use it, so that the equipment can be used by teachers within the institution, etc.

The use of ICT, especially the use of computers, has become an important tool for accessing information, in addition to providing new forms of learning.

We must consider as ideal a teaching that uses diverse means, a teaching in which all means should have an opportunity, from the most modest to the most elaborate [...] from the spoken and written word to images and sounds, passing through mathematical, gestural and symbolic languages. (SANCHO, 2001, p.136).

According to Moraes (1997, p.53) "simple access to technology, in itself, is not the most important aspect, but rather the creation of new social dynamics for learning and new tools". Given the above, it is necessary for the teacher to master these tools and not be afraid to deal with the class in different situations that may cause embarrassment and to know how to incorporate the different computer tools in education.

The process of change in education is neither uniform nor easy. We will gradually change, at all levels and educational modalities. There is great inequality in terms of economics, access, maturity and motivation of people. Some are prepared for change, while many others are not. It is difficult to change acquired patterns (managerial, attitudinal) of organizations, governments, professionals and society. (MORAN, 2007, p.169)

The referred work is composed of the development where it will report on the topic addressed, the methodology that will define how it was proceeded to reach the results and its discussions, the conclusion that will give the opinion on the topic and which references were used to reach the results obtained.

2 Theoretical basis

2.1 The concept of ICTs

Information and Communication Technologies, if integrated with each other, can enable a set of resources capable of providing communication processes linked to various areas, and can also be used to distribute, gather and share information.

According to Cruz (1987, p.16), he states that it is the set of "individual devices, such as hardware, software, telecommunications or any other technology that is part of or generates information processing, or even contains it". It is clear that in a social way, with foundations in information, Information and Communication Technologies come to cause a new paradigm, transforming customs, ways of living and producing in people's lives.

According to Castells (1999, p.67), he defines Information and Communication Technologies as the "converging set of technologies in microelectronics, computing (software and hardware), telecommunications/broadcasting and optoelectronics".

ICTs have become a tool of great importance in the educational context, however, it is necessary that all those involved have discernment, so that the possibilities provided by this instrument are used appropriately, transforming students into agents capable of acting critically and participatively in the contemporary technological scenario (TIMBOÍBA, *et. al*, 2011)

With the emergence and evolution of Information and Communication Technologies in the area of communication, inventions such as radio, TV, computers and their resources, such as multimedia and the Internet, emerged. Communication based on Information and Communication Technologies caused a great revolution in society. The organization of social, political, cultural and economic systems made by computers underwent changes, providing new means of networking.

The inclusion and use of Information and Communication Technologies must reach individuals without losing focus, whether residential, institutions, especially schools, companies and government, promoting connectivity in an increasing way, seeking to group together the largest number of individuals possible. When we refer to values, we should talk about Brazil, as there is a large cluster of resources, but they generate social inequalities.

Based on these disparities, it is inevitable to realize that, despite the state investing in Technologies, there are places where no one even knows what a resource is or even how to use it, thus making it non-existent. However, we know that there are institutions with a considerable collection of technological resources, but not all professionals have access or are prepared to deal with the tools, or when they do have access, they are afraid due to insecurity to work with them and change their practice in the classroom.

However, we know that the mastery and use of Information and Communication Technologies must be linked to daily life so that they can be part of the daily lives of individuals, maintaining a relationship between man and society. Furthermore, it is necessary to include computer classes in our schools as well as in their political pedagogical project in a critical, creative, participatory and interactive way, seeking to prepare teachers in the teaching and learning process, to deal with them in their daily life.

2.2 How to introduce ICTs into public schools

In Elementary School I, in most Brazilian public schools, the big dilemma is that teachers have to deal with classes with students with distorted ages ranging from 6 to 14 years old, where the teacher has to be flexible to deal with them, not to mention the number of classrooms with up to 30 students. This is the reality that most Brazilian teachers are trying to educate in. The big dilemma is to make classes attractive and engaging so that students stop and pay attention. But how? This problem is characteristic of the scenario of public schools in the early years and has been discussed among educators. It is believed that innovations with technological resources can make classes more enjoyable.

more attractive and motivating, the more the teacher needs to stop and think about what he is working on in the classroom and try to innovate, that is, it is necessary to review his methodology, because with the use of technology the class becomes more attractive or not depending on the point of view and what is being worked on.

According to Timboiba, (*et al.*,2011), "With children's lack of motivation at school, it is necessary to take advantage of this opportunity and discover new ways of providing learning that awakens interest and pleasure in learning".

Given the above, it is necessary to review the methodology and take advantage of activities that attract the student's attention, be they images, texts, sound and animation.

Providing students with contact with technological resources in a practical and attractive way, capturing their attention and interest in using tools such as, for example, using a computer.

To introduce ICT in public schools, the managers proposed: developing pedagogical projects with activities including the use of ICT, promoting pedagogical meetings in which there is a need to use these tools, requesting qualified professionals to facilitate the use of ICT, training courses for professionals, a technician for equipment maintenance, that the laboratories have a greater number of computers and a facilitator to work with the teacher to facilitate the process.

But how can ICT be incorporated into schools? Below we can analyze the need to deal with ICT reported by public school managers:

The problem with state public education is the lack of personnel: support staff, lunch ladies, security guards and, mainly, educators. These are problems that are beyond the manager's jurisdiction. Assigning an educator to assist students in the library or computer lab becomes impossible due to the lack of these professionals in schools (Manager A).

A laboratory with a larger number of computers and a facilitator for each term, to facilitate the process together with the teacher. A video room for every 6 classes in the school to avoid clashes between classes due to the great need, finally, that we have a pedagogical director in each school, to facilitate discussions and improve the quality within the Public School, since the pedagogical discussion is becoming secondary within the current management (Manager B)

Training and qualification courses, both introductory and practical, since some professionals do not yet know how to use a computer and others do not know how to use them in their classes. And the main thing is to have a technician available, here at the complex, who we can turn to for maintenance and conservation of the equipment (Manager C).

It is necessary to coordinate teamwork to solve the gap in what is being underused in the school, with the members who are already involved in this work environment. There is no point in bringing someone from outside to try to rescue what is not being used, but rather training the team to solve this challenge. The MEC has been offering the media course in

education, although they know that the interest of both parties is very little, especially on the part of managers.

Given these circumstances, this leads us to reflect: do managers know which of their teachers have already completed or are currently completing training to deal with Media in Education? Are they concerned about the work and projects developed at school during the year in relation to how the training process takes place? Do they promote meetings to help teachers work and organize the use of the spaces and media available at their school? Do teachers know which media are available at their school?

The inclusion of ICT in schools is problematic and constitutes a challenge for schools and teachers who have difficulty in applying the knowledge acquired about ICT in pedagogical practice, due to the changes that it implies for these same practices. (MERCADO; GOMES, 2008, p.241)

According to the authors, it is necessary to establish moments for discussion, planning and evaluation, focused on these gaps that are present within the school. And this is also the responsibility of the management team, which is responsible for awakening and introducing the use of digital inclusion in their schools, emphasizing democratic management.

2.3 Difficulties in using the computer room

In today's world, where information and knowledge are means that society must be included, it is essential to use computer labs available in schools, thus making classes more interesting and attractive. However, for this to happen, teachers and students must be able to deal with this situation, that is, they must know how to handle the tools. However, teachers who carry out experiments of this type with the use of technological resources in the classroom need methodologies that benefit from their use in their daily classroom routine, to take advantage of the available resources and make learning meaningful and effective.

According to Perrenoud (2000), the use of Information and Communication Technologies, including the ability to organize and direct this learning, can manage the individual's own continuing education, offering greater engagement in the development and involvement of teaching and learning.

The use of computer resources at school requires the insertion of the individual, whether culturally, socially or economically, as long as computers are available and connected to the virtual world, allowing research to be carried out in real time and in different educational areas.

According to Mercado (2009), "in a room with internet, students become builders of their knowledge and skills, based on their intellectual and mental development and reorganization".

With the availability of computer labs in schools, reflections based on the work carried out in these schools have emerged, seeking methodologies that aim to stimulate and encourage students in their learning through the practice offered by the teacher. The questions are: The relationship between education and technology is a strong source of information and knowledge. How should this pedagogical practice be understood? Computer labs are being set up in schools. What strategies and policies are schools developing in response to these questions?

Information and Communication Technologies have been gaining increasing importance in education, as they are tools that provide different ways of learning, whether in reading and writing, understanding text and reality, creating graphs, etc. According to Mercado (2009), "Information and Communication Technologies make classes more dynamic, stimulating creativity and critical thinking, allowing the development of autonomy, and the use of these technological resources brings everyday life closer to the classroom and introduces new issues in the educational field". I completely agree with the author, because it is known that the school is a place of learning and when it provides a computer lab and the teacher plans his class to make use of it, trying to get the student to use these tools and not just copy and paste texts accessed from the internet, this learning becomes more productive and meaningful for the student.

According to Costa and Paim (2004), the relationship between education and technology and the reflection on the transformations in society and the impact of technological advances at the beginning of this century, "requires the development of well-defined educational projects, which have in mind strategies that increase the chances of students learning and knowledge". In other words, it is necessary to articulate projects that provide opportunities for students to feel motivated to actively participate in mastering the tools and that there is a pedagogical aspect to this construction of knowledge. In view of the above, the implementation of computer labs in schools opens up a range of questions, which allows students to develop skills and abilities to integrate into the society in which they live.

3 Methodology

The objective of this project is to seek methodologies seeking to contextualize, through the objectives, methodological techniques and analysis of the results obtained through methods for the teacher of the Professor Divaldo Suruagy Municipal School of Basic Education to insert technological resources into the classroom, thus making classes more dynamic, attractive and meaningful for the student.

4 Discussion of results

To prove the gap between teachers and the use of computers in pedagogical practices, a study was developed at the educational institution where I work, on the use of ICT, which could help to better understand this gap. In other words, the non-use of computers as a tool that is capable of improving teaching and learning.

From the universe of 05 teachers who teach in the morning, to guide this study, We worked with a population of 05 teachers. To achieve the objective, I used the questionnaire through the presentation of closed questions and obtained the information below.

Regarding the age of the interviewees, 60% are 45 years old; 20% are 25 years old and 20% are 22 years old. Of the 5 teachers surveyed, 100% are female. They were also asked about their economic profile and in relation to their economic situation, 60% receive between 1 and 2 minimum wages and 40% up to 1 minimum wage.

Regarding academic training and professional qualifications, 20% of the teachers interviewed had only completed high school, 20% were completing higher education, 40% had a degree in Pedagogy and 20% of the teachers interviewed had a specialization. They were asked if they had a computer: 60% answered yes, but despite having a computer at home, 40% of these teachers stated that they did not use this tool frequently and 40% of the teachers answered that they did not have a computer.

When asked about the use of the school's computer lab, one fact caught our attention: 100% of the interviewees only used this space on the day they were taken to the school's computer lab for the first time. Regarding the purpose of using the computer on a daily basis, 40% responded that they use the computer to search for information, 20% to chat and 40% not at all.

They were also asked about the use of computers as a source of teaching resources, and only 40% of teachers responded that they were aware of the resources that can be used.

offered to their students. 60% said they were unaware of the resources that could be offered to students. When asked about what types of media were used in their teaching practices, 80% of teachers responded that they used written media (textbooks, newspapers and magazines), while 20% responded that they used TV and other media.

Regarding the fact that they felt safe in front of the computer, 80% said they did not feel safe, and 20% responded that they felt safe in front of the computer. Finally, these professionals were asked about their reaction to the computer. Only 20% responded that their reaction was normal and that they felt comfortable in front of the computer, 40% said they felt insecure in front of the computer, and 40% of those interviewed said they felt afraid.

All of the interviewees do not use the school's computer lab with their students. Given this fact, I felt the need to formulate only one open-ended question for the item, "Do you frequently use your school's computer lab?" Since 100% of the interviewees stated that they never used it, I decided to add the following item to the question "why?".

In view of the addition of this item, it was found that the school laboratory has existed since 2010. Despite this time of existence, the internet was only installed on its premises last year. According to some teachers, "a computer that does not have the function of connecting to the large network is not very useful". It was also noted from the addition of this item that the time factor and access to the laboratory, which is not available to everyone, are considered an obstacle in the teachers' planning, which ends up making it difficult to include this tool.

The use of technological resources in the classroom has been much discussed. Little by little, schools are implementing computer science in their curricula, giving students their first notions of the world of computerization. Although they already bring this baggage from their daily life in society, the school's role is only to improve and take advantage of this knowledge that is produced by the student.

The vast majority of teachers are not yet qualified to deal with students in computerized classes, as such activities require specific professional skills. Furthermore, how can one create and plan strategies related to a way of working that one has not yet fully mastered?

Given the difficulties presented to schools, they must rethink these practices that are being applied, bringing projects to the teaching-learning process that provide opportunities for

enrichment of the exchange of information, since through the internet we can have contact with the world.

Therefore, it is concluded that it is necessary to include technological resources in the classroom, so that teachers can be researchers of their actions, trying not to become stagnant in time. And that their practice is evaluated by themselves and by the student, so that debate and knowledge construction can take place in an ethical manner, respecting the individualities of the students and showing them that it is always possible to learn anything, when one has the initiative that we are all capable of.

Final considerations

Education in the sense described here leads us to reflect that, with the technological advances that it has been increasing, it plays the role of preparing future workers for insertion in the job market, through school education, when following this path it will neglect human formation in the full sense. Education in the full sense presupposes the construction of intellectuality, individuality, and a true human formation.

However, there are several obstacles that keep teachers from using computers in their teaching activities. These include fear, insecurity, poor physical and structural conditions, and especially a lack of knowledge and technological proficiency, as confirmed by the data collected and presented through the teachers' responses. Therefore, revealing the use of computers is an important task for teachers, since their students belong to the digital generation. However, according to their reports, most of these professionals are stuck in the past.

Therefore, it is up to the school to implement the definitive inclusion of ICT in its annual planning, working on issues related to the education of values, interpersonal relationships, and cross-cutting themes. Teachers must reinvent methodologies and accept these challenges, formulating a pedagogical project that contemplates the use of all technological innovations and promotes interactivity.

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