

International Journal for Innovation Education and Research

ISSN: 2411-2933



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Published Date: 8/1/2020 Page.541-550 Vol 8 No 08 2020

DOI: https://doi.org/10.31686/ijier.vol8.iss8.2560

Information and Communication Technologies in Education: speeches by teachers and managers of a public school in Fortaleza, Ceara State

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Abstract

This article is a product of the author's PhD Thesis, which investigated what teachers in the early years of elementary school think (and do) about the use of Information and Communication Technologies - ICT in the educational context. The research was conducted in a public school in the city of Fortaleza, Ceara State, and the data collected consists of discussions held in focus groups, with teachers and managers of the institution. The analyses were made from theoretical references of Educommunication, a field of research in expansion in Brazil, which defends the idea that educating must necessarily be a democratic and participatory act. The prevalence among educators of a discourse of fear and control over the use of ICT in school was verified through the promotion of a centralizing and authoritarian use of ICT during classes.

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1. INTRODUCTION

The interaction maintained between the school (as an educational institution) and Information and Communication Technologies - ICT, is a relationship that seems to be established between contradictory principles: if on the one hand we have an apparently optimistic and favorable discourse for the use of ICT in the educational context, on the other hand this use still seems to arouse fears about the impact of these tools (such as the computer and television) that seem to be far from the teaching methods commonly adopted in schools (NAPOLITANO, 2007).

Some technologies, such as television and cell phones, seem to arouse even greater fears, being accused of encouraging alienating, ideological postures and inadequate to school principles. This, in itself, causes the presence of technologies in the classroom to be interpreted as something "special" or "different", its use should therefore be done in an absolutely controlled and centralized way in the figure of the teacher (ANONYMOUS, 2010).

For Educommunication (a growing field of research in Brazil), the use of technologies in an educational context does not necessarily represent a problem: what really matters is the quality of communication maintained between educators and learners during the use of technological tools. Thus, the "how is it used" is more important than "what is used", because the educational processes must be dialogical, communicative and open to reflection and questioning by the students (SOARES, 2011).

In this article, we present the results of the doctoral research done by the author with educators of Elementary School, in a public school in Fortaleza, Ceara. The data presented were obtained from discussions held in focus groups with the participants of the study that aimed to discover what teachers and managers thought about the use of ICT in the educational context and how these tools were used.

It could be seen that the use of technologies always seemed to follow a philosophy of apprehension or distrust on the part of educators and the presence of technologies in classes was always done unilaterally, without the participation of students in the construction of the activities carried out and with a mechanical approach to ICT.

Throughout the text, we will present examples of educators' discourses on the use of technologies in their classes, seeking to analyze their positions in the light of educommunicative concepts. The research was registered in the Research Ethics Committee of the Federal University of Ceará, being registered under number 1,456,208. The participation of professors and managers was kept confidential, and all the names presented in this article are fictitious, with merely illustrative function in the text.

2. THEORETICAL REFERENCE

2.1 THE RELATIONSHIP BETWEEN TECHNOLOGIES AND THE SCHOOL ENVIRONMENT IN THE FIELD OF EDUCOMMUNICATION

Educommunication is an area of research in expansion in the country that does not have a delimited concept. Although the objective of this field is clear (to improve the quality of communicative processes maintained in education), Educommunication approaches several objects of study, such as the use of technologies in educational processes, media education aiming the critical interpretation of technologies and even the authorial media production by students and teachers.

Educommunication (or "Educom", as it is also known among many researchers in the field) is not an unprecedented field of study, many scholars in Latin America have already looked at the relationships between Communication and Education, emphasizing different aspects of the relationships maintained between these two fields of knowledge.

Citelli (2011) tells us that there are various ways of looking at the study of the relations between the means of communication and formal education: for him, there is an essentially epistemological way of thinking about Educommunication, making studies about the "[...] mismatches and tensions, between communication processes and education" (CITELLI, 2011, p. 59). In addition, it is also possible to focus on other issues addressed in the relationship between Communication and Education, such as:

[...] media-school relations, literacy for communication, critical reading of the media and the statutes that animate the teaching-learning relations now promoted by new devices for the production, circulation and reception of knowledge and information. (CITELLI, 2011, pp. 59-60).

The relationship between technologies and the field of education has been intensively researched in Latin America since the 1990s, generating research with different nomenclatures for often similar objects of study. Thus, we have an immense range of research that addresses the relations maintained between

technologies, education and the human being, such as the studies on Educommunication as a field of mediations (SOARES, 2011); the investigations on the cultural impact of new technologies on the human being (MARTIN-BARBERO, 2011); the studies of reception for the critique of the media (FÍGARO, 2011); and the proposals for the creation of a "pedagogy of communication" (PENTEADO, 2001; OROZCO-GÓMEZ, 2011). We have here a vast semantic field, and kept the appropriate differences of approach between each author cited, we have basically the same field of study.

Educommunication is giving space and autonomy for students to build their knowledge through dynamic and decentralized actions (KAPLUN, 2014). This autonomy given to students can be done with or without direct participation of technologies in educational processes; however, if used, the technological resources should serve as propellants of communication maintained between teachers and students, and not as a tool for impoverishing dialogue, something that goes against the principles of hope and valuing the student as the holder of opinions and rights (FREIRE, 2014).

3. METHODOLOGICAL PROCEDURES

3.1 FOCUS GROUPS WITH TEACHERS

In our research, we sought to understand what teachers and managers in the early years of elementary school thought about the use of technologies in the classroom. To do this, we observed teachers' classes for a period of three months. In addition, we conducted focus groups with the participants of the study. During the focus group meetings, we discussed texts related to the field of Educommunication and we did group interviews as a way of verifying what educators think about the presence of ICT in the school.

Focus groups are basically discussion groups on a given topic, where the researcher, despite acting as an interviewer, behaves more as a mediator of a group dialogue than as a one-sided intervener. According to Guedes (2003), the focus group allows the researcher to adopt a less intrusive posture, from the moment he behaves as a mediator, trying to leave the interviewees freer and calmer, without feeling pressured to declare anything they believe is necessary for the researcher.

It is important to make it clear that the focus groups did not initially intend to function as a continuing education for the research participants, the intention was to provide elements (through simple materials such as texts and videos used in the meetings) that could broaden the range of arguments of the participants regarding the object of discussion of the focus groups: the use of technologies in education. However, we have noticed throughout the focus groups that the activities carried out there were interpreted by the research participants as a kind of "continuing education" or "mini pedagogical training". In a way, this surprise that the research participants gave us confirms the thought that teacher training is not always done in an intentional or planned manner, but above all "training is also a process of human development, and therefore professional" (ALVARADO-PRADA, 2010, p. 370).

4. DISCUSSION AND RESULTS

4.1 THE PRESENCE OF ICT IN SCHOOL: FROM PROHIBITION TO INSTRUMENTAL USE

Throughout this study, we noticed that among Teachers and Managers there was a predominance of a speech of apparent approval for the use of ICT. However, this "recognition of importance", which was

given to technologies, was accompanied by an extremely limited use by school management, which directed the way (and circumstances) in which each technological tool could be used in teachers' classes.

The use of ICT (TV or computer) in the teaching process was treated as something unilateral: it was a process carried out by the Teachers and inspected by the Managers, characterizing a teaching practice deeply rooted in the concept of pedagogical planning, which is seen as a didactic safety criterion (LUCKESI, 2011).

The lack of freedom to use technological resources in their classes was expressed in the discourse of the research participants in a constant feeling of "hindrance", sometimes we see an indignation or even impotence in the statements of the teachers in front of the positions demonstrated by the school management. This indignation also generated an idea about how teachers thought that technologies should be used in the classroom.

According to Martin-Barbero (2014), the school expresses its distrust of the use of technologies in the form of control. In controlling the presence of ICT, the school seems to start from the reasoning that to use these tools it is not necessary to have previous knowledge or even to learn something specific (which suggests idleness). Thus, it would not be appropriate to use computers or televisions constantly in the school context, since this would represent a threat to the pedagogical ideals defended by the school, among them the idea that one of the school duties is precisely to combat leisure and the lack of activities to occupy time (school work). Thus, the continued use of ICT in the school environment would cause the school to lose its function of educating, because otherwise, "[...] the school - which teaches to read - would have nothing to do" (MARTIN-BARBERO, 2014, p. 50).

We see an essentially instrumental use of technologies by school teachers, besides the presence of ICT being monitored in the teachers' classes, its use took place in two ways: either as a playful tool or as a tool to approach the contents worked on the textbook.

The use of ICT as a playful tool took place in a recreation class of a participant of the study (Teacher Betsy). The school's recreation classes were moments in which the teachers in each class were free to propose activities that they considered playful for the children, not necessarily having to follow the curriculum of the pedagogical contents in the classes of the other subjects (Mathematics, Portuguese, Science, History and Geography).

In the recreation class we observed, the students were accommodated by the Teacher and the animated film "The Lady and the Tramp" from the American company Disney was shown. We watched the cartoon, and the Teacher also watched the film. During the screening, the teacher complained that it was difficult to reserve the library for her class because the school did not have a video room and the screening was done in the library or in each teacher's classroom (as long as each teacher was responsible for bringing the screening material to her classroom).

Betsy also pointed out that the school management did not approve of the use of television in the classroom and did not measure efforts to prevent this use by teachers. Still according to her, using videos during classes was seen by the management of the institution as a sign of "fatigue" or "laziness", since the management of the institution thought that teachers should teach and not simply show videos, said the Teacher.

The fact that the use of technologies is considered something "lazy" by the teachers who use them

is explained by Gauthier (2014, p. 133), when he states that modern pedagogical thinking boils down to "how to teach groups of children, during a continuous period, in a given place and making them learn more, faster and better". The school, as an educational institution, is in a hurry: a hurry to teach and to reap the results of this teaching. And from this point of view, the use of TV seems to be seen as something contrary to this principle, or at best as something that slows down teaching, precisely because it "slows down" it, since according to teacher Betsy, using TV was synonymous with "rolling lessons" for the management of the institution.

Throughout our observations we also realized that the use of ICT in the public school portrayed did not always seem to be seen in a pernicious way, in some opportunities the technologies could "save" the unjustified absence of teachers, as stated below by another research participant:

Teacher Mary: "As I told you, in elementary school when a teacher is missing, management has a rule there that is a law that comes "from above", which cannot release the student for anything. So, what happens? That teacher when she's missing, that class she goes to the library. There's a movie going on. There, the school coordinator or someone goes there, she follows this class, but with the video. So the priority was for those classes that were without a teacher".

Researcher: "So, when a teacher is absent, the class goes to the library so as not to be released"?

Teacher Mary: "Yes".

Researcher: "And she watches a video"?

Teacher Mary: "A film."

Researcher: "But this film is from that missing teacher's class"?

Teacher Mary: "No it isn't. I don't know which ones, because I didn't have access to them, she has some films and she passes these films on to the students".

(Group interview, 2nd Focus Group - Teacher Mary).

Mary makes it clear that the greatest concern of the school management was the occupation of the space of the institution by the students during the school term: the school (as an educational institution) has goals to be met (number of enrollments and approval rates) that directly result in the volume of investments that will be allocated to the institution itself by the Government. In order to achieve these goals, the so-called "time use" discourse is used: it is better to have a child inside the school (even if he is not attending class) than outside it, where he would be subject to the dangers of society, and to keep the students inside the school in an eventual absence of teachers, the school used any strategy, even using resources (in this case, technologies) criticized by the school itself.

For Saviani (2013), the eagerness of school managers for quantitative results is a "[...] neotechnicalism, where the decisive control shifts from process to results". This makes "the evaluation of results seek to ensure efficiency and productivity" (SAVIANI, 2013, p. 439).

We realized that the use made of television inside the school was a use that could gain any nature: playful, illustrative or instrumental. Everything depended on the context, TV was used to remedy any situation of absence or inefficiency of the school system, such as the lack of pedagogical activities within the formal school schedule, but the technologies were not used from the principle that they could be approached as integrating tools of the educational process, providing collective actions through the joint

participation of educators and students in the production of content.

For Soares (2011, p. 17-19), Educommunication works from three basic premises: 1°) to build a dialogue between the field of communication and the teaching institutions, starting from the idea that "[...] education is only possible as a communicative action"; 2°) to present itself to the public as a field of interfaces, precisely because the act of teaching is an act of communicating something, which makes the two areas (education and communication) allow, one in front of the other, to build"[...]. ...] judgements of value and indicators of evaluation, allowing each one to distinguish and affirm itself socially"; and 3°) to propose the action of Educommunication in the educational system, both in the area of school management, as well as in the disciplinary area (of contents) and transdisciplinary (in the proposal of activities involving the means of communication and digital technologies).

Thinking about the application of Educommunication (or its principles) did not seem to be a simple task for the teachers we observed in the public school of Fortaleza. The educators did not seem to be adapted to a more intense dialogue with the technologies, television and computer seemed "strange objects" to the teachers, and an educommunication approach to the technologies sounded to them as something almost inapplicable.

According to Penteado (2001), one of the ways of trying to begin the approach of Educommunication in schools could be precisely the initial reflection on the teaching practice itself, through an "autorreflection" (which would require an exercise of humility on the part of the educators). The concept defended by Penteado about what this "self-reflection" would be lies in the fact that dealing with technologies requires a recognition that these tools are already used by teachers in their classes, and this use can not always be classified as something democratic, bearing in mind that students hardly participate in the process of knowledge construction that is approached in class. The humility recommended in this self-reflection would thus consist in the recognition that a re-education regarding the use of technologies in the classroom could be possible through the generation of a new pedagogy, the so-called "pedagogy of communication," in which the teacher would need to "review himself before the other-student" (PENTEADO, 2001, p. 23).

In conversation with the Principal, we understood better what her perception of the use of ICT in her school was. On that occasion we asked the manager what she thought of the institution's teaching staff showing programs on open TV channels:

Researcher: "If any teacher in the school came to work with video and used television in his class, and chose to broadcast a program of open TV channels like Globo, SBT or Record, a video, a documentary, a soap opera episode, at last, something from open TV. What would you think"?

Principal: "As long as it was to teach something. So... that it had a feature. Why am I showing a movie? To teach it. To make the student think about it. Got it"?

(Group interview, 3rd Focus Group - School Principal).

For the school's principal, television had the function of enriching the transmission of the content being worked on in the classroom. For her, the media could be used "as long as it had a function"; and the function was precisely this: to illustrate something "bigger" than the technology itself, and priority to the school: the textbook.

We see that pedagogical planning has, in the view of the Principal, great importance for the teaching action, this is a valid concern, since planning is a primordial part of the teaching action and no pedagogical action can be developed without having been properly planned, which obviously includes the use of technological resources. However, we must emphasize the fact that from the way it was presented to us by teachers and managers, pedagogical planning seemed to be interpreted as a salvation of teaching practice through techniques for obtaining short-term results, no matter at what price (LUCKESI, 2011).

The school is an environment that works on the basis of goals, with previously defined objectives, where the professionals involved (Teachers, Coordinators, Principals) act in an attempt to shape the attitudes, behaviors and beliefs of the students based on the values propagated by the current educational system (LUCKESI, 2011). Thus, the act of using technologies must also obey this pedagogical tradition, since this codified know-how reaches not only the contents to be taught, but also all aspects of class life (TARDIFF, 2010). This, however, ends up stereotyping the function of the technologies, which when used in a delimited and controlled way in schools, start to serve as real tools for maintaining a pedagogical order that is alien to themselves, since

[...] the means of communication enter as instruments of pedagogical action, but not as a fundamental part of one's own pedagogical being, as means that establish new dimensions of the process of expression of significant social mediations. Radio or TV are used as instrumental means of disseminating a previous theoretical proposal, where the medium itself is forgotten, except for its multiplying character and its effectiveness. (MORAN, 2001, p. 39)

4.2. EDUCOM AT SCHOOL: IDEALIZATION OR LACK OF HOPE?

When we speak of a more democratic approach to information and communication technologies and a more participatory use of them, we are referring to the application of educommunicative concepts, not only in a solitary and individual way, but as a collective, political and participatory process, offering a formation thought out in multiple dimensions, "placing communication at the service of solidarity, transversality, interdisciplinarity and citizenship" (SOARES, 2011, p. 58).

In fact, the question is not whether or not to use ICT in schools, but how to make this use something less targeted, since it is necessary that this openness to new technologies "[...] respects the educational mission of the school and the development of the student, and not caprices of society or economic issues" (KARSENTI, 2010, p. 340).

The intense clash of interests between teachers and the management of the school we visited in Fortaleza, regarding the use of technologies in the classes, seemed to lead the teachers interviewed to a kind of mental exhaustion. This exhaustion, at times, resembled discouragement; at others, it resembled a romantic vision of Educommunication. The following dialogue (conducted with teachers) presents this idealization around what Educommunication means and what it needed to be accomplished in schools. At the time, the teachers participating in the research were asked what they thought was necessary for Educommunication to be implemented in the school:

Teacher Betsy: "So, we're putting a lot of the vision of three teachers. But in the school itself we know that we would also..."

Teacher Newton: "Resistance"! (Interrupts the teacher's speech).

Teacher Betsy: "The resistance... there are teachers... we even feel this way: you brought the project, you asked us for help to do this work with Educommunication, what is left? Three teachers. How many of us are there? So there is a resistance. To get to Educommunication we have to be prepared, you know? We have to be prepared, we take even the reality of the school that we work in (another school) that has computers: everything you said there ... we do not have this room for filming, but we have computers that film, and there is resistance from teachers, there are teachers who do not use. We have computers in the classroom and there are teachers who don't use them, and still so there on the blackboard writing... do you believe that? So..."

(Group interview, 3rd Focus Group - Teacher Betsy and Teacher Newton).

The issue of teacher training was directly addressed by Teacher Betsy in her statements. For her, even if the school had an ideal infrastructure (well equipped computer rooms, sufficient TV sets for use by the whole teaching staff, etc.) the application of Educommunication would still face serious difficulties in the institution because of the resistance shown by the teachers themselves to use the technologies. In this case, we realize that Professor Betsy has linked the application of Educom to the field of ICT, when in fact the educommunicative philosophy proposes more a change of pedagogical bias than a technical field of the use of technological devices (OROZCO-GOMEZ, 2011). Nevertheless, Professor Betsy made a point of exemplifying the fact that few teachers in the school participated in the research, claiming that there was a resistance (or displeasure) of the institution's teachers with everything connected to the use of technologies.

For Teacher Betsy, applying Educommunication in school was an action that would necessarily require further training on this subject, since the teacher stressed that it was not enough to equip the institution with state-of-the-art equipment, since in her words "for Educommunication to arrive we must be prepared". This reasoning demonstrated by the teacher takes us back to the question that the application of Educom really requires a pedagogical training that enables teachers to apply it differently, in ways that are usually undemocratic by which ICT are already used in the classroom (SOARES, 2011); and in Betsy's words, she does not feel prepared to apply either Educommunication or any concept of educommunicative character that is related to the use of technologies in the classroom. It would then be necessary to have a continuous formation in Educommunication, which would not be offered only as a provisional solution on an extraordinary basis, but as something "permanent or lifelong [...] understanding in principle that the formation of these professionals does not stop with a degree and that it is necessary to update oneself to exercise the profession" (ALVARADO-PRADA, 2010, p. 376).

The discursive struggle to which the school's teachers were subjected (being in conflict with the interests of the institution's management) apparently wore them out and took away their hope for a better future, generating a pessimistic, resigned and melancholic discourse. The lack of hope in the future or in the improvement of something that is considered wrong is a hard blow on the human being, which on some occasions even makes him give up thinking about the future, proving that "the unproblematicity of the future [...] is a violent break with human nature" (FREIRE, 2014, p. 71). We have here a discourse that expresses the extremes of the situation raised: if on the one hand the teachers of the school criticized the lack of vision of the management of their institution regarding the use of technologies, on the other hand they themselves (teachers) seemed to see Educommunication as a "pedagogical salvation".

It is worth pointing out that there was no "salvation" available for the pedagogical practice of the teachers of Fortaleza, because the activity of these teachers had nothing to be "saved". To think this way is to admit that there was something wrong with the pedagogical experiences of the teachers who participated in the study, and the objective of the research was not to "save" the reality of the educators, but to understand this reality from their own speeches. Thus, there was a lot to reflect on (but not save).

The skepticism manifested in the speeches of the research participants at school shows us that there is an uncomfortable lack of hope in the teachers regarding improvements that might occur in the school, either in its physical structure or in its pedagogical nature. If for some teachers the implementation of Educommunication was seen almost as a "dream" in the discussions held in the Focus Groups, how could we face the "reality" of the teachers in that institution?

In any case, the lamentations demonstrated by the participants of this study are not without regret (from the Freirean point of view), since it is important that every teacher has hope in his teaching practice and in the improvements that the future can bring, because without hope "[...] there would be no history, but pure determinism". (FREIRE, 2014, p. 70).

5. FINAL CONSIDERATIONS

We live in a time full of stereotypes that tend to simplify and impoverish the essence of the concepts in which we deepen our reflections. In this "wave of prejudice", education and its professionals find themselves surrounded by reductionist or even redundant thoughts regarding the use of Information and Communication Technologies - ICT in educational processes.

Much is said about the importance of using new technologies in the classroom, the need to rethink pedagogical methods, the importance of making the classes "attractive"; however, even with the offer of technological apparatuses, the quality of student learning and communication maintained between teachers and students still seems to be an unknown guided by quantitative targets and rigid planning.

The melancholic view of the teachers participating in the study, regarding the use of technologies in their classes, although sincere, did not cease to be somewhat stereotypical: while the participants were indignant and dissatisfied with the control that was exercised by the school management regarding the use of ICT, the teachers also demonstrated technicalist ideas regarding the use of the technologies themselves, taking a mechanical and undemocratic approach to technological tools.

We still perceive a distance between teaching practice and Educommunication (as a pedagogical and research field). The school still faces the presence of technologies in its premises with discord and a certain severity; this mistrust is due to the fact that ICT call for themselves many obligations that the school considers exclusively of it.

In this eventual "ideological war", the school institution only tends to lose out, since the action of ICT extends beyond the school walls. In this case, it would be up to the school itself to review its ideological and defensive positions towards ICT: how could the use of these technologies be done in a non-technical way? How could technological resources be seen as something more than a tool for "retransmitting content"? What can be done not to present the computer and TV as "enemies of education"? These are the questions that need to be asked about the relationship between ICT and education.

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