

THE INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AS A CROSS-CUTTING THEME IN THE CURRICULUM OF UNDERGRADUATE COURSES

Maceió - Alagoas - 04/2012

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**Category: C
Methods and Technologies**

**Macro level - Systems and Theories of Distance Education: 2
Globalization of Education and Crossborder Cultural Aspects**

**Mid-Level - Management, Organization and Technology: 7
Ways to ensure quality**

**Micro level - Teaching and Learning in Distance Education: 2
Interaction and Communication in Learning Communities**

**Nature of Work:
Research Report**

**Class 1
Scientific Research**

ABSTRACT

This article approaches the importance of ICTs as a cross-cutting theme in the curriculum, and it aims to demonstrate that they provide advantages when implemented and discussed in the curriculum of undergraduate courses, especially in the Pedagogy of UAB one. To talk about this matter, we used a research experiment accomplished in a pole in the northeast of Brazil, in 2011, that aimed to identify the main difficulties of the distance education students. The investigation emerged from the following question: Are there advantages on discussing the ICTs as cross-cutting theme? It arose from the hypothesis that this discussion can provide student learning and the magnification of the teachers' knowledge in any discipline. It's the aim of this study to encourage teachers from institutions to deal with distance education to ponder on a curriculum more

compatible with the current context, which requires the teachers to make important decisions, considering that ICTs could be one of the providers of the improvement of the students' study conditions.

Keywords: Education and Curriculum, Pedagogy UAB; ICT as a crosscutting theme.

1 - Introduction

The Information and Communication Technologies (ICTs) are increasingly present in the daily routine and consequently in the university. Therefore, it is remarkable the importance of making an exchange of knowledge with the academic community about the curriculum of undergraduate education courses emphasizing the importance of the ICT and the virtual learning environment (VLE) for the development of the graduating teachers, as well as about other matters that mandatorily make themselves present for their relevance from the discussions on education x technology x AVA curriculum, such as copyrights, production of teaching material, code of ethics, information security, and others.

When it comes to school, ones think of a palpable classroom with walls and chairs lined up or in circles with people physically present. Sometimes the virtual school is placed in the background or it's not even mentioned by some administrators or teachers, and perhaps because of that the curriculum follows the same line of thought and it avoids the discussions about the use of ICTs as the possibility to extend or transfer this classroom to beyond the conventional school. In the curricular debates, curricular practical issues of everyday life in contemporary education are not often included, which goes along with the technologies in an insoluble way so that it changes the daily lives of teachers, administrators and students, leading to various changes, such as language behavior, the new meanings for the previous concepts to students and new faculty members of this relationship, as tutor, physical spaces and equipment, plus the new curriculum.

In face education can still be found teachers who defend an environment in which (a) teacher (a) specifies how the knowledge will be disseminated in the classroom and sometimes do not accept the inclusion of ICTs in their classes, perhaps because they represent a threat to their traditional way of teaching.

2 - Milestones of the inclusion of the ICT in Education

It is known that in the mid-1990s microcomputers became part of everyday life for a growing number of people, especially with the advent of the internet. Since then, the ICTs have been seen as a solution to the old limitations. During this period, myths were built around the technology, which could have resulted in resistance against its use, especially in education.

In December 1995 the Department of Distance Education (DDE) was created, with programs specifically aimed to the use of educational technology in the graduation of teachers on the distance education, showing the existence of public policies that demonstrated the possibility of absorption of new technologies in the educational area. In 1996, Law 9394 ratified what was being discussed in Article 80, Title III: General provisions with some determinations about distance learning.

In 1998, the Decree 2494 has regulated the Article 80 of the Law of Guidelines and Bases of Education (LGBE), and the same year, under the decree 301 the Minister of Education and Sports has established procedures for the accreditation of institutions and the permission to the graduation level, which definitely marked the use of the ICT in higher education. In 2001, the ordinance 2256 has regulated the use of non-face methodologies in the regular classroom courses indicating that there would be a lift on the frequency of computer equipment and on the internet therefore, the interactions would occur more often, considering the practice of other countries that used the ICTs in corporate education in the training and development of people areas and EAD, known as online education.

In 2005, the Open University of Brazil (UAB) was created and in 2006 it was made official by Decree No. 5800, "highlighting the articulation and integration of higher education institutions, municipalities and states, seeking democratization, expansion and internalization of the offer of free public higher education in the country "(MOTA, 2009, p. 300).

Still on the historical aspect, may be stated that the inclusion of the ICTs in education is still the target of critics related to the supposed predictability of change in the way of teaching and learning, which may induce some people to suspect of threat reduction or deflation of the teaching work. But the historical facts show that there are advantages and benefits of the ICT use on education and that this is non-way back path. When everyone is informed and use the ICTs, that thought will be minimized to full acceptance by all who are educators, so that the technologies are discussed under the aspect of interaction.

3 - The curriculum yesterday, today and tomorrow

From the definition of curriculum, it is important to check and verify if the intentions of the school and social functions and if the more relevant knowledge that is desired by their citizens are materialized and explained to the educational community, leaving no margin for the condition of teachers to work with a hidden curriculum in the classroom and sometimes in pedagogical discussions.

The hidden curriculum consists of all those aspects of the school environment that, not being a part of the official curriculum, explicit, contribute, implicitly, for relevant social learning (...) what is learned in the hidden curriculum are fundamentally attitudes, behaviors, values and orientations. (SILVA, 2001, p.78).

It is believed that the selection of subjects and curriculum content, properly adequate to the purpose of the school is just one part of the process, considering that there may be conflicts, motivated by issues of status or vanity, which will not be solved with adjustments in education or technical or scientific advances. The tendency is that the curriculum remains the same structure for a long time, assuming that any change in the curriculum can be seen as a threat to the groups installed and does not allow the inclusion of new members with different thoughts.

The familiar "backstage war" takes place with a distribution of courses and more favorable contents to certain groups. Within the cases that these occurrence possibilities are materialized, the teacher's role turns to be the execution of the received instructions from their superiors, rather than being an agent of change and act as a facilitator in the teaching-learning-study process, with its function recognized for its importance and participation in discussions and

the construction of the school curriculum equally in political, technical and scientific-pedagogical matters.

The curriculum seems to be directly associated with classes from the "Kindergarten" (Preschool) to the university. Historically, it has always been treated according to the society transformations and the context in which the school is inserted. Therefore, it appears to be important today, to look at the past and the future in motion. In these classes, were also and continue to be contemplated the social, cultural, political, economic and religious aspects, which may interfere and influence the decisions of groups that elaborate the school curriculums.

To illustrate a situation that involves the curriculum and its consequences in order to expand the vision of the reader about what certain actions may result in the teaching-learning process, leading inclusive to school dropout. In the past, as cited by Hamilton (1992), teaching in a medieval school in the twelfth century, for example, was individualized even in classes with many students, and classes were taught by private tutors, students who adopted their students considering the matters in common and by levels of competence organizing their teaching on an individual basis. However, this individualization had implications, because there was no guarantee that the student was learning, there was no requirement for the presence in the classroom (the students could take their readings, and return with their memorized lessons), there was also no expectation that the student would continue in school after the specific objectives have been "hit." In the example quoted the students enrolled, but nothing ensured that they would attend classes, but the absenteeism was not recorded, causing a false impression about the number of students who were in school, but the enrollments did not correspond to the frequency though.

Time has passed, and these medieval teaching practices and other similar ones were being changed, since were created new classes of students that organized themselves and started to discuss new forms of education for those who could afford to study in classes with the subjects that they wanted to learn and that would give them full support, this way the pedagogy of lawyers emerged.

The school became organized, recognized, the teachers recognized as masters, the curriculum was adapted to meet the aspirations of the dominant class. This evolution later resulted in the creation of universities such as Paris'.

Brazil lived a trajectory similar to the rest of the world, however, being a country of vast territory and having five unique and distinctive regions, the discussion on the integration of the ICT in the curriculum became more complex. The globalization and the popularization of these technologies matched the researchers in the education and / or technology to verify the possibility of the topic being discussed through online interaction.

In education, the transversality is a term understood as a way of arranging the didactic work, in which some subjects are integrated into conventional areas in order to be present in all of them. The LDB of 1996 established the National Curriculum Parameters (PCN), and this gave guidance on the application of transversality, aiming at the possibility of establishing, in educational practice, the learning of knowledge theoretically systematized. The target of the PCN is to bring cross-cutting themes and insert them in the already existing contents and methodologies, and not work them apart.

In this sense, were suggested some topics considered more immediate by being present in many forms in everyday life such as: Environment, Sexual Orientation, Ethics, Health, Labour and Consumption and Cultural Plurality. In this context is that it is supposed to insert the ICT, by understanding that its use has become essential in the federal universities that have embraced distance education as an alternative to bring higher education to more distant places and had to use MOODLE as indicated by the AVA MEC / UAB, by being free software and more affordable, and easy to use.

The university in which the research experiment was carried out that fueled the writing of this article may be experiencing the same experience to realize the need to adapt the curriculum to meet the public today and the next generations, as suggested by Marcovitch (1998, p. 53), who proposed the following thought: "[...] Why not trying a program of the future - where you could fit all the speculation about what may be our resumes in the coming decades? [...]. "

This question invites readers to effect a retrospective on the history and theory curriculum, to stimulate critical reflection of the different paradigms that present themselves in school life and discuss the curriculum as an important component in the production of new subjectivities in the contemporary world.

Nowadays it is difficult to live out from everyday digital technology. People use "plastic money", so-called credit card (student, banking), accompanied by their computers and internet devices, cell phones (since it is a multifunctional device, whose usability goes from the address book, passing for records of images and videos, access to the Internet, which lets you send email messages, access sites). These developments force the school to be included in that adaptation process to new times and reflect on their ability to track evolutionary changes in the society, who lives continuously with the changes of equipment and forms of communication between humans, which requires frequent readjustment of the curriculum to meet the expectations of society. As stated by Baker (2002 p. 219).

[...] The presence of multiple languages is an alternative of breaking the limits imposed by the old technologies, mainly represented by the blackboard and the textbook [...]

The history and the curricular trajectory show that "goes from writing to writing" (Barreto, 2002), this doesn't need be changed. What deserves attention is how resources will be used, and how it will conduct, attitudes, behaviors, which means that now the curriculum, to be discussed, must take into account other issues such as: resizing the classroom and use others non-school spaces, the quality of teaching materials (clarity, objectivity, transparency, ethics, illustration, copywriting, interaction, etc.). Standards and security of data and information, respect for students' individual differences. See Figure 1.

Figure 1 contains data collected by Antonio and Lima (2011), collected in his research experiment conducted with students from the UAB Pedagogy Course, students from a pole in the Northeast region of Brazil, shows that if the ICT is incorporated as a crosscutting theme may inhibit or soften some of the events that appeared in the search result, which compromised the success of the Pedagogy Course of the institution.

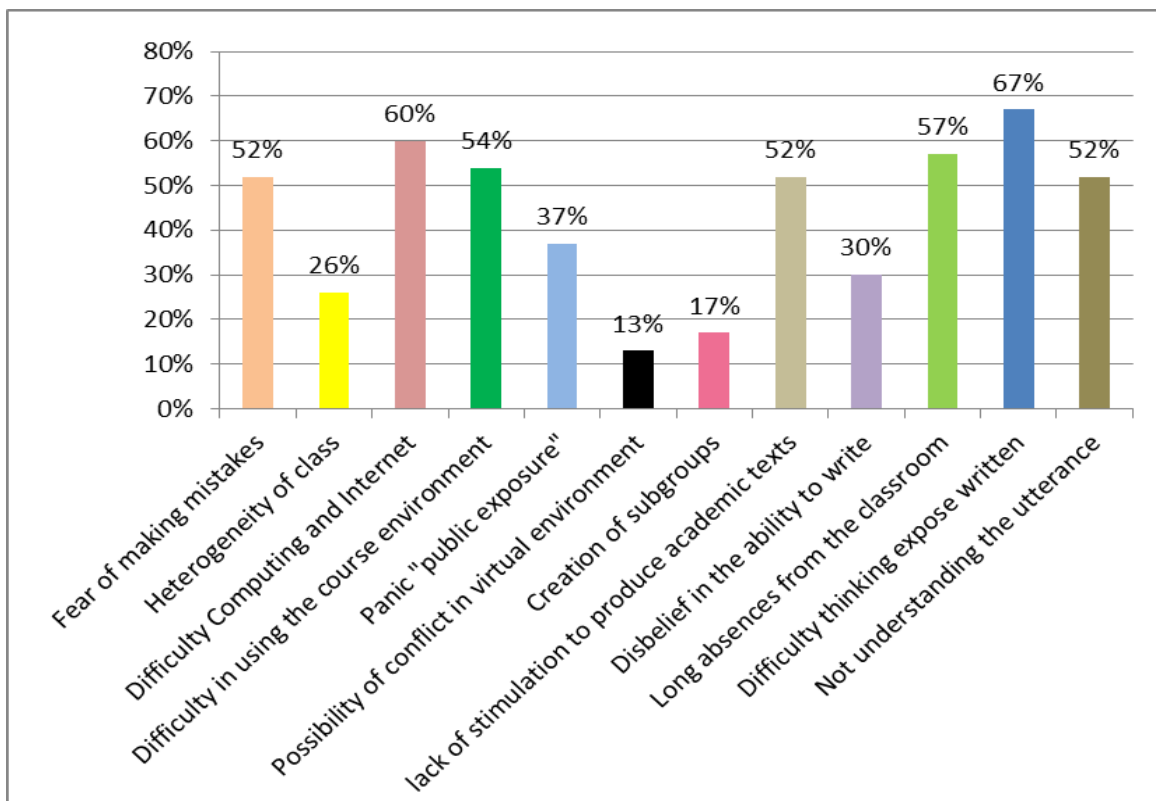


Figure 1 - Difficulties of Pedagogy students / UAB

Just as the students, it is believed that there are teachers who don't have the skills required by the use of the ICTs, bringing all his experience with the classroom for distance education, what happens differently and requires specific skills so that the course can take place satisfactorily.

Analyzing the data of the figure, one can get an idea of the advantages for both student and teachers and for teachers who teach the course. Clearly, if everyone had the opportunity to interact with technologies in all disciplines and discuss it widely, especially in the curriculum discipline; if teachers also had this same concept at the moment of developing their courses' menus, the work would be much easier ensuring faster and more extensive knowledge of the ICTs.

Final Thoughts

Even with the regulations of ODL and with all the caution that the administrators, teachers and pedagogical teams have during the steps that precede and during the course, one has to admit that the curriculum deserves attention and requires improvement and repairs. As regards the inclusion of the ICT and its treatment as cross-cutting theme, the country can innovate in curricular discussion with the involvement of public policy and take a strategic objective goal to ensure all teachers access and use of the ICTs as an essential condition to their training and during the course of teaching, aiming the effectiveness of education in meeting the demands of the contemporary era, known as the knowledge and technological change.

In this line of reasoning, such discipline would also be addressed in courses in all school phases, especially at the university, both in distance education courses and in classroom graduation courses, a cross-sectional, considering that its curriculum would be used in practice, as general for all other disciplines, so that students and teachers would broaden their point of view in technology and its application, both at school and in their daily lives.

Finally, there is an expectation that there will be changes in the curriculum, provided that, the necessary adjustments will be promoted to enable students and teachers the basic skills, abilities and skills to search, manage, process, generate and disseminate information independently and responsible, and even to understand the need to invest in additional certifications and meet the demands of education labor market and the challenges of globalization. For that it's necessary give especial attention to students who have had a little or no contact with the ICTs before starting their academic studies.

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