International Conference ICT for Language Learning

Impact of ICT towards the Deepening and Generation of Knowledge by English Teachers in 98 Elementary Public Schools Atlantic Department, Colombia

Giovanni Polifroni Lobo[1], Carlos Beltrán Sánchez[2]

Atlántico University[1], Metropolitan University[2]

(Colombia)

Abstract

This article highlights the need of promoting a better use of ICT in English teachers and their work, and the deepening of knowledge in terms of their pedagogical practices in public elementary schools from the Department of Atlántico. This is a descriptive study, in which we collected data about the skills of bilingual teachers in public elementary schools. We applied several surveys and used the SPSS statistical software. At the end of the research, we concluded that the teachers surveyed are not generating new knowledge because they do not participate in the construction of research projects supported by technology. Key words: Teachers, ICT, schools, bilingual elementary school, Atlántico, Technology students, deepening, generation, knowledge.

1. Introduction

Today, ICTs are present in all spheres of society, therefore, education has not escaped the influence of this phenomenon. The introduction of these new technologies in education has also brought a variety of possibilities in this field such as potential opportunities, both for teachers and students, of acquiring information search skills, simulation of phenomena without risks, meaningful learning, among others. This work aims to promote a better use of ICT among English teachers from public elementary schools in the Caribbean Region of Colombia, for the deepening and creation of knowledge. On the subject of the deepening of knowledge through ICT, some researches have concluded that teachers rarely implement technological tools in their classrooms, showing ranking values in the category of poorly consolidated competences; they do not promote interaction in their classroom through technological means, they do not practice instructional strategies based on digital knowledge in the classroom; they do not handle technical vocabulary, they do not foster technological learning environments that allow students to develop skills and enough expertise in the area (Mendoza, quoted by Mejia and Puche, 2009).

2. Research Questions

What is the profile of English teachers from public elementary schools, in the Caribbean Region of Colombia, in terms of their use of ICT?

What is the perception that English teachers from public elementary schools in the Caribbean region of Colombia have about the utility and implementation of ICT for the deepening and knowledge generation within the required contents, and in order to develop their pedagogical practices?

3. Problem Statement

In the case of ESL teachers, authors like Riascos, Ávila and Quintero (2009) emphasize that these teachers need a set of knowledge, expertise, skills and individual characteristics that allow them to perform actions in a certain context. In other words, they need the appropriate competences to do this educational work with their students. Some of the skills required by these teachers, based on the observations of the authors mentioned above and the Ministry of National Education of Colombia (2008) are: communicative competence, linguistic competence, pragmatic competence and sociolinguistic competence. According to the standards set by the Ministry of Education of Colombia (2009), and UNESCO, (2008). based on the Common European Framework, 72% out of most teachers involved in education barely reaches the A2 level in English proficiency (The basic level in the English language), even though a B2 level (high superior-intermediate level for an English teacher) is currently demanded. Likewise, it could also be useful to get a better

understanding of the profile of ICT use by English teachers from public elementary schools in the Caribbean region of Colombia, as well as to estimate their perception regarding the usefulness and implementation of ICT to carry out their pedagogical functions.

4. Justification

ICT are essential resources in education, however, their implementation in the educational context is a process that involves acceptance, learning and adaptation, as many studies say. According to Cabero (2008), the implementation of ICT in the educational field is a factor of great help in teaching and learning processes as it can propose strategies leading the construction of more than just the transmission of knowledge. Likewise, it could also be useful to get a better understanding of the profile of ICT use by English teachers from public elementary schools in the Caribbean region of Colombia, as well as to estimate their perception regarding the usefulness and implementation of ICT to carry out their pedagogical functions.

5. Methodology

The methodological guide for this project is the project funded by Colciencias under the call 578 with the title: "measuring the impact of efforts to promote ICT in the education sector in the Colombian Caribbean region." Cases Barranquilla and Cartagena, which is led by Dr. Elias Said Hung, on behalf of Universidad del Norte and Atlántico University, as the main implementing agency, in partnership with the Technological University of Bolivar and Colombia Digital Corporation. Type of Research: The project is framed within the empirical-positivist paradigm and is also descriptive. It not only seeks to establish the traits that characterize the perception of teachers on the issue raised here, but also the factors that are affecting them, inside and outside the classroom; besides, looking for the identification of a set of elements that impact on this perception. Area of study: Since there is no reliable data concerning the number of English teachers from public schools in the Department of Atlántico, the study population will build the general data that exists from the Ministry of National Education in 2010, in terms of the public schools registered in the Secretaries of Education in the Department of Atlántico, Barranquilla, Soledad and Malambo, which means 313 schools that meet these characteristics. These establishments provided education services for 430.849 students. Study Population and Sample: This Project will be focused on the English teachers from public schools in the Department of Atlántico. In the process of gathering the information, we took the data from the project on which this thesis is based, starting with a sample of 98 schools out of 172 public schools, considering the cluster sample design, stratified in three stages (Secretary, Zone and Central Office) with proportional allocation[1] applied at the beginning. The selection of these institutions, while maintaining the sample design initially taken, resulted in finding English teachers to fill out the survey since they were already in the school and voluntarily accepted to do it, during the fieldwork. Although the overall sample considered for the general collection of data from the project funded by Colciencias, and which is the base for this thesis, had a confidence level of 95% (confidence level = 0.5) and a margin of error (e) of ± 5%; the subsample that was considered in our case had a confidence level of 92% and a margin of error (e) of ±% 8; which, while not optimal, is in the sampling margin tolerated and widely accepted in social sciences. Applied research techniques: We collected data on the municipalities of the Department of Atlántico, which has a population of 243 bilingual teachers spread among the public schools of each municipality. The instruments used for the quantitative method were printed surveys and at the end we used the SPSS statistical software for data mining.

6. Analysis of Results

Identify the profile of English teachers from public elementary schools in the Caribbean Region of Colombia in terms of their use of ICT.

---

[1] The sample design that served as reference to obtain the data of this research, which was aimed at obtaining a master degree, proved being the most appropriate since "the subject of the study population is organized into small little homogeneous groups, that is, when the population is made up of natural groupings as in a school" (Ruiz, 2008, p. 81).

The 44.7% out of all the teachers surveyed has never attended an ICT training course during the last year; 50% has actually attended a course, and 5.3% does not know about it.

Out of the teachers that have attended a training course on ICT use during the last years, 30.6% has attended short term training courses and/or programs (of one semester or less); 28.1% has attended seminars and conferences; and 13.2% has obtained some Graduate degree (Specialization, Master, or PhD.).

- Identify the perception that English teachers from public elementary schools in the Caribbean region of Colombia have about the utility and implementation of ICT for the deepening and generation of knowledge within the required contents for the development of their pedagogical practices among the activities that teachers themselves consider with a high punctuation, the following are highlighted:
- Find and select information using different ICT tools and sources such as search engines, virtual libraries, repositories, etc., with a 61.78%.
- Communicate with others using ICT such as via email, chat forums, text messages, etc., with a 60.9%.
- Determine the evidences of the use of ICT in the pedagogical practices of the teachers studied in the research.

In the evaluation of teachers' performance, professional growth and leadership, we proposed different options so that they can identify which is more adjusted to their profile. The results show that approximately 65.7% inquire and reflect on their use of ICT, considering the learning needs of their students. In the same way, there are options in which the results are higher, as shown in the table below:

This reveals that the main stage of the teacher to teach educational content, supported by new technologies, they are the computer field, limiting the time and curriculum flexibility.

7. Conclusions

- Teachers are aware that ICT is key resources within the current educational process and can support teaching and learning of second languages, however, the lack of knowledge about the potential of these tools makes them difficult to teacher's didactic application in the classroom.

Of the findings in the investigation, it appears that low levels of professional training for teachers have pedagogical education; responding to reasons of desertion, disinterest and ignorance of pampering, likewise, know ICT public policies to support the use of technology in teaching skills. Also these low levels of preparation, are in conjunction with difficult access that teachers have the application of these postgraduate studies, as standards in examinations regulated by the Ministry of National Education and the requirements of the scholarships offered by the State Colombia, have a very high level of knowledge, that such tests are performed based on international standards, where education levels are higher. The Technological tools in the area of learning English can drill down those audiovisual components that increase the degree of apprehension against top class attendance. This is based on learning the English language are developed through cognitive and cognitive processes, for which the teacher must be trained and this should be a mediator in the process. Another unique aspect of the research is how the teachers lack of knowledge about the use of ICT in mobile devices, which, is difficulty working their educational content, on the other hand, some libraries do not have adequate infrastructure so that teachers can search the digital educational content and make appropriate use of technology in relation to the centers of public Internet, they are relatively expensive and are not equipped with the necessary infrastructure for the development of their work, hence, the option of working from home becomes more acceptable, in the sense that teachers adapt their equipment to the needs of information and knowledge, and can work independently from home.

References

J. Bastidas, G. Muñoz, (2011) Foundations for Professional Development of Teachers of English, SabBartolome Educational Institution, Cordoba- Nariño (pp.20-49).

Llorente, C and Cabero, A (2009). Development of an Instrument on ICT skills in college students. Media literacy and digital cultures. Paper presented at the Euro-Iberoamerican Congress ATEI 2010. Sevilla. University of Seville, Spain.

Mejia, N and Puche, L (2008) ICT Knowledge Generation: Case Uniguajira. Http://www.virtualeduca.info/ponencias2013/113/GeneracindeConocimientosenTICCasoUNIGUAJI RA.docx recovered.

Ministry of Education (2005). Colombia bilingual ./^/ board (37). Retrieved from http: //www.mineducacion. gov.co/1621/article-97495.html.

Riascos S, C, G Maria Quintero C., et al (2009) ICT in the classroom: perceptions of university professors Faculty of Management Sciences, Universidad del Valle, Cali, Colombia. Magazine Education and Educators. vol. 12 No.3 Chia

UNESCO, (2008). ICT competency standards for teachers.