



Teachers' attitudes towards using technology vs analysis based on Ecuadorian curriculum standards, item 3. C.3, 3. C.4

Actitudes de los docentes hacia el uso de la tecnología frente al análisis basado en los estándares curriculares ecuatorianos, ítem 3. C.3, 3. C.4

Atitudes dos professores em relação ao uso da tecnologia versus análise com base nos padrões curriculares equatorianos, ítem 3. C.3, 3. C.4

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Abstract

The general purpose was to investigate the attitude of Ecuadorian teachers of the English language towards the use of information and communication technologies (ICT) in their classrooms, for this, the Ecuadorian curricular standards were used as a theoretical reference. Discussion and conclusion: Although ICTs provide positive educational benefits, there remains the problem of how well prepared teachers are to use technology. There is also the problem of accessibility to technology in their classrooms. In addition, most teachers seem to lack the time needed to learn how to use and apply technology. Regarding teachers' attitudes, it is concluded that computers can be a useful tool to help teachers meet the needs of students and their individual learning styles; however, teachers should feel comfortable with technology, have time, accessibility to the team, experience, resources and administrative support to apply the tools of computer learning effectively.

Keywords: Technology; learning; teachers.

Resumen

El propósito general fue investigar la actitud de los docentes ecuatorianos de lengua inglesa hacia el uso de las tecnologías de la información y la comunicación (TIC) en sus aulas, para ello se empleó como referencia teórica los estándares curriculares ecuatorianos. Discusión y conclusión: aunque las TIC brindan beneficios educativos positivos, sigue habiendo el problema de qué tan bien preparados están los maestros para usar la tecnología. También existe el problema de la accesibilidad a la tecnología en sus aulas. Además, la mayoría de los maestros parecen carecer del tiempo necesario para aprender a usar y aplicar la tecnología. En Cuanto a las actitudes de los docentes se concluye que las computadoras pueden ser una herramienta útil para ayudar a los maestros a satisfacer las necesidades de los estudiantes y sus estilos de aprendizaje individuales; sin embargo, los maestros deben sentirse cómodos con la tecnología, tener tiempo, accesibilidad al equipo, experiencia, recursos y apoyo administrativo para aplicar las herramientas de aprendizaje informático de manera efectiva.

Palabras clave: Tecnología; aprendizaje; profesores.

Resumo

O objetivo geral foi investigar a atitude dos professores equatorianos da língua inglesa em relação ao uso das tecnologias da informação e comunicação (TIC) em suas salas de aula, para isso os padrões curriculares equatorianos foram utilizados como referência teórica. Discussão e conclusão: Embora as TICs tragam benefícios educacionais positivos, permanece o problema de quão bem os professores estão preparados para usar a tecnologia. Há também o problema da acessibilidade à tecnologia em suas salas de aula. Além disso, a maioria dos professores parece não ter o tempo necessário para aprender a usar e aplicar a tecnologia. Com relação às atitudes dos professores, conclui-se que os computadores podem ser uma ferramenta útil para ajudar os professores a atender às necessidades dos alunos e seus estilos de aprendizagem individuais; no entanto, os professores devem se sentir à vontade com a tecnologia, ter tempo, acessibilidade à equipe, experiência, recursos e apoio administrativo para aplicar as ferramentas do aprendizado de computador de maneira eficaz.

Palavras-chave: tecnologia; aprendizagem; professores.

Introduction

The purpose of this paper is to investigate the attitude of Ecuadorian English Language Teachers towards the use of Information and Communication Technologies (ICT) in their classrooms with regard to the Ecuadorian Curriculum Standards. The role of Information and Communication Technologies (ICT) is of specific importance in the educational field. In this sense, it must be affirmed that these technologies are applied to the instructive field with the purpose of improving the language proficiency of students. It is essential to emphasize that the attitude that the teacher assumes in relation to the technology and its use is determinant in the effectiveness of its application in the teaching and learning process. Teachers are essential to increase the quality of the learning of their students. Therefore it is necessary for teachers to be proficient technically and pedagogically for a better use of ICT in the learning environment. Taking this into consideration the Ministry of Education in agreement with Ecuadorian in-service developed The Ecuadorian Curriculum Standards in 2012 which point out “Curriculum Development”, as the third domain that is devoted to “particular aspects related to planning for standards-based

English, implementing and managing standards, and using resources and technology effectively “, Educación (2012,p.5).

Moreover, The English Curriculum Standards (2012, p.5) clearly states that teachers need to know, understand and use evidence-based performance and approaches related to planning and applying ICT in content instruction. It is also evident that English teachers need to be well informed about program models and skilled in teaching strategies in order to effectively use ICT in their classroom. Hence, English teachers must be able to adjust to the technology as well as select and adapt classroom resources suitable for their students by using resources and technology effectively in English and content instruction. In addition, Ecuadorian teachers must be familiar not only with the national textbooks, but also materials and resources including books, visual aids, and technological resources such as internet, software, computers, and related devices, to improve language instruction for their students.

With all the things in mind the question that arises in this research is: How can teachers effectively use ICT in their classrooms to increase the English language proficiency of their students?

Research question

How can teachers effectively use ICT in their classrooms to increase the English Language proficiency of their students?

Theoretical Framework

According to Ramey (2013), “Technology and science are not the same subjects but they work hand-in-hand to accomplish a specific task or solve a particular problem”. People use technology to spread out their abilities, and that creates people as the most important part to some extent technological system. We can define technology as any application of science to explain a problem or doubt. The term ‘Technology’ is widespread and everybody has their own way of understanding the meaning of technology. Everybody uses technology to accomplish various tasks in our daily lives; in short we can describe “technology as products, procedures or organizations” (Ramey, 2013).

In almost everything we do in our lives, we apply technology, we use it at work to extract materials, get information and learn. In addition, we use technology for communication,

transportation, manufacturing, creating artifacts, securing data, and so much more. We consider technology as human knowledge, which includes tools, materials and structures. If we apply technology in a correct way, it can benefit humans, but if it is wrongly applied, it can cause harm to human beings (Ramey, 2013).

CALL Definition

Computer Assisted Language Learning (CALL) is considered an approach to language teaching and learning which focuses on the use of the computer for reinforcement and assessment of material to be learned. CALL includes a substantial interactive element that replaces the traditional classroom pedagogy. According to Levy (1997), CALL is more broadly known as "the search for and study of applications of the computer in language teaching and learning". CALL enables learners to achieve their education goals. Although traditional methods are used in teaching a second or foreign language in the classroom, CALL helps to improve learners thinking skills when they are out of the classroom. Therefore, the role of computers in the language schoolroom is to support old-style methods of instruction and to try to fulfill the different needs of the learners. A learner becomes more receptive of learning strategies and is capable to use them to accomplish an effective communication (Davies, 2016).

Advantages of CALL in the Classroom

According to research several instructors indicate that the latest computer technology has numerous advantages for second language learning. The listed below are the advantages: Traditional language teaching in classroom can be boring, repetitive or frustrating. Hence, students can lose importance and enthusiasm in learning. That is why CALL programmers provide students different ways to learn English by using computer games, animated graphics, and problem-solving techniques which can make drills more interesting (Indrawati,2008).

Individualization

CALL allows students to develop a non-sequential learning habit so that they can adopt on their own which skills they need to improve and which courses they need to take, the speed and level can also be adapted to their own individual needs. (Indrawati ,2008).

A compatible Learning Style

It is clear that each student has a different learning style. Computers can address these differences, for example by providing an exciting “fast” drill for one student and “slow” drill for another (Indrawati, 2008).

Optimal use of learning time

It is true that CALL offers learners web-based instruction where students can learn anytime, anywhere, anyhow and anything they want. CALL gives learners the opportunity to study and review the materials as many times they want without limited time (Indrawati, 2008).

Immediate Feedback

Students receive maximum benefit from feedback only if it is given immediately. Computers can give instant feedback and help the student ward off his misconceptions at the very first stage. The advantage of CALL is to give immediate feedback, allowing students to improve at their own pace which causes, less frustration among students (Indrawati, 2008).

Error Analysis

According to Indrawati (2008), Computer databases can be used by teachers to classify and differentiate the type of general error of the influence of the first language. A computer can analyze the specific mistakes that students make and can react in different ways from the traditional teacher. This helps students self-correct and understand the principle behind the correct solution.

Guided and Repetitive Practice

Students can repeat the course they want to master as many times as they wish. They have the freedom of expression within certain constraints that the programmers generate, such as grammar, vocabulary, etc. CALL provides drill-type materials that are suitable for repetitive practice, which enable students to learn concepts and key elements in a subject area (Indrawati, 2008).

Pre-determined to Process Syllabus

According to Indrawati (2008), computers improve the learning process from a pre-determined syllabus to an emerging syllabus. For instance, a repetitive paper exercise of ‘fill-in-the-blanks

type exercises can be made more exciting on the screen in the self-access mode, and students can select their own material. In this way CALL enables the synthesis of the pre-planned syllabus by a decision-making method undertaken for the instructor and students (Indrawati,2008).

Literature Revision

Teachers' Attitude toward Technology

Technology develops students' learning and affords teachers time to work on what really matters. There is no doubt that learners love to use technology in their classroom, but what really matters is the view of technology from the teachers' perspective .According to a report that has been made in the United States, analyzing the opinions of nearly 2,500 middle and high school teachers on the topic "How Teachers are using Technology at Home and in their Classrooms", It is clear that many educators who were involved in the survey were clear about the fact that the Internet has had a major impact on education (Jennifer,2010).

General Attitudes toward Technology

Prior Experience

A teacher's past experience and favorable attitude toward technology were closely correlated, and are strong signs that a teacher will effectively use of technology in his or her classroom. According to studies, it was clear that teachers' attitudes are far more positive regarding CALL when they have previous knowledge of technology. The more teachers have used technology the more confident they become incorporating it into their classrooms. Certainly, studies have found that teachers who have general prior experience are more positive and eager about technology and more easily distinguish the educational profits (McLeod ,2011).

Teachers' Area of Specialty

Teachers of technical topics tend to have more favorable attitudes toward technology in general, and toward integrating technology into learning. Studies shows that most of the teachers who enjoyed interacting with the computer were about information science, for example, specialty teachers as well as teachers who taught similar technical topics such as chemistry, math and physics. Additionally, surveys of over two hundred fifty post-secondary professors found that the

‘technical orientation’ of the professor’s specialty, along with other factors such as computer self-efficacy and general computer attitudes, predicted technology use in the classroom (McLeod ,2011).

Attitudes toward Teaching with Technology

There are two connected tendencies when teachers were asked about their attitudes toward using technology in the classroom. The first, one is a paradigm shift and the second one is training.

Paradigm Shift

Teachers appear to be struggling with the best ways to incorporate technology into teaching and learning. Teachers sense a paradigm shift in teaching with technology, but reveal some hesitation in embracing the change. Teachers understand that using technology for learning changes their teaching methods. In fact, teachers are taught that technology is a tool to help teachers teach, which focuses more on transmitting and communicating messages through presentation software rather than allowing learners to construct knowledge (McLeod, 2011).

Training

Research has clearly shown that computer training positively impacts teachers’ attitudes toward technology. It was explored in secondary teachers and students’ attitudes toward constructivist by using Internet-based learning environments. In fact, in an early study of teachers’ attitudes by one of the innovators in the field it was found pre-service teachers assumed that computers would help them organize their own work. These pre-service teachers believed that computers would motivate students. However, they did not necessarily think of computers as ‘natural’ or believe computers would help students work in collaborative groups (McLeod ,2011).

Barriers Teachers Perceive for integrating Technology into Their Teaching Practice Currently, teachers face significant difficulties in their efforts to implement and incorporate technology in their classroom. Unluckily, there is historical evidence that these difficulties continued virtually untouched over the last 50 years. According to Persichitte (1998), a prominent new technology in the classroom was filmed during the post-World War II era. In those years, there were four obstacles identified which decreased technology usage in the classroom. For instance, lack of suitable resources for the right technological appliance, which fits in the curriculum, inaccessibility of equipment, cost of technological products, and

teachers' lack of skills to use equipment appropriately. These barriers have been recognized in the post-World War II era by numerous investigators. However, it is surprising that these are the same obstacles we are still facing in our attempts to implement instructional technologies and with which classroom teachers continue struggling. Therefore, the barriers teachers perceive for integrating technology into their teaching are the following: time, expertise, access, resources and support (Persichitte, 1998).

The first barrier is time. Teachers need time to plan, collaborate, prepare and use technology in the classroom. The second one is expertise, it is important to consider teachers' preparation for the use of a specific technology, which must be significant, practical, systematic, progressive, and on-going (Persichitte, 1998). It is obvious that the greatest benefit of staff development will be realized when teachers instruct other teachers in the use of technology in their classrooms because their multiple fields also support the efficacy of this practice. A third critical factor is access. Classroom teachers need access to computers, the computer lab, and other technologies during the school day. It has been analyzed that teachers may have the time, the expertise, and the resources, but if they do not have the access, technology implementation will not occur in the classroom (Loehr, 1996). The fourth factor is resources. For instance, adequate staff development, preparation, and technical support, the purchase, and upgrade of hardware and software, the physical and electrical configuration of classrooms and labs for technology and phone bills and on-line account charges require significant resources (Persichitte, 1998). Finally, the fifth critical factor is support. This encompasses both administrative and technical support. Ritchie (1996) argues that administrative support may be the most critical factor since it can have a direct influence on all of the other critical factors. Technical support also includes the identification and utilization of appropriate strategies, methods, and materials related to technology integration, (Persichitte, 1998).

Teacher's Perceptions of Technology Use in the School

Computers have changed the teaching approach of many teachers today. Teachers can present their classes in a practical and real way depending on the subject by using the technology, in this case the computer. There has been research on the views of teachers toward technology use in the classroom. According to Cope & Ward (2002), "experienced teachers who had little or no professional experience in the use of technology were less likely to use it in the classroom and were less likely to see the advantage of technology usage in the classroom". Teachers did not

expect that they could teach differently and that their roles could be different in a classroom with the use of computers. Researches also point out that teachers believe that people have to be confident in their ability to use the technology. In addition, Warschauer (2007) states that schools with an upper socioeconomic status can incorporate technology much more enthusiastically because teachers are self-confident that students have better access to computers and technology at home and therefore they can complete schoolwork in which technology is required for the accomplishment of any task (Marie-Anne Mundy, 2012).

How important is use of Technology in Education?

According to Saxena (2013), both education and technology are a great combination if they are used together with a right vision and purpose. It is clear that technology improves education. Nowadays technology has become important for transforming education for the better. With the use of technology, teachers, students, and parents have a variety of tools for improving their learning. There are several ways in which technology improves education. For instance, “Teachers can collaborate to share their ideas and resources online” (Saxena 2013). Teachers and students can communicate with each other across the world instantly so that the students can be informed of the limitations of their work and improve them effectively. “Students can develop valuable research skills at a young age”. Saxena (2013), Technology provides students instantaneous access to quality information which provides a guide to education quicker than before.” Students and teachers have access to an expanse of material” (Saxena 2013). There is a gallery of credible websites resources available on the Internet that can be used by the teachers as well as the students. Without limiting students’ opinion, technology also offers a range of information. “Online learning is now an equally credible option” Saxena (2013). Nowadays, to have face-to-face interaction is sometimes difficult, especially for adult learners, because most of them work and do not have time to attend a regular class. Further some students tend to work better when they go at their own speed. Therefore, online education is recognized today as an important tool to improve education and to benefit students.

Discussion and conclusion

Based on the research, CALL is considered an advantage for both students and teachers because it provides motivation and learning autonomy and opens up unlimited opportunities for the

development of the teaching and learning processes. After analyzing the use of ICT in the classroom, it is clear that if teachers use technology appropriately, students can increase their English language proficiency. However, although ICT provides positive educational benefits there remains the problem of how well teachers are prepared to use technology. There is also the problem of accessibility to technology in their classrooms. In addition, most teachers seem to lack the time needed to learn to use and apply the technology.

In conclusion, by using ICT in the classroom teachers can effectively help students increase their English language proficiency. The role of computers must be to support old-style methods of instruction. Computers can be a useful tool to help teachers meet the students' needs and their individual learning styles. However, teachers must be personal comfortable with the technology. They must have time, accessibility to the equipment, expertise, resources and administrative support to apply computer-learning tools effectively.

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