

El uso de dispositivos digitales en las clases de inglés en la carrera de Medicina

The use of digital devices in English classes in the medicine career

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Resumen: La presente investigación aborda el uso de dispositivos digitales en las clases de inglés en la carrera de Medicina. Se emplearon como métodos la observación, encuesta, entrevista; los cuales arrojaron insuficiente preparación docente en el uso de dispositivos digitales en las clases de inglés. Se proponen talleres metodológicos para elevar la preparación docente en este sentido. Al evaluar la efectividad de la propuesta se aplica el test de Shi cuadrado de Mac Nema que corroboran la preparación docente y la calidad del aprendizaje; al adquirir los estudiantes habilidades como el tratamiento de la información, la competencia digital, lingüística y comunicativa.

Palabras clave: Taller Metodológico; Las Tecnologías de la Información y las Comunicaciones, Dispositivos digitales, Inglés.

Abstract: The present research deals with the use of digital devices in English classes in the Medicine program. The methods used were observation, interviewed, and surveyed; which showed insufficient teacher preparation in the use of digital devices in English classes. Methodological workshops are proposed to increase the teacher's preparation in this sense. When evaluating the effectiveness of the proposal, the Mac Nema's Shi square test is applied, which corroborates the

teaching preparation and the quality of learning, as students acquire skills such as information processing, digital, linguistic and communicative competence.

Keywords: Methodological Workshop; Information and Communication Technologies; Digital devices; English.

Introduction

At present, the Cuban educational system requires a teaching-learning process equipped with technologies. Similarly, English is widely used as a lingua franca among speakers of different languages in most countries of the world.

It is also taught as a second language in many educational systems. English is the official language of many Commonwealth countries, is widely studied as a second language and is one of the official languages of the European Union and numerous world organizations.

The learning of English is part of the educational curriculum from basic education levels; along with the development of technological skills, today's student faces the need to learn and apply in their area a language in addition to their mother tongue, mainly English, as it has become an intercultural communication tool.

The 20th century was characterized by a radical change in technologies, the most representative example being the birth of the Internet, which invades every corner of our daily lives. Information and Communication Technologies (ICT) constitute a valuable means for the interactive transmission of information that makes it possible to enhance the fulfillment of the objectives and functions of the teaching of different disciplines.

All the information that we can extract from ICT can be taken to our classes to renew the English language teaching process through slides, recordings, videos and photos as teaching aids. The didactic-technological training of teachers, whatever the level of integration of ICT in educational institutions, requires a "digital literacy" and a didactic update that helps them to know, master and integrate the new media in their teaching practice (Vera, 2012, p. 1).

Teaching practice (Vera, 2012, p.10).

Problemical situation that gives rise to the proposed work.

At the University Of Medical Sciences Of Guantanamo, the integration of technological

resources in English learning is weak, which influences the process of acquiring a second language.

In order to determine the scientific problem, 8 observations were made in English classes of the third year of the medical career. It was found in 90% of these that when students use digital devices during the classes, they use them in a way that does not respond to specific educational objectives, as they are distracted by games, Internet browsing or interacting with messaging applications. Therefore, teachers consider their use as a distracting element that does not contribute to the teaching-learning process.

85% of teachers maintain their traditional teaching methods, lacking preparation and skills to accompany their students in the teaching-learning process mediated by the use of mobile devices, even showing disparate attitudes and opinions towards their use and effectiveness. In addition, they show anguish when something does not go well and often reject their use because they feel overwhelmed by technology.

Surveys were applied to a universe of 211 third year students; the result obtained illustrates that 88% of the interviewed do not use their digital devices and in particular the installed applications to develop autonomously the learning of the English language. They were of the opinion that the cell phone is used to make calls, check email, send and receive text messages, take pictures, record videos, listen to music and consult the University's web page. Twelve percent had English dictionaries installed on their cell phones and 25% use websites for self-learning English.

Interviews were conducted with the department head, main professors of the subject of the different years of the course (5) and methodologists (2). It was found that the theoretical and methodological preparation of teachers for the proper use of digital devices in the classroom is insufficient, as well as the weak contextualization of the use of these devices to the contents of the subject in the third year of the Medicine course. Ninety percent of the interviewed persons are of the opinion that there is a certain lack of concern on the part of the professors with regard to the

the incorporation of the use of digital devices in their pedagogical practice. Eighty-five percent say that professors assign an instrumental role to these devices, mostly as a means of

communication and entertainment, being weak the evidence of an intention of their use in the pedagogical practice. Fifteen percent of the teachers use the English Spanish and Oxford dictionary applications to search for information quickly, but they do not socialize them with their students.

The above allowed verifying the contradiction that exists between the insufficient preparation of the teaching staff for the use of digital devices in English classes and the need to have professionals according to the scientific-technological advances.

Hence, in order to increase the methodological preparation of teachers in the use of digital devices in English classes in the third year of the Medicine course, methodological workshops are proposed for the use of applications in these devices.

Development

ICTs are a set of elements and techniques used in the processing, storage and transmission of data and information. There are a multitude of technological tools that can be incorporated into the classroom (Pulido et al., 2016).

In recent decades, education has undergone significant changes brought about by the development of technologies that have modified the ways of accessing and disseminating information and modes of communication. One of the technological presentations of ICT is digital devices: cell phones, tablets and others. Therefore, it is necessary for teachers to get involved and modify the teaching-learning process (Cataldi et al., 2012).

The teaching aids constitute one of the didactic components that, together with the objectives, contents, methods and evaluation, intervene in the teaching-learning process, thus directly influencing the process of transmission and acquisition of knowledge, habits, skills and abilities. All these didactic components have a very close interaction and interdependence, for this reason it is wrong to consider the teaching aids as complementary elements of the teaching-learning process (Richards et al., 1998).

From the moment of class preparation, the integration of objectives, methods and means is manifested in the logical sequence to be followed by the teacher, determining first the objectives and then selecting the content. These two factors provide the decisive criteria for

determining the methods to be applied, the means and tools to be used in the classroom (Cataldi et al., 2012).

There are different media that contribute to making our classes more illustrative and enjoyable. There are two main types of teaching aids:

1. The means of direct use, which do not require any electronic support for their use in the classroom.
2. Technical media, which do require an electronic support for their use in the classroom. These are subdivided into three groups: visual media, sound media and audiovisual media.

Communicative competence is an essential category in the English language teaching and learning process, based on the Communicative Approach method, which involves the expression, interpretation and negotiation of meaning in the interaction between two or more people, or between a person and a written or oral text (Montejano, 2001 p. 32). (Montejano, 2001 p. 32).

One of the best-known lists is that of the five characteristics of the communicative method. (Nunan, 1996, p.22)

1. Emphasizes communication in the foreign language through interaction.
2. Introduces real texts in the learning situation.
3. Provides students with opportunities to think about the learning process and not just the language.
4. Gives importance to students' personal experiences as elements that contribute to learning in the classroom.
5. Attempts to relate the language learned in the classroom to activities outside the classroom.

The presence of digital devices is a reality almost everywhere on the planet. The interactions between mobile technologies and the educational environment are transforming educational processes. It is appropriate to allow digital devices to enter the classroom as working tools, be part of educational projects, and integrate them as an element of the teaching-learning process, analyzing the materials available on the network for teaching English adapted to these technologies.

The preparation of teachers in Cuba has demonstrated the need to use methodological work as the strategic and most efficient way, since it is both the starting point and the result of the teaching-educational process, where a high scientific-methodological level must be shown when organizing, planning, executing and controlling the class system, hence the relationship between preparation and methodological work.

According to the UNESCO Thesaurus Dictionary, a methodological workshop is defined as a meeting of individuals, generally experts, with common interests and problems, to exchange information and acquire useful skills and techniques.

Some specialists identify as general characteristics of the workshop a professional organizational form that establishes contact with reality, which can be applied in any of the organizational components. In these, a work team should be created to address in-group a central problem that originates in the practice and returns to this transformed by the group discussion with its corresponding contributions and that contributes to the preparation. In addition, it allows systematizing and integrating knowledge, skills, assessments and experiences in the creative professional activity from the group interaction (Addine, 1996).

Proposal of methodological workshops for the use of digital devices in the third year of the Medical School.

Through workshops, teachers are trained in the use of websites, applications for smartphones and tablets, Facebook pages, for the development of English language skills (speaking, listening, reading and writing). These workshops can be carried out in the English subject groups in the third year every 15 days with a duration of 2 to 4 hours as required by the subject and in session opposite to classes.

In order to achieve greater motivation and participation of the teachers in the methodological workshops, the following participatory and animation techniques are suggested:

- The problem tree: Provides the possibility of identifying causes and effects of a problem.

-Three truths one lie

-Reflection of the day.

As well as these techniques of analysis and deepening:

- Brainstorming.
- Commission work.
- Memory game.
- The questioning ball.

The evaluation of the workshops will be based on the results of the application of different techniques and on the participation of each of the teachers.

Workshop 1

Title: New technologies and the teaching and learning process.

Objective: To socialize the teaching staff regarding the types of teaching that make use of new technologies in the English language teaching and learning process in order to improve the quality of the classes.

We can name some types of teaching that make use of new technologies, such as Computer Supported Education (CSE), tele-education, e-learning, b-learning, and m-learning. We will focus on these last three types of teaching (Cataldi et al., 2012).

E learning: is also called virtual training or e learning. It is actually a type of learning that takes place over the Internet.

Another educational process is blended-learning, or more commonly known as B-learning. It is blended learning. It is a combination of face-to-face and online learning, using virtual platforms within a given space.

M learning or mobile learning: is a teaching-learning process that uses digital devices with wireless connectivity to enhance learning. In order to carry out this process it is essential to have a mobile device with web connection.

For the study of foreign languages, there are programs such as Google translator, which translates both by voice and by text and allows conversations in different languages. With this type of applications, interesting activities can be created in the classroom, using Bluetooth and Zapia for the exchange of digital material between students and teachers.

Evaluation: oral

Workshop 2

Title: Propuesta de sitios webs y aplicaciones para smartphones y tablets

Objective: Socialize with the teaching staff the access route to websites and applications for digital devices that support the use of ICT in their teaching work.

Then, the authors of this work make the following proposal for the development of different language skills.

Vocabulary (To increase your English vocabulary)

1. Oxford Learners Dictionary: The traditional Oxford dictionary, now online and with complements, such as word lists by subject or notifications of new English words, such as photobomb.
2. Merriam-Webster: Visual dictionary that helps to learn and memorize the English names of a multitude of objects and elements illustrated and classified by subject.
3. English Verbs: Application that allows you to search for the most used verbs in the English language and their pronunciation with audio.
4. Longman Dictionary English: Application that allows you to search for English words, their meaning, and their pronunciation with audio.
5. English Dictionary: Application that allows you to search for English words, their meaning, synonyms and their pronunciation with audio.

Writing. (*Escritura*)

1. Listen and Write: A website that brings dictation up to date and allows students to work on English comprehension and writing skills while transcribing everything from Coldplay or Katy Perry songs, to Emily Dickinson poems, TED conferences or news. Available at <http://www.listen-and-write.com/>
2. Lang 8: Platform where native speakers correct what you write.
3. English Page: Exercises on verb tenses. <http://lang-8.com/English>

Reading (Lectura)

- 1.-Project Gutenberg: Virtual library that allows you to access and download a multitude of works in English and other languages free of rights.
- 2.-Chronic Disease and Treatment: This application deals with chronic diseases, causes and treatment.
- 3.-All stomach diseases and treatment: All stomach diseases and treatment: Application about digestive system diseases and treatment.
- 4.-All Respiratory Disease and Treatment: Application about respiratory diseases and treatment.
- 5.-Kidney diseases and Treatment: Application about Kidney diseases and treatment. Some topics are offered free and others with internet connection.

Listening (Audición)

1. Listen a minute: Exercises are accompanied by the corresponding text to check that what has been heard has been understood. Retrieved from <http://www.listenaminute.com/>
2. LyricsTraining: Web with a multitude of music videos to improve listening and writing skills through song lyrics. You can choose the video and the level (beginner, intermediate, advanced and expert). Retrieved from <http://lyricstraining.com/>
3. Podcast in English: Interesting repository of podcasts to work on listening comprehension accompanied by transcription, questions and activities. Retrieved from <http://www.podcastsinenglish.com/>

Speaking (Expresión Oral)

1. Learn English Sila: Web with a large section dedicated to English pronunciation. Retrieved from <http://aprendeinglessila.com/category/pronunciacion/>

2. Phonetics Focus: Twenty games to work with your students on phonetics in a fun way. Retrieved from http://cambridgeenglishonline.com/Phonetics_Focus/
3. TV 411: Videos with native speakers exploring key topics for everyday life, such as finding accommodation or reading a medicine label. Retrieved from <http://www.tv411.org/>
4. Travel Phrasebook: Application consisting of a Language Translator.
5. Study English without Internet: Application that allows you to learn the most used phrases, as well as the essential grammatical rules for a good use of the English language.

Evaluation: oral (individual and team)

Workshop3

Title: *Integration of various English language skills using digital applications.*

Objective: Socialize with teachers some applications to integrate various skills in the process of teaching and learning English.

In order to integrate these skills, some applications have been used from different Internet pages, such as:

Test Your English: Check your English level with the proposed activities. Retrieved from: <http://testyourvocab.com/>

1. Learn English: Grammar, vocabulary, quizzes, lessons, tests, pronunciation and even tips on British culture retrieved from <http://www.learnenglish.de/>
2. Real English: Original videos and interactive classes taught by English teachers always available. [http:// real- english.com/](http://real-english.com/)
3. IELTS Skills: Application that integrates the 4 language skills and suggests the use of bibliographies such as English Grammar in use (Raymond Murphy) or any other from the University of Cambridge and Dictionaries such as Oxford and Cambridge.
4. All Medical History Taking: Application that allows the integration of knowledge in aspects referred to the taking of information in the preparation of the patient's medical history.

Evaluation: Through a practical activity.

Proposal validation

To determine the relevance of the proposal designed within the teaching-learning process at the University of Medical Sciences of Guantanamo, the Mac Nema's Shi-square test was applied. Through this test the effectiveness of the methodological workshops is evaluated. We can affirm with 90% confidence that the proposed objective is fulfilled. A tabulation of the results achieved was carried out on a sample of 27 students of the C3 teaching brigade corresponding to the third year of the medical career, in the exams before and after the proposal was applied, reaching a 39.6 percentage variation; demonstrating a better performance of the students within the process.

Table 1: Test results before and after implementation of the proposal

	Before	After	Variation Percentage change
Approved	18 (66,67%)	27 (100%)	39,6
Suspended	9	0	
Total	27	27	

Source: Self elaboration

Observations were made in 8 English classes in the third year of the medical career. In 100% of the classes observed, the use of these devices are of great impact, students and teachers simultaneously analyze all the information previously socialized either in the applications of the dictionaries English Spanish and Oxford (version 2.9., free English course containing 40 classes with 4 levels and 4 tests at the end of each level among others. In addition to using summary photos, boxes, videos or other resources used by the teacher; allowing students to acquire important skills for their development, mainly the treatment of information and digital competence as well as linguistic and communicative.

Interviews were conducted with the Head of the English Language Department, main teachers (5), teachers of the year (8), and methodologists (2). The interviews confirm the teachers'

recognition of the need and relevance of implementing the proposal, in terms of improving the teaching-learning process. 98% are of the opinion that professionals are trained with higher quality, with a high knowledge on the use of new technologies capable of discriminating or distinguishing good information from the large volume offered by the networks; thus raising the quality of self-directing their learning with the option of choosing when, where and more quickly. 100% believe that we will have professionals with a level of communicative competence that allows them to interact easily in their field of action and in different contexts, either for the study of bibliographies in English or to interact with patients or professionals from other countries, increasing the efficiency and quality of medical services.

Surveys were conducted with the selected sample of students. The opinion of 100 % of the interviewed is that mobile devices are very motivating; they highlight the use of video clips, applications that help them to better understand the patterns of the native speakers of the language they are studying. Ninety-eight percent of the respondents emphasize that the use of mobile devices in the classroom is adequate. 100 % of the interviewed are motivated and learn much better. 95 % mainly use applications such as Oxford Learners, Merriam-Webster, Longman, English Dictionaries, and Chronic Disease Treatment. 100 % reported that since mobile devices are easy to handle and connect, they quickly socialize the applications to manage knowledge and ensure a greater number of student links with access to updated information.

Hence, this proposal constitutes a source of constant feedback to raise the quality of teachers in the use of mobile devices in the training of medical students and thus contribute to raising the quality of the teaching-learning process.

Conclusions

The methodological workshops for the use of digital devices in the third year of the Medical School are an effective way to improve the methodological preparation of teachers and the quality of the teaching-learning process.

An evaluation of the instruments applied shows that the impact of the proposal is widely accepted by the pedagogical and student collective and that the results in the quality of learning

are palpable. The proposal responds to one of the current challenges of the pedagogical sciences, which is to respond to the demands of an interconnected world mediated by emerging technologies.

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