



## Technology and Language Teaching in Times of Pandemic.

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Theme: La tecnología y la formación en idiomas

## *La tecnología y la enseñanza de idiomas en tiempos de pandemia.*

## *Technology and language teaching in times of pandemic.*

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### Abstract

The development of new Information and Communication Technologies (ICT) has had a great impact on education worldwide. In the new scenario that we live today in the world with the COVID 19 pandemic, technologies have become the most powerful weapon in the educational sphere. At the closing of our universities distance education through the use of educational platforms, cell phones, tablets, have enabled the continuity of student learning. English language teachers face a new challenge in terms of teaching English, moving from face-to-face to online mode, where students and teachers must overcome the digital inequalities that arise in order to have access to quality education and excellence. This paper aims to highlight the importance of information and communication technologies in the process of teaching and learning languages and in dealing with the pandemic. As well as some experiences in the use of digital tools to promote the teaching and learning of English language in students. For this purpose, the behavior of the new information and communication technologies was systematized in the scientific literature, taking into account the concepts derived from it, based on an extensive bibliographic search using mainly the Analytical-Synthetic and Historical-Logical methods.

**Key words:** English language learning, COVID 19, information technologies



## Introduction

Information and communication technologies in higher education represent the new learning environments and, due to their impact on education, they are developers of competencies necessary for learning and generators of life skills; however, it is also important to consider the challenges that must be overcome so that access to technological advances is guaranteed in higher education under affordable conditions (García, 2017).

Therefore, teachers and students are required to have knowledge and skills that allow them to be at the height of the process and, in addition, to prepare themselves with more rigor from the methodological and pedagogical point of view to adequately face the teaching-learning process.

Useful educational scenarios are generated to promote learning that require the development of teaching-learning process modalities that adapt to the needs of students in a more favorable way, considering their characteristics, motivation, needs and interests.

Information and Communication Technologies (ICT) allow access to new sources of information and communication channels for the exchange of ideas, experiences, culture, etc., and also favor distance education through different technological tools.

At present, it is evident how the benefits of ICT have contributed significantly to the development and continuity of education in the world. Due to the pandemic of the COVID 19 virus, universities have been forced to change their way of teaching, education went from face-to-face teaching to online teaching.

This paper aims to highlight the importance of the role of information and communication technologies in English language teaching in current times, as well as to present some experiences regarding the use of technological tools in distance learning.

## Materials and Methods or Computational Methodology

For the presentation of the results that were pursued with this research, the Historical logical and Analysis and synthesis methods were used to systematize in the bibliography consulted, a greater number of pedagogical journals and articles for the study and analysis of concepts related to information and communication technologies, their influence on the teaching and learning of the English language, as well as the impact of the COVID 19 pandemic in higher education.



The empirical method used was the analysis of official documents of the Computer Science Engineering program, specifically those related to the teaching of English.

## Results and discussion

ICT in English language teaching.

ICT are defined by Cabero (2015) as "Resources perceived as facilitators and transmitters of information and educational resources for students, which can be adapted to the needs and characteristics of the subjects, being able to achieve with them a true audiovisual, multimedia and hypertextual training" (As cited in Escobar, 2016).

The information that is created and transmitted through ICTs can have different formats, such as textual or voice data, images, multimedia elements, among others (Tello, 2011). Users' mastery of the different activities that can be carried out with ICTs refers to digital literacy. This literacy includes competencies such as computational literacy, ICT literacy, information literacy and multimedia literacy (UNESCO, 2018).

For Coll (2004), ICTs are a vital tool that improves learning processes and teaching.... are a fundamental part of the family and school environment, therefore, teachers are called to prepare and train themselves to be at the forefront of the new digital era and provide their students with pedagogical strategies generated with the use of ICTs for different school contexts; that allow energizing learning environments, motivating the development of basic and communicative skills that generate significant learning. (As cited in Escobar, 2016).

Moreover, ...technologies are an essential support at a time when society is immersed in a profound digital transformation. Education as a whole, and language teaching in particular, is no stranger to technological development; on the contrary, new technologies have entered the classroom with great force. Digital resources are of great help to both the teacher and the student as they open the door to novel educational methods... (Cantelar, 2019). This also brings with it the improvement of the English discipline with the purpose of achieving excellence in the professional training of students.

Carretero (2011) considers that ICTs motivate students to recognize the English language as a means of communication and an essential tool for accessing information sources. They enable the design and elaboration of a large number of complementary materials, allow the design of individualized evaluation processes and establish self-evaluation as a didactic resource. They also facilitate the design of programs that adapt to the student's learning style. With the use of ICTs, the principle of "learning to learn" materializes, since it focuses on student autonomy in and out



of the classroom. The student listens to his own intervention and can check his mistakes through feedback. The level of motivation is significantly higher when ICTs are used, since a range of possibilities opens up for the user when interacting with the different resources. The student is an active learner, as he controls his linguistic learning process, strengthening and stimulating independent study. ICT facilitates contact between students and teachers, which gives the possibility of raising and clarifying doubts, exchanging ideas and debating.... (As cited in Texidor et al, 2017).

Taking into account the above, it is important to highlight the role of the teacher in the use of technology. It is the teacher who is in charge of selecting the right materials, applications and sites for the proper use of the student in terms of learning development. ICT are essential in teaching innovation, but they must be accompanied by good educational planning, strategies and resources all designed according to the needs of the students.

Teacher guidance, in relation to the use and employment of ICTs, for self-study of the English language is essential for students to achieve digital competence as well as English language proficiency, increasingly promoting non-formal self-study by learners in this 21st century. The guidance provided to learners, by teachers, is essential for learning, since, according to Bennett, Maton, & Kervin (2008) students do not always have the technological skills despite being born into a high-tech world. (As cited in Ruiz-Zamora, 2020).

Therefore, it is important for the teacher to keep the search for updated information on new technologies, since they are constantly evolving. in this way, the teacher will be able to adequately guide students in this field.

## Changes in education

The COVID 19 pandemic brought major changes to the educational sector in Cuba. Both teachers and students have been forced to face new challenges with the delivery of classes in a non-face-to-face manner. The urgent need to give continuity to teaching made institutions and professors assume this new modality. Hence the importance of incorporating new pedagogical strategies supported mainly by technologies.

Among the strategies designed to prevent the spread of the pandemic is distance education. Thanks to ICT, teachers can fulfill the distance work assigned to them and have been forced to leave traditionalisms behind and implement new ways of learning, which, it is through distance education connected online, which has changed the way of educating; this distance education of proven quality and effectiveness, has created a multitude of organizational, technological and pedagogical models for teaching and learning based on ubiquitous, instantaneous, and sustained real-time communication and collaboration, which in the past was unthinkable since only face-to-face education was valid, where memorized physical texts were used. (As cited in González, 2020).



As stated above, new problems require new solutions. The pandemic forced us to stay at home, to protect and care for ourselves, but we could not forget the teaching and education of students and the continuous preparation of teachers. It is for them that these aforementioned strategies are implemented. In many cases without any experience in this type of distance learning, but the challenge was already imposed, it only remained to implement the strategies, models and do our best to meet the objectives proposed by the Ministry of Education, schools and universities.

Sacristán Romero (2013) states some of the benefits that distance education brings (As cited in Falcón, 2017)

1. Access to the benefits of educational technology.

The greatest benefit provided by distance education is the possibility of using computer and communications technology to efficiently educate and make available to the general public the vast amount of information that exists today.

2. Avoid time and space limitations.

Traditional face-to-face education has the obvious limitation that it must be adjusted to the moment when the one who sends the message and the one who receives it are in the same place. Distance education, by employing communication media, can efficiently avoid this limitation by using means that facilitate communication when the people involved are in different places and at different times. This great flexibility is of utmost importance for those who, for multiple reasons, whether personal, family, work or disability, need access to educational services from which they would otherwise be excluded. The possibility of working in deferred time is perhaps the most convenient aspect of this educational modality, particularly when users are very busy, have to physically move frequently or are located in different time zones.

3. Possibility of team study, regardless of physical or temporal distances.

The possibility of studying with others has always been considered one of the advantages of face-to-face education. This way of learning cooperatively has the great advantage of uniting the talents of many people, motivating the learning process, increasing the retention of participants in educational programs and making the educational experience more enjoyable by being shared with people for whom we feel an affinity. Traditionally, study groups have worked when stakeholders meet primarily face-to-face, establish work discipline, and come to cultivate good personal relationships. This affective aspect of group study can only be emulated in distance study. The distance modality, however, has the potential benefit that it makes it possible for people who are geographically distant and who, for various reasons, cannot work in the same time dimension, to do so through the use of technology. In other



words, even though it may be difficult, if not impossible, to reproduce the rich interaction produced in the study groups, the use of technology can make it possible to form virtual groups that would otherwise be impossible to form.

In distance education in general and "online" education in particular, teacher-student interaction is carried out by means of technological resources, and the possibility of using gestural, body and oral language and communication in real time is significantly reduced. Much of this is centered on the activities that the student performs and the teacher teaches from his comments and written observations about the performance he observes. The teacher ceases to be the one who transmits knowledge, and also the mediator between the student and the disciplinary contents, which are immersed in the course itself, to become a permanent evaluator of the learning of each of his students. He analyzes and evaluates the performances to consolidate or reorient the achievements.

How to teach English during the pandemic?

In the times we live in today, there are new challenges for teachers in terms of teaching English. While in the past, technological tools were used to support the development of classes in the classroom, today, after the confinement due to the pandemic, these tools are used to bring teaching to the home.

Teachers and universities have demonstrated their capacity to react to the new measures. Despite not having the necessary infrastructure and the lack of essential skills in the management and use of ICT in teachers, they have managed in a short time to transform education in Cuba and above all to maintain communication with students despite the distance.

According to Cabero (2011), the integration of ICT into the teaching-learning process of foreign languages requires the emergence of new didactic environments that require a new type of learner, who should be characterized by being more concerned with the process than with the product, being prepared to make decisions and to choose his or her own learning path (self-learning).

The Moodle learning management system is an open source software based on the ideas of constructivist pedagogy (knowledge is constructed in the student's mind instead of being simply transmitted) and, in addition, it enables collaborative learning. this platform allows, on the one hand, to respond to the principles stated by Järvelä (2006) that justify the use of ICT in learning, and on the other hand, it participates in the five learning management systems defined by Baumgartner (2005). For the latter author, Moodle has three educational reference models: (As cited in Sanchez, 2012)



- ✓ Teaching I or knowledge transmission. In this model, students' learning depends on the teacher's knowledge and there is no supervision of the learning process.
- ✓ Teaching II or acquisition, compilation and accumulation of knowledge. This model is based on the premise that active participation is a necessary condition for learning, as an active process in which the student must plan, review and reflect.
- ✓ Teaching III or knowledge development, invention and creation. The role of the teacher in this model is that of facilitator of learning. It is the students who, based on the teacher's presentation of problems, must produce and generate their own knowledge.

It can be said that the Moodle platform promotes a collaborative teaching-learning scheme in which the student is an active protagonist in his own training. This makes the teacher's role go far beyond the administration of knowledge through static materials directed to the student, it lies in the creation of an appropriate environment that allows the student to build his own knowledge from his orientations, the didactic materials and the resources and activities provided by the system.

Moodle provides teachers and students with a variety of integrated resources that create an attractive and dynamic environment for learning and assessment. It is also useful for providing course support materials, complementary activities to students, as well as the possibility of online communication between teacher and students.

At the Universidad de las Ciencias Informáticas (UCI), English language courses are available on the Moodle platform. In this way, the teaching-learning process becomes more varied, accessible and dynamic for the student, since it allows presenting the materials by units, ordered and ready for the students' consultation.

Due to the pandemic faced today, UCI students and workers must access the English courses from home. They can log on to the Moodle platform, download the materials and work from home. This allows the student to be a manager of their time and resources and makes it easy for them to log in when possible to send activities to the teacher.

In normal times, the teaching of English at UCI was done in a face-to-face manner, guided by a program broken down into units, and progress was made according to planning and guidance. Today, English teaching is adjusted to the times in which we live. A team of teachers guided by the English course coordinators set about the task of reorganizing what was already planned and oriented. This included a thorough review, selection and validation of the resources and documents already mounted on the platform, to choose the most suitable and appropriate to meet the objective of giving continuity to language teaching from a new perspective.





Each teacher has the orientation to choose the materials already existing in the courses or create new resources to design activities or learning tasks according to the needs of each student, enhancing individualized attention, taking into account the objective to be achieved and the knowledge necessary for their professional training.

In order to meet the objectives, set out in the new English teaching, technologies have played a fundamental role. The use of existing social networks such as WhatsApp, Telegram and Facebook have demonstrated their effectiveness as a support tool in Cuban education. Thanks to them, teachers have been able to maintain constant communication and feedback with students despite the distance.

### Some experiences

One of the main experiences learned during this time is that constant communication is essential with students, teachers and family. It is important to highlight the role of the Cuban family. The parents have shown total interest and cooperation in the improvement of their children and have demonstrated their emotional and financial support.

Another important aspect is the time factor, which has always been one of the main problems for the study and systematization of English. Therefore, having access to technology at all times allows learning to be totally adapted to the student's possibilities, so that he can design his study plan without limits according to his schedule and from any place he may be.

The dedication and interest in the continuity of the students' learning is a motivation for the teacher's constant search for information and improvement. It is important to select the most appropriate resources and materials from different sources, taking into account the needs of each student.

In addition, not all students have the same possibilities of connection and technology at home. The search for alternatives to reach each one of them has also been one of the important moments experienced during this period to achieve the objective of the university and the professor.

The creation of groups in applications such as WhatsApp and Telegram have also been of great help in establishing communication among teachers. The type of communication that has been established during this particular period goes beyond the professional sphere and is conducive to solidarity. As for the student groups, questions and answers related to some specific content are exchanged, ideas and suggestions are shared, and, in addition, they must report their health status, not only of the student but also that of his or her family.



Online learning, not being able to have students in the classroom, or in the dorm, and finding the right strategies to maintain engagement with their learning, is the most difficult part of social distancing. It takes a lot of dedication and being attentive to messages, emails, phone calls in order to accomplish this important and necessary task, the continuity of English language learning from home.

## Conclusions

The new information and communication technologies have favored the development of distance education, providing tools to support this process. The possibility of using the chat, the forum for interpersonal communication, the creation of online exercises, are some of the advantages provided by ICT and that allow the exchange and collaborative work as theoretical premises of the distance modality.

Language teaching in Cuba in times of the COVID-19 pandemic is a challenge for teachers and students, so it is necessary to have the basic tools within educational institutions to take advantage of technology and allow everyone to benefit from them.

It is necessary to prepare teachers in the use and application of virtual platforms, with training and support mechanisms for teachers. Although there is great motivation for the use of ICT by teachers and students, both still face great challenges on a daily basis.

## References

1. Cabero, J; Duarte, A. y Barroso, J. (2011). La piedra angular para la incorporación de los medios audiovisuales, informáticos y nuevas tecnologías en los contextos educativos: la formación y el perfeccionamiento del profesorado. Recuperado de: <http://www.uib.es/depart/gte/revelec8.html>
2. Cabero, J. (2015). Reflexiones educativas sobre las tecnologías de la información y la comunicación TIC. CEF, 19-27. Recuperado de:

[https://campusenlinea.reduaz.mx/mtie2/pluginfile.php/3912/mod\\_page/content/11/Reflexiones%20educativas.pdf](https://campusenlinea.reduaz.mx/mtie2/pluginfile.php/3912/mod_page/content/11/Reflexiones%20educativas.pdf)

3. Cantelar, S. (2019). La enseñanza del inglés abraza el cambio tecnológico. Revista Equipamiento para centros educativos. Recuperado de: <https://www.interempresas.net/Tecnologia-aulas/Articulos/246954-La-ensenanza-del-ingles-abraza-el-cambio-tecnologico.html>



4. Escobar, F.A. (2016). El uso de las tic como herramienta pedagógica para la motivación de los docentes en el proceso de aprendizaje y enseñanza en la asignatura de inglés. Maestría en tecnologías de información y comunicación. Medellín. Recuperado de : <https://repository.upb.edu.co/handle/20.500.11912/2762>
5. Falcón, M. (2013). La educación a distancia y su relación con las nuevas tecnologías de la información y las comunicaciones. Medisur [online]. vol.11, n.3. Recuperado de: [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S1727-897X2013000300006](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1727-897X2013000300006)
6. García, M.R; Reyes, J; Godínez, G. (2017). Las Tic en la educación superior, innovaciones y retos. *Revista Iberoamericana de las Ciencias Sociales y Humanísticas: RICSH*, ISSN-e 2395-7972, Vol. 6, N°. 12. Recuperado de: <https://dialnet.unirioja.es/servlet/articulo?codigo=6255413>
7. González, S. (2020). Un reto en tiempos de pandemia para la educación médica en Cuba. Universidad de Ciencias Médicas de La Habana, Facultad de Ciencias Médicas “Miguel Enríquez”. La Habana, Cuba. Recuperado de: [http://scielo.sld.cu/scielo.php?pid=S086421412020000300016&script=sci\\_arttext&tlng=en](http://scielo.sld.cu/scielo.php?pid=S086421412020000300016&script=sci_arttext&tlng=en)
8. Ruiz- Zamora. (2020) Competencia digital de estudiantes universitarios para el aprendizaje del inglés en tiempos de la COVID-19. *Revista Lengua y Cultura*. Recuperado de: <https://repository.uaeh.edu.mx/revistas/index.php/lc/issue/archive>
9. Sánchez, J; Sánchez, P; Ramos, F.J. (2012). Usos pedagógicos de Moodle en la docencia Universitaria desde la perspectiva de los estudiantes. Recuperado de: <https://rieoei.org/historico/documentos/rie60a01.pdf>
10. Tello, E. (2007). Las tecnologías de la información y comunicaciones (TIC) y la brecha digital: su impacto en la sociedad de México. *Revista de Universidad y Sociedad del Conocimiento*. (RUSC) Recuperado de: <http://www.uoc.edu/rusc/4/2/dt/esp/tello.pdf>
11. Texidor, R; Reyes, D; Berry, S; Cisnero, C.H. (2017). Las tecnologías de la información y la comunicación en la enseñanza de inglés en Ciencias Médicas. *Educ Med Super* vol.31 no.2 Ciudad de la Habana. Recuperado de: [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S0864-21412017000200019](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-21412017000200019)
12. UNESCO. (2018). *A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2*. Montreal: UNESCO. Retrieved from: <http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf>