



# REVISTA INCLUSIONES

HOMENAJE A MARÍA JOSÉ AGUILAR IDÁÑEZ

Revista de Humanidades y Ciencias Sociales

Volumen 8 . Número 1

Enero / Marzo

2021

ISSN 0719-4706

**CUERPO DIRECTIVO**

**Director**

**Dr. Juan Guillermo Mansilla Sepúlveda**  
Universidad Católica de Temuco, Chile

**Editor**

**Alex Véliz Burgos**  
Obu-Chile, Chile

**Editor Científico**

**Dr. Luiz Alberto David Araujo**  
Pontificia Universidade Católica de Sao Paulo, Brasil

**Editor Brasil**

**Drdo. Maicon Herverton Lino Ferreira da Silva**  
Universidade da Pernambuco, Brasil

**Editor Ruropa del Este**

**Dr. Alekzandar Ivanov Katrandhiev**  
Universidad Suroeste "Neofit Rilski", Bulgaria

**Cuerpo Asistente**

**Traductora: Inglés**

**Lic. Pauline Corthorn Escudero**  
Editorial Cuadernos de Sofía, Chile

**Portada**

**Lic. Graciela Pantigoso de Los Santos**  
Editorial Cuadernos de Sofía, Chile

**COMITÉ EDITORIAL**

**Dra. Carolina Aroca Toloza**  
Universidad de Chile, Chile

**Dr. Jaime Bassa Mercado**  
Universidad de Valparaíso, Chile

**Dra. Heloísa Bellotto**  
Universidad de Sao Paulo, Brasil

**Dra. Nidia Burgos**  
Universidad Nacional del Sur, Argentina

**Mg. María Eugenia Campos**  
Universidad Nacional Autónoma de México, México

**Dr. Francisco José Francisco Carrera**  
Universidad de Valladolid, España

**Mg. Keri González**  
Universidad Autónoma de la Ciudad de México, México

**Dr. Pablo Guadarrama González**  
Universidad Central de Las Villas, Cuba

**Mg. Amelia Herrera Lavanchy**  
Universidad de La Serena, Chile

**Mg. Cecilia Jofré Muñoz**  
Universidad San Sebastián, Chile

**Mg. Mario Lagomarsino Montoya**  
Universidad Adventista de Chile, Chile

**Dr. Claudio Llanos Reyes**  
Pontificia Universidad Católica de Valparaíso, Chile

**Dr. Werner Mackenbach**  
Universidad de Potsdam, Alemania  
Universidad de Costa Rica, Costa Rica

**Mg. Rocío del Pilar Martínez Marín**  
Universidad de Santander, Colombia

**Ph. D. Natalia Milanesio**  
Universidad de Houston, Estados Unidos

**Dra. Patricia Virginia Moggia Münchmeyer**  
Pontificia Universidad Católica de Valparaíso, Chile

**Ph. D. Maritza Montero**  
Universidad Central de Venezuela, Venezuela

**Dra. Eleonora Pencheva**  
Universidad Suroeste Neofit Rilski, Bulgaria

**Dra. Rosa María Regueiro Ferreira**  
Universidad de La Coruña, España

**Mg. David Ruete Zúñiga**  
Universidad Nacional Andrés Bello, Chile

**Dr. Andrés Saavedra Barahona**  
Universidad San Clemente de Ojrid de Sofía, Bulgaria

**Dr. Efraín Sánchez Cabra**  
Academia Colombiana de Historia, Colombia

**Dra. Mirka Seitz**  
Universidad del Salvador, Argentina

**Ph. D. Stefan Todorov Kapralov**  
South West University, Bulgaria

**COMITÉ CIENTÍFICO INTERNACIONAL**

**Comité Científico Internacional de Honor**

**Dr. Adolfo A. Abadía**

*Universidad ICESI, Colombia*

**Dr. Carlos Antonio Aguirre Rojas**

*Universidad Nacional Autónoma de México, México*

**Dr. Martino Contu**

*Universidad de Sassari, Italia*

**Dr. Luiz Alberto David Araujo**

*Pontificia Universidad Católica de Sao Paulo, Brasil*

**Dra. Patricia Brogna**

*Universidad Nacional Autónoma de México, México*

**Dr. Horacio Capel Sáez**

*Universidad de Barcelona, España*

**Dr. Javier Carreón Guillén**

*Universidad Nacional Autónoma de México, México*

**Dr. Lancelot Cowie**

*Universidad West Indies, Trinidad y Tobago*

**Dra. Isabel Cruz Ovalle de Amenabar**

*Universidad de Los Andes, Chile*

**Dr. Rodolfo Cruz Vadillo**

*Universidad Popular Autónoma del Estado de Puebla, México*

**Dr. Adolfo Omar Cueto**

*Universidad Nacional de Cuyo, Argentina*

**Dr. Miguel Ángel de Marco**

*Universidad de Buenos Aires, Argentina*

**Dra. Emma de Ramón Acevedo**

*Universidad de Chile, Chile*

**Dr. Gerardo Echeita Sarrionandia**

*Universidad Autónoma de Madrid, España*

**Dr. Antonio Hermosa Andújar**

*Universidad de Sevilla, España*

**Dra. Patricia Galeana**

*Universidad Nacional Autónoma de México, México*

**Dra. Manuela Garau**

*Centro Studi Sea, Italia*

**Dr. Carlo Ginzburg Ginzburg**

*Scuola Normale Superiore de Pisa, Italia*

*Universidad de California Los Ángeles, Estados Unidos*

**Dr. Francisco Luis Girardo Gutiérrez**

*Instituto Tecnológico Metropolitano, Colombia*

**José Manuel González Freire**

*Universidad de Colima, México*

**Dra. Antonia Heredia Herrera**

*Universidad Internacional de Andalucía, España*

**Dr. Eduardo Gomes Onofre**

*Universidade Estadual da Paraíba, Brasil*

**Dr. Miguel León-Portilla**

*Universidad Nacional Autónoma de México, México*

**Dr. Miguel Ángel Mateo Saura**

*Instituto de Estudios Albacetenses "Don Juan Manuel", España*

**Dr. Carlos Tulio da Silva Medeiros**

*Diálogos em MERCOSUR, Brasil*

**+ Dr. Álvaro Márquez-Fernández**

*Universidad del Zulia, Venezuela*

**Dr. Oscar Ortega Arango**

*Universidad Autónoma de Yucatán, México*

**Dr. Antonio-Carlos Pereira Menaut**

*Universidad Santiago de Compostela, España*

**Dr. José Sergio Puig Espinosa**

*Dilemas Contemporáneos, México*

**Dra. Francesca Randazzo**

*Universidad Nacional Autónoma de Honduras, Honduras*

**Dra. Yolando Ricardo**

*Universidad de La Habana, Cuba*

**Dr. Manuel Alves da Rocha**

*Universidade Católica de Angola Angola*

**Mg. Arnaldo Rodríguez Espinoza**

*Universidad Estatal a Distancia, Costa Rica*

**Dr. Miguel Rojas Mix**

*Coordinador la Cumbre de Rectores Universidades  
Estatales América Latina y el Caribe*

**Dr. Luis Alberto Romero**

*CONICET / Universidad de Buenos Aires, Argentina*

**Dra. Maura de la Caridad Salabarría Roig**

*Dilemas Contemporáneos, México*

**Dr. Adalberto Santana Hernández**

*Universidad Nacional Autónoma de México, México*

**Dr. Juan Antonio Seda**

*Universidad de Buenos Aires, Argentina*

**Dr. Saulo Cesar Paulino e Silva**

*Universidad de Sao Paulo, Brasil*

**Dr. Miguel Ángel Verdugo Alonso**

*Universidad de Salamanca, España*

**Dr. Josep Vives Rego**

*Universidad de Barcelona, España*

**Dr. Eugenio Raúl Zaffaroni**

*Universidad de Buenos Aires, Argentina*

**Dra. Blanca Estela Zardel Jacobo**

*Universidad Nacional Autónoma de México, México*

**Comité Científico Internacional**

**Mg. Paola Aceituno**

*Universidad Tecnológica Metropolitana, Chile*

**Ph. D. María José Aguilar Idañez**

*Universidad Castilla-La Mancha, España*

**Dra. Elian Araujo**

*Universidad de Mackenzie, Brasil*

**Mg. Romyana Atanasova Popova**

*Universidad Suroeste Neofit Rilski, Bulgaria*

**Dra. Ana Bénard da Costa**

*Instituto Universitario de Lisboa, Portugal*

*Centro de Estudios Africanos, Portugal*

**Dra. Alina Bestard Revilla**

*Universidad de Ciencias de la Cultura Física y el Deporte,  
Cuba*

**Dra. Noemí Brenta**

*Universidad de Buenos Aires, Argentina*

**Ph. D. Juan R. Coca**

*Universidad de Valladolid, España*

**Dr. Antonio Colomer Vialdel**

*Universidad Politécnica de Valencia, España*

**Dr. Christian Daniel Cwik**

*Universidad de Colonia, Alemania*

**Dr. Eric de Léséulec**

*INS HEA, Francia*

**Dr. Andrés Di Masso Tarditti**

*Universidad de Barcelona, España*

**Ph. D. Mauricio Dimant**

*Universidad Hebrea de Jerusalén, Israel*

**Dr. Jorge Enrique Elías Caro**

*Universidad de Magdalena, Colombia*

**Dra. Claudia Lorena Fonseca**

*Universidad Federal de Pelotas, Brasil*

**Dra. Ada Gallegos Ruiz Conejo**

*Universidad Nacional Mayor de San Marcos, Perú*

**Dra. Carmen González y González de Mesa**

*Universidad de Oviedo, España*

**Ph. D. Valentin Kitanov**

*Universidad Suroeste Neofit Rilski, Bulgaria*

**Mg. Luis Oporto Ordóñez**

*Universidad Mayor San Andrés, Bolivia*

**Dr. Patricio Quiroga**

*Universidad de Valparaíso, Chile*

**Dr. Gino Ríos Patio**

*Universidad de San Martín de Porres, Perú*

**Dr. Carlos Manuel Rodríguez Arrechavaleta**

*Universidad Iberoamericana Ciudad de México, México*

**Dra. Vivian Romeu**

*Universidad Iberoamericana Ciudad de México, México*

**Dra. María Laura Salinas**

*Universidad Nacional del Nordeste, Argentina*

**REVISTA  
INCLUSIONES** M.R.  
REVISTA DE HUMANIDADES  
Y CIENCIAS SOCIALES

**Dr. Stefano Santasilia**  
*Universidad della Calabria, Italia*

**Mg. Silvia Laura Vargas López**  
*Universidad Autónoma del Estado de Morelos, México*

**Dra. Jaqueline Vassallo**  
*Universidad Nacional de Córdoba, Argentina*

**CUADERNOS DE SOFÍA  
EDITORIAL**

**Dr. Evandro Viera Ouriques**  
*Universidad Federal de Río de Janeiro, Brasil*

**Dra. María Luisa Zagalaz Sánchez**  
*Universidad de Jaén, España*

**Dra. Maja Zawierzeniec**  
*Universidad Wszechnica Polska, Polonia*

## Indización, Repositorios y Bases de Datos Académicas

Revista Inclusiones, se encuentra indizada en:





REX



UNIVERSITY OF  
SASKATCHEWAN



Universidad  
de Concepción

BIBLIOTECA UNIVERSIDAD DE CONCEPCIÓN





**SPANISH EFL TEACHERS AND ICT TOOLS. A SURVEY-BASED ANALYSIS**

**Mg. Nerea Blanco González**

Universidad de Nebrija, España

ORCID ID: <https://orcid.org/0000-0002-9784-7659>

nereablagon@gmail.com

**Ph. D. Lidia Mañoso-Pacheco**

Universidad Autónoma de Madrid, España

ORCID ID: <https://orcid.org/0000-0003-4798-2075>

lidia.mannoso@uam.es

**Fecha de Recepción:** 23 de octubre de 2020 – **Fecha Revisión:** 26 de octubre de 2020

**Fecha de Aceptación:** 17 de diciembre de 2020 – **Fecha de Publicación:** 01 de enero de 2021

**Abstract**

In the last few years, teachers in Spain have experienced numerous changes in their methodology due to the implementation of ICT (Information and Communication Technologies) in education. This research provides a survey-based analysis of EFL (English as a Foreign Language) teachers that assesses their attitude towards digital resources and the current state of affairs in Spain concerning digital tools. Results indicate that despite receiving training in digital skills, teachers still need more support from their educational centres and that the technical equipment available is limited. Besides, they use more often ICT tools for practicing listening and evaluate favourably collaboration among teaching staff and the figure of the ICT coordinator.

**Keywords**

ICT – English – Education – Spain – Methodology

**Para Citar este Artículo:**

Blanco González, Nerea y Mañoso-Pacheco, Lidia. Spanish EFL teachers and ICT tools. A survey-based analysis. Revista Inclusiones Vol: 8 num 1 (2021): 174-186.

Licencia Creative Commons Attribution Non-Comercial 3.0 Unported  
(CC BY-NC 3.0)

Licencia Internacional





## Introduction

In the last few years, teachers in Spain have experienced rapid changes in their teaching methodology and the kind of resources used in their lessons due to the influence and evolution of Information and Communication Technologies (ICT), which are in constant change.

The integration of ICT in the students' curriculum is a priority, as acknowledged by the Spanish Royal Decree<sup>1</sup>. According to this document, digital competence acquisition is a key competence that must be addressed by teachers, which allows students to be more prepared for everyday situations and future challenges.

The way people use these tools will depend significantly on their previous education, knowledge and critical capacity. Teachers should instruct their learners on how to search for information, distinguishing between true and false data, and the best way to use these tools with responsibility and guidance. To that aim, schools need to provide the teaching staff the right resources, and teachers should count with appropriate digital competence<sup>2</sup>.

Other aspects should be dealt with concerning ICT implementation, such as funding, collaboration among the parties involved in the teaching-learning process, or the attitudes of the educators, to mention but a few. According to Area<sup>3</sup>, a great investment should be done at schools in order to effectively incorporate ICT in the lessons. Once the teachers have the right knowledge, training and skills, the use of ICT could be carried out successfully.

According to various experts in the field, the application of ICT tools has been identified as a critical factor for boosting motivation, interest in the subjects, and creativity among learners. Moreover, it may improve the ability to solve issues, and fosters group cohesion, reinforcing students' self-confidence and autonomy.

Although most of the studies support that teachers are willing to incorporate ICT tools in their classes due to their many benefits, some authors refer to the fact that there are some teachers that refuse to integrate ICT tools because of their lack of digital skills and self-confidence<sup>4</sup>. To prevent this, training courses based on providing digital skills are offered by institutions, and teachers are encouraged to collaborate with more advanced teachers, who can share their experiences and expertise with them.

This paper aims at providing a survey-based analysis of the use of ICT tools in the language classroom. In this study the attitude by English as a Foreign Language (EFL) teachers at the Secondary Stage and the current state of affairs in Spain will be investigated. This paper is divided into five main parts: the introduction, which has been presented above; followed by the theoretical framework (section 1) that analyses the benefits of ICT tools and the teachers' role and attitudes towards them.

---

<sup>1</sup> Royal Decree 1105/2014, of 26th December, which establishes the basic curriculum of Compulsory Secondary Education and Bachillerato. Boletín Oficial del Estado 3, January 3, 2015.

<sup>2</sup> Elisa Garrido and José Luis Ortega, "The implementacion of ICT in the English class in Andalucía", *Revista Curriculum* (2014).

<sup>3</sup> Manuel Area, "Innovación pedagógica con TIC y el desarrollo de las competencias informacionales y digitales", *Revista Investigación en la Escuela*, Vol: 64 (2008): 5-18.

<sup>4</sup> Anne Ottenbreit-Leftwich; Krista Glazewski; Timothy Newby and Peggy Ertmer, "Teacher value beliefs associated with using technology: addressing professional and student needs", *Computers & Education*, Vol: 55 (2010): 1321-1335. DOI: 10.1016/j.compedu.2010.06.002.

The research continues presenting the methodology followed in the study (section 2). Then, section 3 shows the results and discussion of the data collected in the survey, and finally, the paper states the conclusions raised from the findings of the research.

### Theoretical framework

The implementation of ICT in educational centres has been of great importance during the last 20 years in Spain. The European Union has supported the implementation of ICT in education and emphasized the need of adapting the way of teaching to the demands of the modern world. Bax<sup>5</sup> defines normalization as the “stage when the technology becomes invisible, taken for granted in everyday life, embedded in everyday practice and hence ‘normalized’ to the extent that we hardly even recognize them as Technologies”, which is the target of school practices nowadays.

A significant number of scholars agree on the fact that teachers are an essential part of the transforming process in order to meet the students’ needs and deliver quality education for all<sup>6</sup>. Thus, the attitude of the teacher towards different factors or elements influencing the teaching-learning processes is a key factor to be taken into account in the education field<sup>7</sup>. The rapid development of ICT tools makes it essential to constantly train teachers in order to be able to implement digital resources in their lessons. Teachers are the ones responsible for the correct and appropriate use of ICT in their classes, and then, they must have a sufficient formation to ensure their appropriate use and implementation<sup>8</sup>.

Regarding students, they are also expected to achieve a set of goals in the use of ICT, such as

“(a) to get, interpret and transform information into significant knowledge; (b) to develop social knowledge, skills and attitudes; (c) to create a critical knowledge and strategies to learn on their own; (d) to develop skills to look for information, process and communicate it; and to implement the 1 to 1 model in the learning environment in order to provide orientation and help to reflect on important issues related to ICT management”<sup>9</sup>.

Accordingly, for the implementation and application of ICT to be successful, teachers not only need to be trained in this regard, but students also need to gain different skills to employ digital resources successfully. Apart from these requirements set for both teachers and students, some changes need to be made at schools so that the teaching-learning process becomes successful in ICT tools implementing. As Morrissey<sup>10</sup> states, the inclusion of ICT in the classroom involves changing the organization at the educational centre, as well

<sup>5</sup> Stephen Bax, “CALL-past, present and future”, *System*, Vol. 31 (2003): 23.

<sup>6</sup> Colin Low, “A defense of moderate inclusion and the end of ideology”. In: R. Cigman (Ed.), *Included or Excluded?* (Londres: Routledge, 2007).

<sup>7</sup> José María Fernández and Blas Bermejo, “Actitudes docentes hacia las TIC en centros de buenas prácticas educativas con orientación inclusiva. Universidad de Sevilla”, *Enseñanza & Teaching* (2012): 45-61. Retrieved from <https://idus.us.es/bitstream/handle/11441/49099/Actitudes%20docentes%20hacia%20las%20TIC%20en%20centros%20de%20buenas%20practicas%20educativas%20con%20orientacion%20inclusiva.pdf?sequence=1&isAllowed=y>.

<sup>8</sup> Elisa Garrido and José Luis Ortega, “The implementacion of ICT in the English...”

<sup>9</sup> Elisa Garrido and José Luis Ortega, “The implementacion of ICT in the English...”

<sup>10</sup> Jerome Morrissey, *El uso de TIC en la enseñanza y el aprendizaje. Cuestiones y desafíos*. In: Magadán Cecilia y Valeria Kelly [Compilers]. Retrieved from: <http://coleccion.educ.ar/coleccion/CD30/contenido/pdf/morrissey.pdf>. 2007.

as its investment in infrastructures and resources, and the development of training courses aimed at teachers. As Area<sup>11</sup> affirms, the lack of resources at schools is not the core concern, but the absence of training for teachers who do not know how to use and implement ICT in their class.

Regarding the teacher's role in this evolving teaching-learning scenario, it must be that of guiding, engaging and attracting the attention of the students, enabling peer education and tutoring. Therefore, the teacher should act as a coach and not just as a lecturer, allowing students to discover their learning, cooperate and use reflective learning. In this line, ICT needs to be now considered as a way of transforming learning, the atmosphere of the classroom, and as a means of promoting knowledge scaffolding, amongst other aspects<sup>12</sup>.

ICT tools can help teachers to teach in a more interactive way and consolidate the previous knowledge of their students (or 'schemata') by using audiovisual materials, games, songs, etc. In addition, their use may improve the understanding of the content given and enhance L2 acquisition<sup>13</sup>.

According to Herrtwich<sup>14</sup>, teachers should also develop their teaching material and find their resources in their own environment, creating and preparing their classes and developing relevant digital skills. In order to get the most of their lessons, they should first prepare their learners to acquire basic skills, enabling them to use electronic learning material and knowing how to control ICT tools to carry out the activities set in class<sup>15</sup>.

Following Llorens<sup>16</sup>, in order for teachers to choose the best technology, they first need to determine the educational model, since we should not forget that ICT is an added value that may improve the teaching process. Besides, as this author claims, the implementation of ICT tools depends on the teachers' will and motivation, since they involve many hours of work, dedication, preparation, commitment and skill acquisition.

Nowadays, the use of ICT tools is constantly increasing, although there are still a great majority of instructors who decide not to use these tools. Sometimes, these teachers do not receive the appropriate training or they feel they are not prepared enough for handling new technologies, so they end up demotivated when trying to use ICT tools and opt for continuing using the same traditional resources.

---

<sup>11</sup> Manuel Area, "Innovación pedagógica con TIC y el desarrollo de las competencias...

<sup>12</sup> Silvia Panzavolta and Chiara Laici, *EAI Endorsed Transactions*. DOI:10.4108/eai.26-7-2017.152907. 2017.

<sup>13</sup> Milan Klement; J Jiří Dostál and Květoslav Bártek, *Perception and Possibilities of ICT Tools in the Education from the Teachers' Perspective*. Olomouc: Palacký University. DOI: 10.5507/pdf.17.244500933. 2017.

<sup>14</sup> Ralf Herrtwich, "Network and Operating System Support for Digital Audio and Video". 2nd International Workshop. Berlin: Springer, 402. 2012.

<sup>15</sup> Milan Klement; J Jiří Dostál and Květoslav Bártek, *Perception and Possibilities of ICT...*

<sup>16</sup> Ariadna Llorens, *Propuesta metodológica para la determinación y el aprendizaje de las competencias genéricas clave del/la ingeniero/a tic y percepción diferencial del mercado entre el grado y el postgrado o máster*. Universitat Politècnica de Catalunya. Departament d'Organització d'Empreses. 2012.

As Teo<sup>17</sup> states, teachers' attitudes towards ICT and digital competences determine students' computer use. Thus, the negative attitudes on the part of teachers need to be identified to be then redefined and foster more positive ones<sup>18</sup>. It is thus necessary to further investigate why teachers do not use ICT tools or are somehow reluctant to implement them in class.

Despite the fact that some teachers claim that they lack enough formation in digital competence, many educational centres have been implementing in the last decade introductory ICT courses in their curriculum mostly focused on the development of ICT knowledge and the acquisition of the corresponding skills<sup>19</sup>.

According to the research carried out by Tondeur et al.<sup>20</sup>, teacher education programmes can help instructors to be able to use technology in their future lessons. Besides, these authors discovered that teachers seem to be more eager to integrate technology into their classrooms when they observe that other teachers use it, so this appears to be an important motivator for them. Their results also appear to indicate that the theoretical and conceptual information should be practically-oriented so that teachers can have the possibility of experiencing the pedagogical integration of technology in the classroom through training.

According to Ottenbreit-Leftwich et al.<sup>21</sup>, "rather than expecting technology to change the nature of teaching and learning, it may be more beneficial to help teachers use technology in order to enhance the curriculum in ways they see fit". These authors also state that technology should be aligned with the teacher's beliefs and strategies, which are consistent with the teaching approaches that teachers use.

Regarding the integration of ICT in the pedagogical practice, Koehler and Mishra<sup>22</sup> developed the Technological Pedagogical and Content Knowledge (TPACK) framework, which focuses on technological knowledge (TK), pedagogical knowledge (PK) and Content Knowledge (CK). This framework, one of the most solid developed recently, offers proposals and recommendations to the issues, doubts and uncertainties that teachers frequently encounter when incorporating technology in their educational practice.

According to them, for technology implementation in class to be effective and successful, some factors must be identified, such as the context of the educational centre,

---

<sup>17</sup> Timothy Teo, "Pre-service teachers' attitudes towards computer use: A Singapore survey", *Australasian Journal of Educational Technology*, Vol: 24 num 4 (2008). <https://doi.org/10.14742/ajet.1201>.

<sup>18</sup> Abbas Gilakjani and Lai-Mei Leong, "EFL Teachers' Attitudes toward Using Computer Technology in English Language Teaching", *Theory & Practice in Language Studies*, Vol: 2 num 3 (2012).

<sup>19</sup> Drew Polly; Clif Mims; Craig Shepherd and Fethi Inan, "Evidence of impact: Transforming teacher education with preparing tomorrow's teachers to teach with technology", *Teaching and Teacher Education: An International Journal of Research and Studies*, Vol: 26 num 4 (2010): 863-870.

<sup>20</sup> Jo Tondeur; Johan Van Braak; Guoyuan Sang; Joke Voogt; Petra Fisser and Anne Ottenbreit-Leftwich, "Preparing preservice teachers to integrate technology in education: a synthesis of qualitative evidence", *Computers & Education*, Vol: 59 (2012): 134-144.

<sup>21</sup> Anne Ottenbreit-Leftwich; Krista Glazewski; Timothy Newby and Peggy Ertmer, "Teacher value beliefs associated with using technology: addressing professional and student needs", *Computers & Education*, Vol: 55 (2010): 1321-1335. DOI: 10.1016/j.compedu.2010.06.002.

<sup>22</sup> Punya Mishra and Mathew Koehler, "Technological Pedagogical Content Knowledge: A new framework for teacher knowledge", *Teachers College Record* Vol: 108 num 6 (2006): 1017-1054.

an analysis of the classroom, its resources, culture of the target learners, grade level of the students, class demographics, characteristics of the teacher, etcetera. All these factors will determine the way technology will be used in a specific environment. Therefore, adaptations are required, since there is not such an ideal setting where all teachers apply the same tools and teaching methods, but instead various issues and circumstances to handle each time. Every school, class and student have their own characteristics, and then a combination of different methodologies and digital tools is needed.

Regarding the benefits of ICT implementation, we can state that ICT tools allow learners to become self-managed when they search for information themselves, which allows them to be self-motivated and self-directed learners when reacting in an effective way to the rapid changes<sup>23</sup>.

ICT can also serve to foster collaborative learning among learners, not only restricted to the ones living in the same area. Indeed, many activities and projects can be done between national schools and educational centres located in other countries, thus fostering international communication and language exchange.

Besides, ICT is essential at all levels of education. They do not only have an impact on the branch of knowledge, but also on scientific and technological progress. These are innovative technologies that emerge rapidly in our society and we should enable the appropriate development of it<sup>24</sup>.

Many studies support the idea of using ICT to teach EFL. Some academics have realized that the increased use of these technologies can significantly enhance the performance of active learning methods, as well as the motivation and commitment on the part of learners<sup>25</sup>. As Wheeler<sup>26</sup> notes, ICT can also be used to foster collaborative learning by means of activities such as role-playing or problem-solving activities tasks, which sometimes requires greater commitment in terms of time to prepare all these group/peer dynamics.

In addition, ICT tools can bring students a closer feeling of the foreign language, allowing the development of linguistic, communication and intercultural competence. This may be achieved if educative projects are conducted with other foreign institutions, setting real-life situations and giving cultural awareness to students. Besides, the implementation of ICT in the language classroom enables the intensification and personalization of the learning, promoting interest and attracting the attention of the learners in the subject<sup>27</sup>.

---

<sup>23</sup> Wulansari Sisca; Rohadi Dede and Qonaatun Aa. "Implementation of ICT in Teaching and Learning English", Proceedings of the 1st International Multidisciplinary Conference on Education, Technology, and Engineering, (2020): 204–207. <https://doi.org/10.2991/assehr.k.200303.048>.

<sup>24</sup> Albina Bilyalova, "ICT in teaching a foreign language in high school", Procedia. Social and Behavioral Sciences, Vol: 237 (2017): 175-181. DOI: 10.1016/j.sbspro.2017.02.060.

<sup>25</sup> Steve Wheeler, "Information and communication technologies and the changing role of the teacher", Journal of Educational Media, Vol: 26 num 1 (2001): 7-17. DOI: 10.1080/1358165010260102 y Ju Nadolskaja, "Multimedia training programs as a means of activation of educational activity of students at studying of German language as a second language". Educational Technology & Society, Vol: 17 num 1 (2014): 347–358. Retrieved from: <http://ifets.ieee.org/russian/periodical/journal.html>.

<sup>26</sup> Steve Wheeler, "Information and communication technologies..."

<sup>27</sup> Ju Nadolskaja, "Multimedia training programs as a means of activation..."

Thanks to incorporating ICT in the tasks set in class, our students may feel more comfortable since they are used to operating digitally on a daily basis. As Bilyalova<sup>28</sup> states, “ICT contribute to overcoming the psychological barrier of students to the use of a foreign language as a means of communication”. Thus, students can express themselves in a more natural way and their motivation increases if they practice the foreign language with digital tools.

In contrast with traditional methods, the student becomes in the new digital area the core of the teaching-learning process and s/he can find her/his own way to internalize the knowledge. Therefore, the teacher here acts as a guide or assistant, managing and fostering the students’ motivation in learning the foreign language.

Before integrating ICT in class, the equipment and resources need to be in place in order to use ICT effectively. Therefore, all educational centres willing to implement these tools in their lessons need to prepare the facilities, as explained below:

- All classes must have computerized and audio-visual equipment, or classes designed for this purpose with the corresponding timetable, so that everybody can benefit from them.
- Programs to streamline the educational centres and resources in order to integrate Good Practices concerning ICT.
- Training programs for teachers to promote the use of ICT in class and to teach them how to integrate them and use them in a successful way.
- Follow-up of the on-going professional development of teachers.

In this regard, it is important to mention the volatility of ICT tools. There is no lasting knowledge of digital tools due to their rapid changes, which frustrates some teachers<sup>29</sup>. Consequently, it is difficult for users to keep updated on the latest innovative features and the new digital resources that are constantly emerging. To prevent this, teachers must be adequately trained and the training sessions must ensure teachers acquire digital competences to integrate their use into their pedagogical practices, and redesign them if needed.

At this point we should clarify that two different kinds of generations currently coexist into the school environment: digital natives (students living and growing up surrounded by the use of technologies) and digital migrants (teachers who were born before the Internet area and that started using these technologies at a later age)<sup>30</sup>.

As mentioned above, teachers need to know how to use the TPACK approach in order to deliver their classes integrating ICT. Firstly, teachers need to understand the students’ diversity and their learning needs. Secondly, they must plan and design their learning environment, as well as the experiences that can meet their pedagogical needs.

---

<sup>28</sup> Albina Bilyalova, “ICT in teaching a foreign language in high school...”

<sup>29</sup> Jesús Valverde; M<sup>a</sup> del Carmen Garrido y Rosa Fernández, “Enseñar y aprender con tecnologías: un modelo teórico para las buenas prácticas con TIC”. *Revista de Teoría de la Educación Sociedad de la Información*, Vol: 11 num 3 (2010): 203-229. Retrieved from [http://revistatesi.usal.es/~revistas\\_trabajo/index.php/revistatesi/article/view/5840/5866](http://revistatesi.usal.es/~revistas_trabajo/index.php/revistatesi/article/view/5840/5866).

<sup>30</sup> Jesús Valverde; M<sup>a</sup> del Carmen Garrido y Rosa Fernández, “Enseñar y aprender con tecnologías...”

Thirdly, they need to develop efficient teaching and pedagogical strategies to adequately address different learning needs. Fourthly, they must identify the best management strategies to be applied in class, and lastly, they need to analyse the diversity in learners in a class where technology is used<sup>31</sup>.

For the use of ICT to be effective, educators need to know how to choose the resources that best suit their students' needs and the contents to be taught. That is why teachers require training and on-going professional development in ICT tools. As Murray states,

“The use of computer technology in English language teaching and learning is accepted, often uncritically, in many settings, even though in other settings, computers are not available, while in still other settings, teachers and learners often lack the necessary computer literacy skills to exploit the technology effectively for language teaching and learning”<sup>32</sup>.

Teachers need then to receive on-going training, and professional development is an essential part of the pedagogical process. Professional development relates not only with the use of ICT, but with the acquisition of the knowledge needed in order to know how to foster student interaction by means of these tools while developing and upgrading a suitable curriculum for integrating ICT and enhancing the quality of learning<sup>33</sup>.

The pedagogy teachers should employ when incorporating ICT refers to the creation of activities promoting peer-to-peer learning, creativity, experimentation and student-centred learning. Digital tools can create an environment where learners interact, giving them a sense of freedom in which they can use all the resources available. Moreover, they also enable collaborative learning through practice and experimentation while learners perform the activities.

Thus, it needs to be underlined that ICT tools empower students to be responsible for their own learning and that of their peers. In this case, the creation of activities in which more advanced students can help peers who have some difficulties to understand the contents is an excellent way of building opportunities for knowledge sharing. Additionally, it is important to mention that educators need to guide students in order to make the right use of these tools. Teachers need to help students distinguish which information is accurate and which is not, and to avoid the abuse of technology. Some studies have focused on the relations between this possible excessive use of technology and other variables: wellbeing, academic performance, parental control, to mention but a few<sup>34</sup>. Finally, we should remark that educational centres and teachers should implement preventive measures against the misuse of technology. In addition, teachers should evaluate the digital content of resources, tools and platforms to be used in class, and ensure their proper application.

---

<sup>31</sup> Margaret Niess, Guiding preservice teachers in TPCK. In: AACTE Committee on Innovation and Technology (ed.), Handbook of Technological Pedagogical Content Knowledge (TPCK) for Educators (New York: Routledge, 2008).

<sup>32</sup> Denise Murray, “Creating a technology-rich English language learning environment”, International Handbook of English Language Learning, Vol: 15 num 1 (2007): 747. Newbury Park, CA: SAGE. DOI: 10.1007/978-0-387-46301-8\_49.

<sup>33</sup> Donna Johnson, Using computers to promote development of English as a second language (New York: Carnegie Corporation, 2005).

<sup>34</sup> Alfredo Oliva; M<sup>a</sup> Victoria Hidalgo; Carmen Moreno; Lucía Jiménez; Antonia Jiménez; Lucía Antolín and Pilar Ramos, Uso y riesgo de adicciones y nuevas tecnologías entre adolescentes y jóvenes andaluces (Sevilla: Aguaclara Editorial, 2012).



## Methodology

The present study analyses the attitudes of Secondary foreign language teachers in Spain towards the use of ICT tools in their lessons. To that end, a survey-based analysis has been conducted in May 2020, whose results have been qualitatively and quantitatively assessed.

In order to carry out the survey, a total of 43 respondents follow a 22-item questionnaire published by *Google Forms*, containing both open and closed-ended questions aimed at reflecting their attitude and view towards ICT tools.

The questions are based on former studies conducted by relevant researchers, such as Jung<sup>35</sup>, Niess<sup>36</sup>, Sánchez et al.<sup>37</sup> and Klement, Dostál and Bártek<sup>38</sup>. Anonymity was guaranteed in the study to ensure the confidentiality of the data collected in the research.

## Results and discussion

Following the results obtained in the survey, the purpose of integrating ICT tools in the classroom appears to be mostly focused on motivating the students to participate and learn, followed by implementing innovative and collaborative learning, integrating digital competence in the curriculum, and finally, fostering knowledge acquisition. Teachers implementing ICT tools consider that thanks to them their teaching methodology may be improved.

Respondents who acknowledged not to implement the use of ICT tools in their lessons mainly allude to the fact that the school has limited technical equipment and support (13.6%). Besides, they justify their refusal to implement ICT in their foreign language class by saying that they are afraid of making mistakes, and that their educational centres do not offer them sufficient training in digital skills (both accounting for 4.5%). Most of the teachers surveyed, specifically 88.4%, clarify that they would like to receive training in ICT tools to integrate them into their current teaching methodology.

These findings seem to contradict the actual training which is offered by schools and is supported by the Regional Ministry of Education. Indeed, 70.7% of the survey participants assure this fact, and 61.9% of the answers confirm that they make use of that training. Moreover, 58.1% of the participants affirm that the school where they work offers enough learning materials for them to learn and acquire digital competence. Besides, apart from the training offered, 90.7% of the teachers surveyed admit that they search for ICT training resources or online tutorials on their own to improve their digital competence and to gain professional development.

Results also reflect that 69.8% of the educational centres have an ICT coordinator who helps teachers master ICT use or solve technical issues when needed.

<sup>35</sup> Sei-Hwa Jung, The use of ICT in learning English as an international language. Doctoral dissertation, University of Maryland, College Park, the USA. Retrieved April 20, 2019 from <http://drum.lib.umd.edu/handle/1903/3885>. 2006.

<sup>36</sup> Margaret Niess, Guiding preservice teachers in TPCK...

<sup>37</sup> Ana Belén Sánchez; Juan-José Mena; María González and He Guan Lin, "In service teachers' attitudes towards the use of ICT in the classroom", *Procedia-Social and Behavioral Sciences*, num 46 (2012): 1358-1364.

<sup>38</sup> Milan Klement; J Jiří Dostál and Květoslav Bártek, Perception and Possibilities of ICT...

The presence of an ICT coordinator generally makes teachers feel more relaxed due to their availability and willingness to help them when they have any technical issues in their classes.

Moreover, it has also been found that most of the schools in Spain facilitate group learning and the exchange of resources among educators, accounting for 65.1% of the answers. When teachers exchange resources and experiences, the possibility of implementing ICT in their methodology increases. On the other hand, although it is generally believed that the integration of ICT tools in the classroom may overwhelm teachers due to different factors, such as lack of previous preparation, only 26.3% of the participants of the survey affirm to be overwhelmed by their implementation in the class.

Concerning the digital resources used in the language class by Spanish teachers, some of the latest and trendiest technologies were mentioned in the survey, such as *Kahoot*, *Genially*, *Canva*, *Quizlet*, *Class Dojo*, *Voki*, *Symbaloo*, *Snappet*, etc. Moreover, due to the suspension of lessons during the SARS-CoV-2 pandemic this year, teachers have had to find new ways of continuing their lessons, and digital tools such as *Google Classroom*, *Meet*, *Zoom* and *Google Forms* were also included in the list.

As regards frequency of use, 53.5% of the teachers who participated in the survey claim to use ICT tools every day, 14% use them 3 times a week, 9.3% use them twice a week and 11.6% just use them once a week in both their lessons and their didactic practices set as homework. The participants also affirm to use them more often in listening activities, followed by speaking, reading and writing. Besides, they use ICT tools to evaluate the learning process of the students, which is becoming more computerized nowadays.

Regarding the improvement of the student's academic performance by using ICT tools, it has been found that a large majority of teachers surveyed agree and believe that ICT tools are a proper resource to achieve that goal. Actually, most of them agree with the fact that students are more motivated when using ICT tools in class and this is reflected in their learning progress. This view correlates with the teachers' own satisfaction they claim to have when incorporating them in class. In fact, 81% of the participants feel that the use of ICT improves their motivation as teachers, although 19% do not feel motivated by their use. Finally, it was found that 93% of the teachers surveyed believe they have a positive attitude towards the integration of ICT in the teaching and learning process, which is in accordance with the findings above presented.

## Conclusions

The aim of this paper was to study the attitudes of Spanish teachers working at Secondary Stage concerning the use of ICT tools in their English lessons. To that end, a survey-based research has been conducted. The overall results of the survey have been positive, showing that most of the teachers who participated in the survey implement ICT tools in their classes of English.

The motivational attitude of EFL teachers is key for ICT implementation. If teachers do not feel driven by the use of ICT tools, they may transmit that feeling to the students and end up opting for more traditional resources, such as the textbook.

Although schools directed by the Regional Ministry of Education are offering training courses in digital competence, teachers still perceive the need to receive more training, even

though they can self-direct their learning on the web. Moreover, collaboration and exchange of experiences among the teaching staff members is essential to succeed in ICT implementation. Some teachers admit that they feel afraid of incorporating ICT in their classes of English. In this case, observing and hearing real testimonies from other colleges can reassure them and serve as a boost for their future implementation.

Although our study incorporates teachers working at Secondary Stage, further research is needed so as to compare their views and trends regarding ICT implementation in the EFL class with the ones claimed by teachers working at Primary or higher levels, such as University professors. The results of our study would surely reflect distinct trends if comparing the very same teachers' views after concluding the following academic year with the ones held the previous course. Then, a longitudinal study would be interesting as a vibrant continuation of the present research.

To conclude, the SARS-CoV-2 pandemic in Spain will definitely encourage instructors who are currently reluctant to incorporate ICT tools in their EFL classes. The new times we are living have made a definite U-turn in our society, thus making ICT tools the best (and sometimes only) way to continue with the teaching-learning process. Hence, the incorporation of ICT in the language class must not only be an option to promote effective learning and motivation amongst students, but a need for the current educational landscape.

## References

Area, Manuel. "Innovación pedagógica con TIC y el desarrollo de las competencias informacionales y digitales". *Revista Investigación en la Escuela*, Vol: 64 (2008): 5-18.

Bax, Stephen. "CALL-past, present and future". *System*, Vol: 31 (2003): 13-28.

Bilyalova, Albina. "ICT in teaching a foreign language in high school". *Procedia. Social and Behavioral Sciences*, Vol. 237 (2017): 175-181. DOI: 10.1016/j.sbspro.2017.02.060.

Fernández, José María and Bermejo Blas. "Actitudes docentes hacia las TIC en centros de buenas prácticas educativas con orientación inclusiva. Universidad de Sevilla". *Enseñanza & Teaching* (2012): 45-61. Retrieved from <https://idus.us.es/bitstream/handle/11441/49099/Actitudes%20docentes%20hacia%20las%20TIC%20en%20centros%20de%20buenas%20practicas%20educativas%20con%20orientacion%20inclusiva.pdf?sequence=1&isAllowed=y>.

Garrido, Elisa and Ortega, José Luis. "The implementacion of ICT in the English class in Andalucía". *Revista Curriculum* (2014).

Gilakjani, Abbas and Leong, Lai-Mei. "EFL Teachers' Attitudes toward Using Computer Technology in English Language Teaching". *Theory & Practice in Language Studies*, Vol: 2 No. 3 (2012).

Herrtwich, Ralf. "Network and Operating System Support for Digital Audio and Video". 2nd International Workshop. Berlin: Springer. 2012.

Johnson, Donna. *Using computers to promote development of English as a second language*. New York: Carnegie Corporation. 2005.

Jung, Sei-Hwa. The use of ICT in learning English as an international language. Doctoral dissertation, University of Maryland, College Park, the USA. Retrieved April 20, 2019 from <http://drum.lib.umd.edu/handle/1903/3885>. 2006.

Klement, Milan, Dostál, J Jiří and Bártek, Květoslav. Perception and Possibilities of ICT Tools in the Education from the Teachers' Perspective. Olomouc: Palacký University. DOI: 10.5507/pdf.17.244500933. 2017.

Llorens, Ariadna. Propuesta metodológica para la determinación y el aprendizaje de las competencias genéricas clave del/la ingeniero/a tic y percepción diferencial del mercado entre el grado y el postgrado o máster. Universitat Politècnica de Catalunya. Departament d'Organització d'Empreses. 2012.

Low, Colin. "A defense of moderate inclusion and the end of ideology". In: R. Cigman (Ed.), *Included or Excluded?* Londres: Routledge. 2007.

Mishra, Punya and Koehler, Mathew. "Technological Pedagogical Content Knowledge: A new framework for teacher knowledge". *Teachers College Record* Vol: 108 num 6 (2006): 1017-1054.

Morrissey, Jerome. El uso de TIC en la enseñanza y el aprendizaje. Cuestiones y desafíos. In: Magadán Cecilia y Valeria Kelly [Compilers]. Retrieved from: <http://coleccion.educ.ar/coleccion/CD30/contenido/pdf/morrissey.pdf>. 2007.

Murray, Denise. "Creating a technology-rich English language learning environment". *International Handbook of English Language Learning*, Vol: 15 num 1 (2007): 747-762. Newbury Park, CA: SAGE. DOI: 10.1007/978-0-387-46301-8\_49.

Nadolskaja, Ju. "Multimedia training programs as a means of activization of educational activity of students at studying of German language as a second language". *Educational Technology & Society*, Vol: 17 num 1 (2014): 347–358. Retrieved from: <http://ifets.ieee.org/russian/periodical/journal.html>.

Niess, Margaret. Guiding preservice teachers in TPCK. In: AACTE Committee on Innovation and Technology (ed.), *Handbook of Technological Pedagogical Content Knowledge (TPCK) for Educators*. New York: Routledge. 2008. 223-250.

Oliva, Alfredo, Hidalgo, M<sup>a</sup> Victoria, Moreno, Carmen, Jiménez, Lucía, Jiménez, Antonia, Antolín, Lucía and RAMOS, Pilar. *Uso y riesgo de adicciones y nuevas tecnologías entre adolescentes y jóvenes andaluces*. Sevilla: Aguaclara Editorial. 2012.

Ottenbreit-Leftwich, Anne, Glazewski, Krista, Newby, Timothy and Ertmer, Peggy. "Teacher value beliefs associated with using technology: addressing professional and student needs". *Computers & Education*, Vol: 55 (2010): 1321-1335. DOI: 10.1016/j.compedu.2010.06.002.

Panzavolta, Silvia and Laici, Chiara. *EAI Endorsed Transactions*. DOI:10.4108/eai.26-7-2017.152907. 2017.

Polly, Drew, MIMS, Clif, Shepherd, Craig and Inan, Fethi. "Evidence of impact: Transforming teacher education with preparing tomorrow's teachers to teach with technology". *Teaching and Teacher Education: An International Journal of Research and Studies*, Vol: 26 num 4 (2010): 863-870.

Royal Decree 1105/2014, of 26th December, which establishes the basic curriculum of Compulsory Secondary Education and Bachillerato. Boletín Oficial del Estado 3, January 3, 2015.

Sánchez, Ana Belén, Mena, Juan-José, González, María and GuanLin, He. "In service teachers' attitudes towards the use of ICT in the classroom". *Procedia-Social and Behavioral Sciences*, num 46 (2012): 1358-1364.

Teo, Timothy. "Pre-service teachers' attitudes towards computer use: A Singapore survey". *Australasian Journal of Educational Technology*, Vol: 24 num 4 (2008). <https://doi.org/10.14742/ajet.1201>.

Tondeur, Jo, Van Braak, Johan, Sang, Guoyuan, Voogt, Joke, Fisser, Petra and Ottenbreit-Leftwich, Anne. "Preparing preservice teachers to integrate technology in education: a synthesis of qualitative evidence". *Computers & Education*, Vol: 59 2012): 134-144.

Valverde, Jesús, Garrido, M<sup>a</sup> del Carmen, Fernández, Rosa. "Enseñar y aprender con tecnologías: un modelo teórico para las buenas prácticas con TIC". *Revista de Teoría de la Educación Sociedad de la Información*, Vol: 11 num 3 (2010): 203-229. Retrieved from [http://revistatesi.usal.es/~revistas\\_trabajo/index.php/revistatesi/article/view/5840/5866](http://revistatesi.usal.es/~revistas_trabajo/index.php/revistatesi/article/view/5840/5866).

Wheeler, Steve. "Information and communication technologies and the changing role of the teacher". *Journal of Educational Media*, Vol: 26 num 1 (2001): 7-17. DOI: 10.1080/1358165010260102.

Wulansari Sisca, Rohadi Dede and Qonaatun Aa. "Implementation of ICT in Teaching and Learning English". *Proceedings of the 1st International Multidisciplinary Conference on Education, Technology, and Engineering*, (2020): 204–207. <https://doi.org/10.2991/assehr.k.200303.048>.

**REVISTA**  
**INCLUSIONES** M.R.  
REVISTA DE HUMANIDADES  
Y CIENCIAS SOCIALES

**CUADERNOS DE SOFÍA**  
**EDITORIAL**

Las opiniones, análisis y conclusiones del autor son de su responsabilidad y no necesariamente reflejan el pensamiento de la **Revista Inclusiones**.

La reproducción parcial y/o total de este artículo debe hacerse con permiso de **Revista Inclusiones**.