MENDIVE
REVISTA DE EDUCACIÓN

Translated from the original in Spanish

Digital competencies of university teaching as an urgent challenge

Competencias digitales de la docencia universitaria como desafío urgente

Competências digitais no ensino universitário como um desafio urgente

Aydee Rivera de Parada

Licenciada en Ciencias de la Educación. Dra. en Ciencias Sociales. Directora de Investigación de la Universidad Evangélica de El Salvador.
ORCID: https://orcid.org/0000-0002-1846-7157
Correo electrónico:
aydee.parada@uees.edu.sv;
aydee.rivera@gmail.com

The crisis generated by the pandemic of COVID-19 is given the opportunity to innovate ways of teaching and learning in education. At the beginning of 2020, no one imagined that the outbreak located in the city of Wuhan in China, in December 2019, was going to change the way of life of humanity. Since March the same year, when WHO declared Europe as the epicenter of the pandemic, it initiated various periods of quarantine that interrupt socio - economic activity of the country, a situation that was expanding to Latin America. With this, academic activities were also closed to avoid crowds of people and thus prevent infections.

In this emergency situation, educational institutions are forced to reorganize academic face to face activity thereby the challenges of digital skills form largely of teachers are sharpened. With regard to the students, the challenge was shown more with the availability of technological resources such as computers, tablets, mobile devices and internet access. Among the lessons that the crisis is leaving, I want to refer to digital competences as a mandatory and urgent factor for education.

The aforementioned competences have been considered as learning tools for some decades and have been slowly being implemented in educational institutions; however, the acceleration caused by the pandemic is unmatched. In a sudden jump, most of the institutions went from four walls classrooms to the virtual ones, and others, from a synchronous communication to an asynchronous one, such as it was possible, through messages, audios and videos, among other shapes. Teachers had to acquire technological devices and the educational systems of the countries were forced to implement strategies to develop emergency digital skills in teachers.

From this perspective, I think it is necessary to highlight some important background on the digital skills, and strategies for teaching and learning, as it has been promoted and criticized previously in Latin America and the Caribbean.

In a comparative study of teaching effectiveness between Mexico and the United States, which sought to explore through teaching evaluation

questionnaires answered by students in a Mexican institution of higher education, the variables were used: age, gender, years of experience, seniority, academic category, type of contract, academic degree, main area of activity and area of †knowledge where the teachers taught. It was found that teaching performance is not related or does not present consistent patterns with age, experience, or the seniority of the teachers (Garcia, 2003).

Paredes-Labra, J. (2011) reports the results of a study in relation to the knowledge of teachers about the use of Information and Communication Technologies (ICT) in teaching in Mexico. It was detected statistical difference by gender; in it, women are the ones who have the most knowledge about it. It was also found the surprising fact that the youngest teachers, under 30 years of age, and the oldest, over 50, are the least aware of how ICT is used in teaching.

However, technical knowledge about the use of computer tools is not enough for teachers to integrate technologies into teaching, but rather it is a process in which other factors such as computer literacy and use of computer systems and use of learning management system.

According to the Paredes-Labra study, regarding the promotion that teachers make of the use of ICT among students, 63.4 % of those surveyed motivate them to consult bibliographic databases and the Internet. 66.6 % of teachers promote the preparation of reports, reports and other activities through the use of the computer. A very low percentage, 18.3 %, promotes collaborative work between them, one of the most advantageous aspects offered by ICT.

Another aspect that was investigated was the use that teachers make of virtual platforms for self-focused learning;

taking into account that it is the basis for the integration of technologies into teaching. In this aspect, it was found that they have used the System Learning Management (LMS) for training reach s or at 52.7 % while the platform is Moodle better use with 38.7 %. The result shows that a significant fraction of teachers do not have experience in using the LMS system, which makes it difficult for them to know its advantages and applications, which is, after all, one of the most important aspects to generate the necessary confidence in the integration of these technologies to teaching.

Although the effectiveness of the teacher is not necessarily related to age, sex or experience, when we enter the need for teacher training in the pedagogical use of technology, differences are already being found.

In a study conducted with university teachers Salvadorans, 79.2 % it is given much importance to learning in the domain of digital platforms, but only 50 % say they have control of them (Rivera Parada, A. 2016).

In connection with the use of technologies for learning and research, a study on the use of the Smartphone in flexible forms of education systematized experience in three schools, although mobile devices for many teachers represent a distraction in class; on the contrary, " ... in this case the incorporation of a paradigm shift in the use of the mobile device as a teaching tool is illustrated, making the student obtain long-term knowledge and making him the protagonist of his teaching-learning process" (Manzanares and Rivera, 2018).

In the implementation of a pilot course with secondary education teachers in El Salvador, it was found that the Seminar subject that is developed in this education to finalize the training process does not currently have a

didactic or pedagogical structure that allows monitoring the student learning from an institutional perspective.

It was administered a pre test -pos test, and we investigated, descriptively, the efficiency of this method of teaching and learning in achieving the proposed competences, which was supplemented with qualitative approximation to access experiences and knowledge not measured in the test. The themes developed were: search of information, technology domain, methodology domain and communication of results. According to Rivera, Campos Navarrete and others (2018), the need to seek information with the use of information technologies and, therefore, the technological domain is emphasized; it is a Rega mastery of the English language is added while in most of the public scientific publications this language predominates.

In a recent survey of the year 2020 (not published), teachers state that, due to the Salvadorian and world reality with the change of educational modality from face-to-face to virtual, it is necessary to train in the use of E- learning tools to stay active in the teaching exercise.

In short, roughly half of teachers will need digital upgrade and, thereby, the integration of educational planning, digital evaluation, communication virtual effective and the English language with universal language of science.

Finally, I make a call for reflection to take advantage of the challenge presented by the pandemic and consider not only updating digital skills in teachers, but also that educational institutions make their educational models more relevant, where self-management of learning and ubiquitous learning are key elements. It is not important to think about returning to the new normality "the known plus pandemic and its effects", but to imagine to create a "new reality" with more relevance and humanism, where educational systems respond to current and future needs.

BIBLIOGRAPHIC REFERENCES

Base de datos sobre el diagnóstico en la investigación realizado a los docentes (2020). Consultas a docentes sobre conocimientos de Metodologías de Investigación. Disponible en: https://docs.google.com/spreadsheets/d/1mn9KZw1D9BRx91LNnikzN7mYuGPzGK5DAlnrpH0FPAA/edit?usp=sharing

García Garduño, J.M. (2003). Profesores universitarios y su efectividad docente. Un estudio comparativo entre México y Estados Unidos. *Revista Perfiles Educativos*, XXV(100), 42-55 Instituto de Investigaciones sobre la Universidad y la Educación. Distrito Federal, México. Disponible en: http://www.redalyc.org/articulo.oa?id=13210004. Fecha de acceso: 19 feb. 2016.

Manzanares, C.L.; Rivera de Parada, A.; Pérez Majano, W.A. (2017). *La innovación y los dispositivos móviles en modalidades flexibles de educación del sector público en El Salvador*. Libro impreso publicado por Ministerio de Educación MINED-2017, El Salvador Centro América.

Organización Mundial de la Salud. (2020). Brote de enfermedad por coronavirus (Covid-19). https://www.who.int/es/emergencies/diseases/novel-coronavirus-2019?gclid=Cj0KCQjwv7L6BRDxARIsAGj-

34rjroW_oNLndvy3FOWKSov8Wl
-I90u9iyej8BmZGLE1SnIsOU-
8Bn0aAn_OEALw_wcB#

Paredes-Labra, J. (2011). Transformar la enseñanza universitaria con la formación mediante la creatividad. Una investigación-acción con apoyo de las TIC. *Revista Iberoamericana de Educación Superior*, 2(5) 2011. Disponible en https://ries.universia.net/article/view/65/250

Rivera de Parada, A. (2016). Competencias del docente universitario. Desafíos para las universidades privadas de El Salvador. *Ciencia, Cultura y Sociedad*, 3(1), 33-44. https://doi.org/10.5377/ccs.v3i1.2960

Rivera de Parada, A., Campos Morán, S., Navarrete, P.M., Zelidón, A. M., Mejía Dietrich, R., García, F.,

Reynado, M.G. (2018). *Evaluación de la formación en investigación educativa en el desarrollo de competencias investigativas en docentes de educación media*. Libro impreso publicado por Ministerio de Educación MINED-2018, El Salvador Centro América.

Conflict of interest:

Authors declare not to have any conflict of interest.

Authors´ Contribution:

Authors participated in the writting process of this article and in the analysis of documents.

Translated from the original in Spanish