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Case Report

Implementation of Simbaloo in the Career of Engineering in Business Management (IGE), Case Study: University Students

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Abstract: In this research project entitled "Management and development of simbaloo, implemented in the career of Engineering in Business Management (IGE), case study: University Students" seeks to manage a virtual environment of resources through simbaloo a brand digital pages where Students and teachers have access to resources at the end of their subjects, such as the Business Management Engineering career. Likewise, thanks to the use of this technological tool, time was saved organizing websites, and the availability of resources that favor the teaching-learning process.

Keywords: Digital organizer, student, teacher, virtual environment.

INTRODUCTION

Today the use of Information and Communication Technologies (ICT) seek to make the teaching-learning process more efficient, that is why the uses of various technological tools have become part of the student and teacher environment.

On the other hand, the use of ICT seeks "practicality" to be able to carry out activities in a more dynamic and efficient way. Although it is true, as a result of the pandemic, as a teacher, various resources have been sought to facilitate the teaching-learning process.

Consequently, technological development and new forms of communication force university institutions to rethink educational practice. Digital information and communication technologies are having an increasing weight in university educational processes, demanding the configuration of new spaces and learning environments, as well as new functions and professional roles in the teaching staff (García-Valcárcel, 2017).

In addition, the technological and scientific advances that have contributed to accelerate knowledge in the masses allow the dissemination of a wealth of information with greater ease and speed, which is why it is necessary to use them in this universalization process where the student becomes their own guide of learning, being the bibliography, videos, software, information networks, communication networks, among others, direct complements that facilitate and consolidate knowledge in students (La Cruz y Casariego, 2007).

From this premise, ICTs are tools that help students to access various knowledge resources; to collaborate and share with your colleagues; to solve problems using different epistemological tools; to develop learning communities made up of other students, teachers and experts, and to participate in groups of discussion or debates (UNESCO, 2004).

The development of technology impacts in such a way the ways of life of society, and, therefore, it also affects education, which cannot be left out. Especially considering that new forms of

communication have been created, new ways of accessing and producing knowledge (Cooperberg, 2002).

The objectives of the present investigation are shown below.

GENERAL OBJECTIVE

- Implement simbaloo in the matter of Production Management.

Specific goal

- Identify the subjects of the IGE career.
- Select resources for the teaching-learning environment.
- Design a learning itinerary for the IGE career.
- Implement Simbaloo in the IGE career.
- Know the satisfaction of the users who used symbaloo.

JUSTIFICATION

The implementation of simbaloo in the field of Production Management, belonging to the Engineering in Business Management (IGE) career, seeks to organize and share educational resources, to easily manage and share content related to the subject, optimizing time and paper. On the other hand, it is a personalized tool that will guide learning with a compilation of classified and updateable content such as administration, finance, costs, production, quality and research.

The benefits of using simbaloo are the following:

- It is an Online desktop that can be accessed from any computer.
- Updated web news can be viewed.
- Organize all the resources that are most used in your environment.
- The resources to be used are standardized.
- Facilitates the search for resources.

For the research method, it is broken down as follows:
Participants: Students of the subject "Production Management.
The type of research is mixed since qualitative and quantitative research is used.

DEVELOPING

Likewise, for research development, Symbaloo was implemented which was adapted to the subject of "Production management". On the other hand, a stratification of the resources of the subject was made to organize and categorize links referring to the subject, such as:

- Production Management.
- Productivity.
- Supply chain.
- Continuous improvement.
- Lean manufacturing.
- Distribution plant.

The Production Management subject tab is shown below:

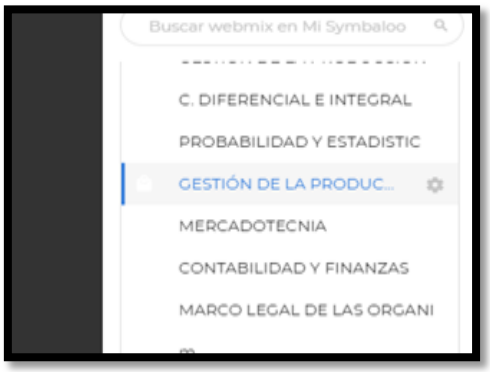

Figure 1: Resource stratification of the subject Production management
Source: Own elaboration (2021)

On the other hand, the distribution of the resources of the production management subject is shown below:

Figure 2: Resource stratification of the subject Production management
Source: Own elaboration (2021)

This section shows the diversification of topics towards the end of the subject, which allows to have a broader panorama of the subject to strengthen the teaching-learning process.

On the other hand, the resources are shown as research portals, so that students can investigate from reliable sources as shown below:

Figure 3: Resource stratification
Source: Own elaboration (2021)

Likewise, a validated instrument with a Cronbach's alpha of 0.89 was adopted and implemented, which is acceptable to measure the informational competence of symbaloo (De Vellis, 2012).

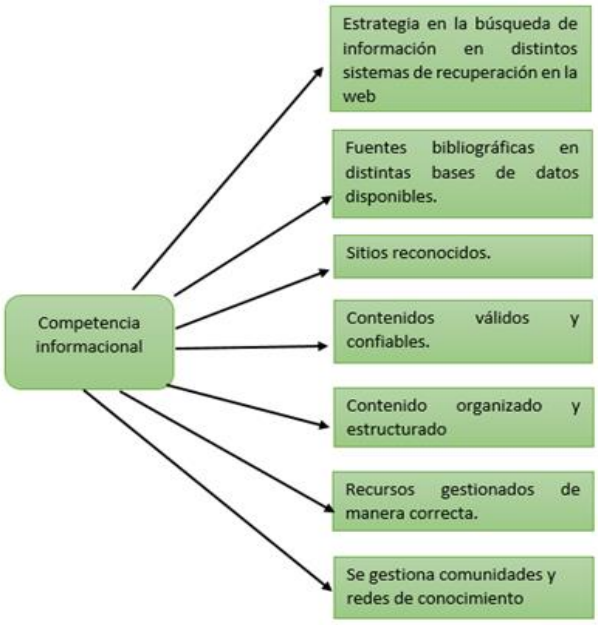

Figure 4: Informational competence instrument.
Source: Beltrán, Ramírez y García (2017)

This instrument allowed to know if the tool is really efficient and functional, which guarantees a management of resources for its teaching-learning process, likewise this facilitates the student to identify reliable resources for their training and therefore to the inclusion of the era digital.

In the global era of digitized information, access to knowledge is relatively easy, immediate, ubiquitous and inexpensive. One can access the required information on the network, the corresponding debate, follow the line of inquiry that seems appropriate without the control of someone called a teacher and if they feel like they can form or participate in multiple networks of people and groups that share interests, information, projects and activities, without time, institutional or geographical limitations (Revista Electrónica de Educación, 2013).

On the other hand, it is important to note that from the moment the Internet became part of our lives at all levels, we tend to notice in each analysis carried out that socio-educational changes go faster than the assimilation of what they cause in people or institutions (Torres y Herrero, 2016). That is why, as an institution, students are expected to standardize their learning processes through a learning management tool.

This means profoundly modifying the vision that the teacher has of the organization of his class, where perhaps the most difficult thing is to abandon certain rituals that schooling has established in the classroom environment, such as: always concentrating attention on one subject; control everything the students do in the classroom, work on the topics in a pre-established order (Díaz, 2013).

The inclusion of ICT and Web 2.0 functionalities in the classroom has come to change the way of learning and teaching. In addition, current teachers must adapt to the needs of students, who are increasingly immersed in technological resources, which is why there is a need to integrate and update these concepts in teaching and make use of these technologies (Inzunza, Osuna, Arce, Cruz y González, (2019).

Implementing a Personal Learning Environment (PLE) as a pedagogical strategy requires a planned and contextualized dynamic, in order to motivate the student towards the achievement of learning purposes to explore the influence of the characteristics to manage resources, interact and collaborate in personal learning environments in metacognitive skills associated with digital writing in secondary education (Calle y Sánchez, 2017).

On the other hand, it is segmented as follows:

Table 1: Segmentation of the survey

Segmentación:
Edad
Genero
Semestre
Materia

Source: Own elaboration (2021)

The previous table shows the segmentation of the implementation of the survey, to the Engineering students in Business Management, where it is represented by age, gender, semester and subject.

Consequently, the google forms tool was used.

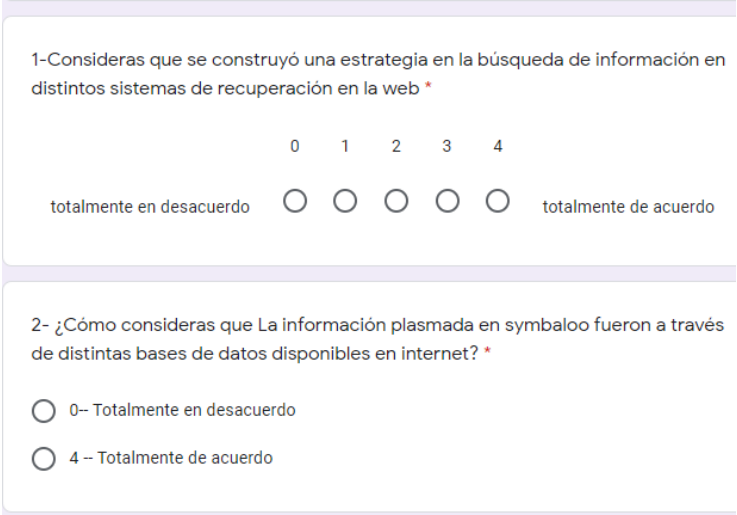

Figure 5: Question 1 and 2 "satisfaction survey"
Source: Own elaboration (2021)

In questions 1 and 2 it focuses on the resources to be used and the information captured from the resources in symbaloo.

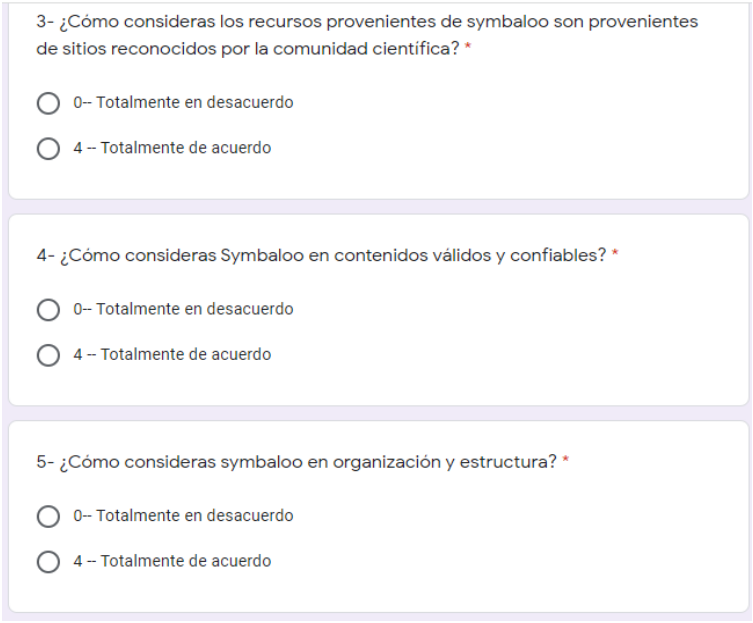

Figure 6: Question 3, 4 and 5 "satisfaction survey"
Source: Own elaboration (2021)

The previous questions show recognized, reliable, valid, organized and structured sites. Which facilitates the collection of information to be able to know the satisfaction of the students, through the use of symbaloo.

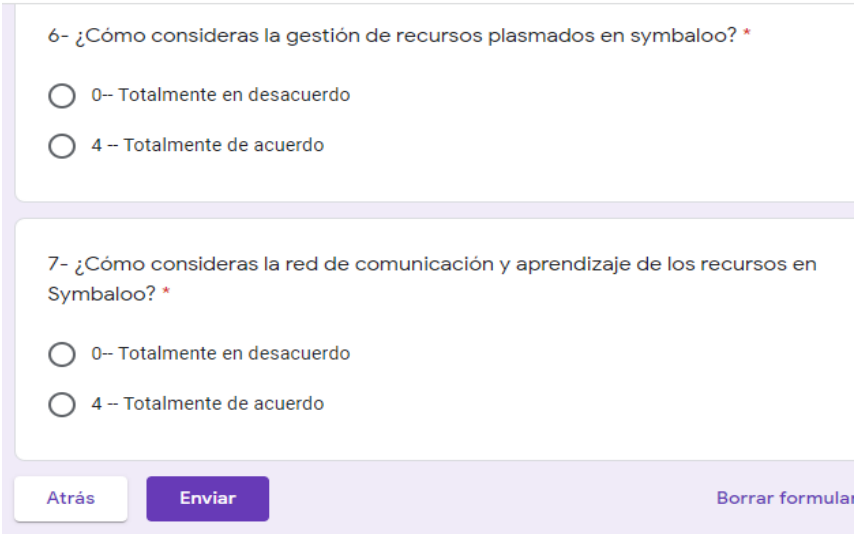

Figure 6: Question 6 and 7 "satisfaction survey"
Source: Own elaboration (2021)

Meanwhile for questions 6 and 7, they are focused on the management of the resources reflected and the benefit of using symbaloo in their teaching-learning process.

The use of novel instruments (online forms) with direct access through mobile devices gives students a very positive image of innovation and current status in official university studies (García, 2018).

On the other hand, thanks to the implementation of the aforementioned satisfaction survey, it allowed to know if it fulfilled the objective of knowing the satisfaction of the users who used the digital paginas brand, which favors the management of the resources used by the students.

A PLE is a personal learning environment which implies an innovation in education in favor of student-centered learning, that is, in the management of learning. This allows the student to take control and manage their own learning, taking into account their needs for continuous improvement (Marín, Negre y Pérez, 2014).

Therefore, Symbaloo is considered as a PLE offers a personalized learning experience, considering the needs and preferences of the student with a variety of tools that will be used in a convenient way; opportunities for formal, informal and continuous learning centered on the Student (Ampudia y Trinidad, 2012).

DISCUSSION AND ANALYSIS OF RESULTS

Coming to the culmination of this research article, the following results were obtained:

Segmentation based on age lies 90% in students aged 20-25, while 10% oscillates between 26-30 years of age.

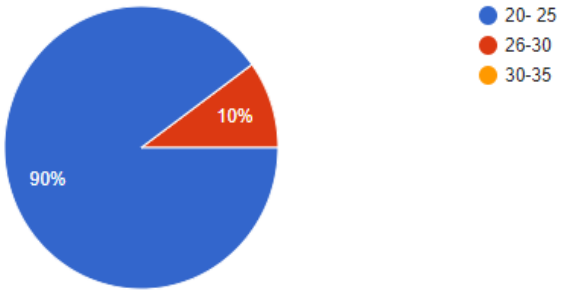

Figure 7: "Age" factor in the implementation of the survey
Source: Own elaboration (2021)

For the following graph, gender was determined, where out of 100% 60% of the respondents are women, while 40% are men as shown below:

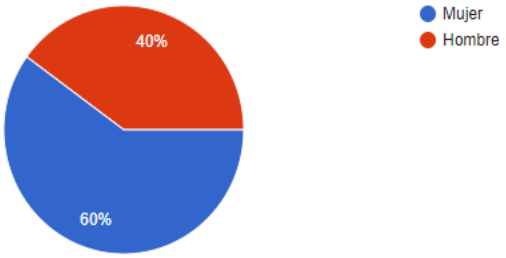

Figure 8: "Gender" factor.
Source: Own elaboration (2021)

The scale used in the questions were the following:
Scale:
0 - Strongly disagree
1 - Disagree
2 - Slightly agree
3 - Possibly agree
4 - Totally agree

For question 1. How do you consider that a strategy was built in the search for information in different retrieval systems on the web?

17.5% of those surveyed say they slightly disagree, while 30% say they possibly agree, and finally 52.5% totally agree.

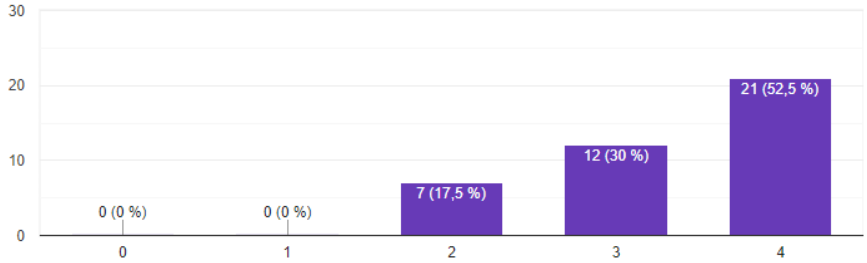

Figure 8: Information search strategy
Source: Own elaboration (2021)

For question 2. How do you consider that the information captured in symbaloo was through different databases available on the internet?

Of which 7.5% say they totally disagree, while 92.5% say they totally agree with the information contained in symbaloo from different internet bases as shown below:

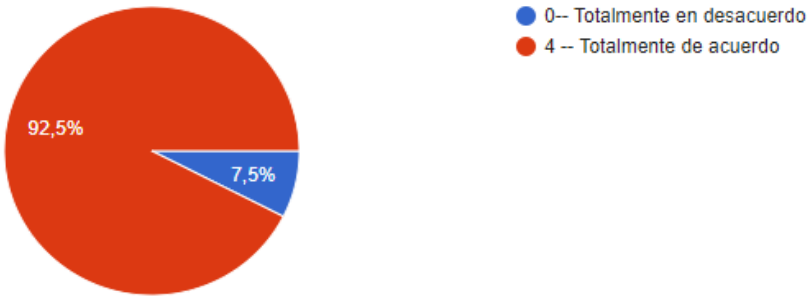

Figure 9: Information used from different internet databases
Source: Own elaboration (2021)

For question 3- How do you consider the resources coming from symbaloo as sites recognized by the scientific community?

10% say they disagree, while 90% say they fully agree as shown below:

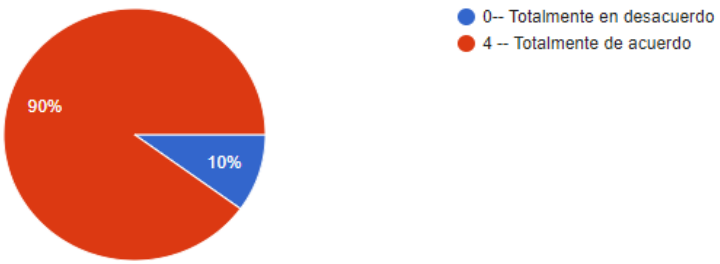

Figure 10: Resources from symbaloo
Source: Own elaboration (2021)

For question 4. How do you consider Symbaloo in valid and reliable content?

15% of respondents say that they disagree, while 85% say that they fully agree, which implies a

majority was to their liking the content is good and reliable as shown in the following graph:

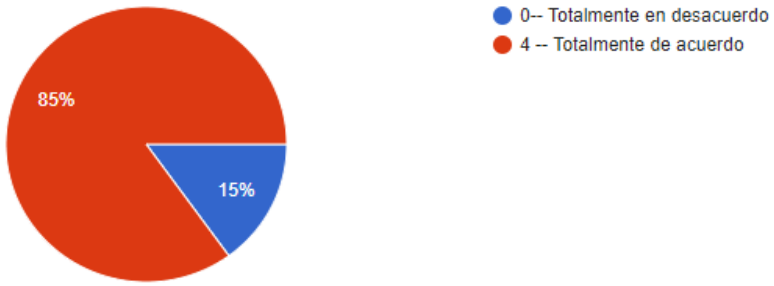

Figure 11: Valid and reliable content
Source: Own elaboration (2021)

For question 5. How do you consider symbaloo in organization and structure?

10% say that they disagree with the organization of the content, while 90% say that they fully agree with the content as shown in the following graph:

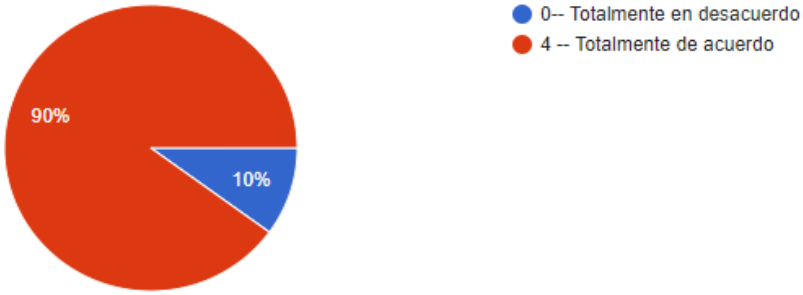

Figure 12: Organization and structure
Source: Own elaboration (2021)

For question 6- How do you consider the management of resources reflected in symbaloo?

10% of the respondents consider that there was not a good management of the resources, for this reason they totally disagree, while 90% of the respondents say that they totally agree on the organization and structure of the resources.

For question 7. How do you consider the communication and learning network of the resources in Symbaloo?

7.5% of those surveyed consider that it is not a communication and learning network with this tool, while 92.5% say that, if it is, that is, they totally agree.

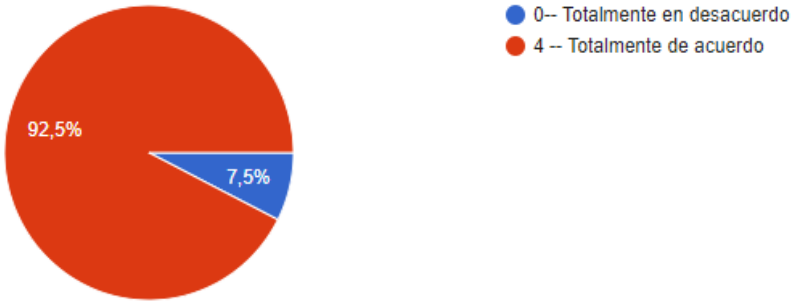

Figure 13: Communication and learning network
Source: Own elaboration (2021)

On the other hand, to have accuracy in the implementation of the instrument, which is the satisfaction survey, the validation of Cronbach's alpha values between 0.70 and 0.90 indicate good internal consistency (Celina y Campo, 2005).

Next, the cronbach's alpha of the instrument "satisfaction with the use of symbaloo" is shown, which indicates that if it is greater than .70 it is acceptable, therefore it is evident that for the implementation it was reliable.

Table 2: Cronbach's alpha

Estadísticas de fiabilidad	
Alfa de Cronbach	N de elementos
.747	7

Source: Own elaboration (2021)

CONCLUSIONS

Thanks to the implementation of symbaloo, it is concluded that this tool was accepted by the students of Engineering in Business Management. This indicates that it is really a resource management tool for your learning environment, in addition to having very well structured and segmented resources that add to your academic training, it allows you to manage your own PLE, using a simple and intuitive interface as well mentioned by Calles (2015).

BIBLIOGRAPHY

- Ampudia Rueda, V., & Trinidad Delgado, L. H. (2012). Entornos Personales de Aprendizaje: ¿final o futuro de los EVA? *Rencuentro*, (63), 32-39. Recuperado a partir de: https://www.redalyc.org/articulo.oa?id=34023237005
- Beltrán Sánchez, J. A., Ramírez Armenta, M. O., & García López, R. I. (2017). Propiedades métricas de un instrumento de autoreporte para medir la competencia informacional de maestros de primaria. Píxel-bit. *Revista de Medios y Educación,* (50), 147-158. Recuperado a partir de: https://www.redalyc.org/articulo.oa?id=36849882010
- Calles Burgos, M. M. (2015). Symbaloo como puerta de acceso a las tecnologías de la información y la comunicación en la enseñanza de álgebra. Espiral. *Cuadernos del Profesorado, 8*(17), 35-45. Recuperado a partir de: http://www.cepcuevasolula.es/espiral
- Calle-Álvarez, G. Y., & Sánchez-Castro, J. A. (2017). Influencia de los entornos personales de aprendizaje en las habilidades metacognitivas asociadas a la escritura digital. *Entramado, 13*(1), 128–146. Recuperado a partir de: https://doi.org/10.18041/entramado.2017v13n1.25141
- Celina Oviedo, H., & Campo Arias, A. (2005). Aproximación al uso del coeficiente alfa de Cronbach. *Revista Colombiana de Psiquiatría, 34*(4), 572-580. Recuperado a partir de: http://www.scielo.org.co/pdf/rcp/v34n4/v34n4a09.pdf
- Cooperberg, A. F. (2002). Las herramientas que facilitan la comunicación y el proceso de enseñanza-aprendizaje en los entornos de educación a distancia. *RED. Revista de Educación a Distancia*, (3). Recuperado a partir de: https://www.redalyc.org/articulo.oa?id=54700302
- De Vellis, R. (2012). Scale development. Theory and applications (3rd ed.). Thousand Oaks, California: SAGE.
- Díaz-Barriga, Á. (2013). TIC en el trabajo del aula. Impacto en la planeación didáctica. *Revista Iberoamericana de Educación Superior, 4*(10),3-21. Recuperado a partir de: https://www.redalyc.org/articulo.oa?id=299128588003
- García Tormo, F. V. (2018). Aplicación de tics (formularios on-line) como metodología docente activa en estudios de postgrado. *International Journal of Developmental and Educational Psychology, 1*(3), 10-11. Recuperado a partir de: https://www.redalyc.org/journal/3498/349856428020/349856428020.pdf
- García-Valcárcel Muñoz-Repiso, A. (2007). Herramientas tecnológicas para mejorar la docencia universitaria. una reflexión desde la experiencia y la investigación. *RIED. Revista Iberoamericana de Educación a Distancia, 10*(2), 125-148. Recuperado a partir de: https://www.redalyc.org/articulo.oa?id=331427207006
- Inzunza Ruíz, D., Osuna Martínez, I., Arce Bojórquez, B., Cruz Reyes, P. I., & González García, L. A. (2019). Recursos didácticos digitales para el aprendizaje en áreas de la salud / Digital didactic resources for learning in health areas. *Revista Electrónica Sobre Tecnología, Educación Y Sociedad, 5*(9). Recuperado a partir de https://www.ctes.org.mx/index.php/ctes/article/view/710
- La Cruz, W., & Casariego, E. (2007). Las herramientas tecnológicas en la enseñanza del diseño industrial. *Télématique, 6*(2), 33-44. Recuperado a partir de: https://www.redalyc.org/articulo.oa?id=78460203

- Marín-Juarros, V., Negre-Bennasar, F., & Pérez-Garcias, A. (2014). Entornos y redes personales de aprendizaje (PLE-PLN) para el aprendizaje colaborativo. *Comunicar: Revista Científica de Comunicación y Educación*, *21*(42), 35-43.
- Revista Electrónica de Educación. (2013). La era digital. Nuevos desafíos educativos. *Sinéctica, Revista Electrónica de Educación*, (40), 47-72. [fecha de Consulta 7 de julio de 2021]. Recuperado a partir de: https://www.redalyc.org/articulo.oa?id=99827467010
- Torres-Gordillo, J. J., & Herrero-Vázquez, E. A. (2016). PLE: Entorno personal de aprendizaje vs. Entorno de aprendizaje personalizado. *Revista Española de Orientación y Psicopedagogía*, *27*(3), 26-42.
- UNESCO. (2004). Las Tecnologías de la información y comunicación en la formación docente: Guía de planificación (Trad. F. Trías y E. Ardans). Montevideo: Ediciones Trilce. Recuperado de: http://unesdoc.unesco.org/images/0012/001295/129533s.pdf