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Recurso educativo digital GoConqr en el proceso de enseñanza de la asignatura emprendimiento y gestión

GoConqr digital educational resource in the process of teaching entrepreneurship and management

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Palabras

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Resumen

Introducción: el presente artículo titulado "Recurso Educativo Digital GoCongr en el proceso de enseñanza de la asignatura emprendimiento". Gocongr es una plataforma educativa en línea que ofrece una variedad de herramientas y recursos para mejorar la experiencia de aprendizaje de los estudiantes. Objetivos: determinar la factibilidad de empleo del recurso digital GoCongr en el proceso de enseñanza del área de emprendimiento y gestión en los estudiantes de Primer año de Bachillerato en Ciencias de la unidad educativa José Pedro Varela. Metodología: se aplicó un estudio descriptivo que permitió analizar este recurso educativo, utilizando un enfoque mixto basado en diversas técnicas, como la observación directa y una encuesta a los alumnos para evaluar la factibilidad del recurso digital en mención. Resultados: con base en los métodos mencionados anteriormente, fue posible determinar que la mayoría de los estudiantes de primer año de Bachillerato en la Unidad Educativa del estudio consideró que los recursos tecnológicos son útiles para el proceso de aprendizaje. Además, al utilizar GoCongr, se pudo observar la facilidad de uso de este recurso y cómo puede contribuir a la organización de contenidos, la inclusión de mapas mentales, diapositivas y otros recursos interactivos en la asignatura de emprendimiento y gestión. Conclusiones: se ha evidenciado como GoCongr, es adecuada para el proceso de enseñanza de la asignatura de emprendimiento y gestión, ya que fomenta la colaboración y la interacción entre los estudiantes, presentado características interactivas, innovadoras y de fácil uso, convirtiéndose en una herramienta útil para la gestión del trabajo individual y colectivo, ofreciendo diversos recursos y posibilidades para organizar contenidos, promover el aprendizaje colaborativo y visualizar información de forma distinta. Área de estudio general: Educación. Área de estudio específica: Entornos digitales.

Keywords:ICT, digital educational resources, GoConqr, teaching process

Abstract

Introduction: this article titled "GoConqr Digital Educational Resource in the teaching process of the entrepreneurship subject."
Goconqr is an online educational platform that offers a variety of tools and resources to enhance the learning experience of students.
Objectives: determine the feasibility of using the GoConqr digital resource in the teaching and learning process of the area of entrepreneurship and management in the first year of Bachelor of





Science students of the José Pedro Varela educational unit. Methodology: a descriptive study was applied that allowed us to analyze this educational resource, using a mixed approach based on various techniques, such as direct observation and a survey of students to evaluate the feasibility of the digital resource in question. Results: Based on the methods mentioned above, it was possible to determine that most first-year Baccalaureate students in the Educational Unit of the study considered that technological resources are useful for the learning process. Furthermore, when using GoCongr, it was possible to observe the ease of use of this resource and how it can contribute to the organization of content, the inclusion of mind maps, slides and other interactive resources in the subject of entrepreneurship and management. Conclusions: it has been demonstrated that GoCongr is suitable for the teaching process of the subject of entrepreneurship and management, since it encourages collaboration and interaction between students, presenting interactive, innovative and easy-to-use features, becoming a useful tool for the management of individual and collective work, offering various resources and possibilities to organize content, promote collaborative learning and visualize information in a different way. General area of study: Education. Specific study area: Digital environments.

Introduction

Globally, technologies have been advancing and changing various aspects of daily life, becoming increasingly integrated into daily activities. Their use facilitates and speeds up some processes, for example, in the business field, technology is used for different types of management in the market (Pineda, 2018). For this reason, education is not alien to this technological advance, but rather ICT has been integrated as indispensable tools for educational transformation and innovation.

According to Latorre-Cosculluela et al. (2018), continuous advances in technology provide various methodological alternatives that facilitate the development of teaching processes. Among them, we can mention precisely the Learning and Knowledge Technologies (TAC), which seek to transform Information and Communication Technologies (ICT) to create, share, disseminate and even discuss certain information that directly contributes to academic training. This implies the use of technological educational resources in a more didactic and pedagogical way.





According to Serrano & Casanova (2018), Ecuador is not immune to this reality; there are digital gaps that have not been completely eliminated and in many cases prevent the use of these digital educational resources in the teaching and learning process. Currently, educational centers are forced to choose different ways to strengthen knowledge in students, due to the scarce information provided by the state, lack of leveling for teachers, who are forced to look for the best option for their students.

Lack of knowledge about the use of digital educational resources and continuing to opt for the traditional class model can sometimes create a lack of interest in the subject among students, which leads to difficulties in understanding specific topics, analyzing texts, working in groups, among other aspects that are relevant in the teaching and learning processes.

According to Granda et al. (2019), ICTs are a useful teaching tool for teaching processes to be developed efficiently, so that the pedagogical exercise can be materialized interactively, either synchronously or asynchronously, promoting autonomy in students as well as collaborative work.

Currently according toCedeño & Zambrano (2023),The implementation of this resource as a complement to teaching and learning has been far from optimal. This has been expressed by various authors, such as Granda et al. (2019) who point out that despite having a regulatory framework, in practice there is a lack of training on the part of teachers, a limited use of teaching materials and the persistence of traditional methodologies.

Digital resources are designed to be applied as media in the teaching process, providing teachers with tools that are useful in learning. Within these digital resources, there are a variety of educational applications that allow teachers and students to innovate, obtain information, generate and create content where students are the protagonists. For this reason, it is necessary not only to implement them, but also to analyze how they influence the teaching process, managing to show if they have had the desired success.

Espinel (2020) refers to the existence of different technological tools for teachers and students, such as; a) Those intended for access to information; b) Those for connectivity and task coordination; c) Those for exposition; d) Technological platforms.

Teaching a new subject or the subject of Entrepreneurship and Management is a slow and complex process that requires practice, dedication and motivation. It is not only about transmitting knowledge or the hours that students dedicate to learning that is not important, if this is not of quality and they do not have adequate educational resources or methodologies that allow them to reach a learning pace where they achieve the stated





objective. It should be noted that on the Internet there are sites that generate free and highquality tools.

However, with all the advantages of the educational use of technological tools, they have a restriction that is associated with the ease of access and connectivity they have to them (Espinel, 2020).

There is a Latin American study carried out by Karing (2021), which indicates that strategies based on virtual technological tools were applied for meaningful learning, and as part of its results it is mentioned that teachers present weaknesses in the use of educational programs that are currently available online precisely to develop educational processes, this because it mentions that the teacher is using only traditional pedagogies instead of innovative ones where digital tools are used as means for this educational process.

Digital educational resources

Digital educational resources are considered a type of tool or material that exists in the digital environment and whose intended use is educational, which serves to enhance the learning of researchers in their initial student stage (Jiménez & Ortiz, 2018). They are materials for didactic application that act as a support for new educational content (Pineda, 2018).

Through these resources, opportunities for interaction between students-students and teachers-students are discovered in an asynchronous and synchronous way, where individuals reflect and reformulate their ideas, performing according to their own pace, time, will and autonomy (Moreira & Barros, 2020).

It is possible to determine that digital resources are tools that manage to enhance the teaching process, whether in person or virtually. Their purpose will always be to make classes more dynamic, improve skills and acquire new knowledge in students, achieving motivation in them in order to improve learning as well as the achievement of the class objectives that they want to achieve.

As the years go by, traditional classes are being left aside, where the teacher only had a blackboard, chalk and an eraser to teach their classes, but with the passing of the years and the different innovations today technological advances allow us to achieve several innovative tools that can be used in the educational process, such as ICT or Information and Communication Technologies, which currently constitute means to keep us in communication, and are present in many aspects where we develop, which increasingly determines the need to know them and handle them correctly in education, therefore, it can be said that the educational field does not escape this circle of technological development and innovation.





In the university teaching journal, the authors Serrano & Casanova (2018) mention that thanks to new technologies and educational platforms, students have easy access to all technological educational resources, which allows them to obtain multimedia support files or documents, as well as design and create innovative ways of presenting work. In many cases, it is the student, and depending on the study modality, who is in charge of planning his time to determine his learning pace.

One of the new technologies they have access to is smartphones, which allow them to have access to the Internet and an email account available at any time, also guaranteeing instant communication with anyone and having various applications and services at their disposal, making it one of the most used in the educational field, whether to be in immediate communication or to share information to support the teaching processes that take place in the classroom.

Educational practices mediated by information and communication technologies

communicationso that it meets the requirements of multiple literacies

Within the educational field, the <u>Organic Law on Intercultural Education</u>(LOEI) (National Assembly of Ecuador, 2011) establishes principles that recognize the value of multiple learning, digital literacy and the use of Information and Communication Technologies (ICT) and computer programs as tools to enhance knowledge.

The introduction of technological resources in the design of formal educational practices implies procedures and standards for their use in teaching and learning activities. These procedures and standards, in combination with the different forms of information representation or languages associated with technological resources, can influence and in some cases even determine the adoption of certain forms of organization of the joint activity of the participants (Coll, 2004).

However, in the general context of education, it is widely recognized that multi-learning, digital literacy, and the use of information and communication technologies (ICT) and software are valuable tools for enhancing knowledge. These tools can expand educational opportunities, encourage student participation, facilitate access to online educational resources, promote collaboration and communication, and develop digital skills that are increasingly important in today's world.

Nowadays, it is evident that teaching-learning processes are undergoing changes in their contexts, driving the development of networks and virtual media. This has led to the creation of spaces in which students and teachers work with technological resources, creating a structure designed by teachers, who act as guides and facilitators of the educational process (Díaz, 2023). Therefore, teachers must become facilitators of





inclusive environments so that the education offered is of quality and it is possible to include each of the agents that are part of it.

The above gives rise to thinking about the multiple literacies that exist today, understanding these as "the understanding, use and critical evaluation of the various forms of information, including texts and images, written, printed or electronic media" (Cedeño & Zambrano, 2023), therefore within the teaching-learning process it is necessary to promote multiple literacies including digital, informational and media literacy.

Based on Vygotsky's thinking and based on the principles of cognition, it is possible to verify that the instructional design in an online community of practice coupled with multiple literacies must be anchored to four dimensions, as described by Díaz (2023):

- Situationality. It is generated through contextualized actions, such as tasks and projects, based on the real great need, which takes into consideration explicit and implicit knowledge in the context where it is found and according to the type of literacy.
- Communality. The interests and problems shared by the members of the community are observed, which helps to have joint goals.
- Interdependence. It occurs in the way in which participants change in the level of competence or expertise, depending on the level of competence, or if there are differences around skills, knowledge, opinions, needs to generate relationships of joint benefit.
- Infrastructure. It includes the existence of rules that allow the promotion of motivation and action of a set of mechanisms that are accountable to participants, as well as the execution of structures that streamline information and its interdependence.

The aforementioned dimensions are associated with the proposals of Coll (2004), although the authors base their proposal on the model of communities of practice, in which the participant is collectively included in real situations, where social and constructive acts are encouraged which make sense in action environments.

Therefore, it is assumed that there is an urgent need to include pedagogical proposals from a constructivist point of view, which coincides with what is described byTamayo-Guajalaet al. (2021), who claim that it is a theory based on the creation of learning environments that focus on student participation, supported by the interpretation of reality.





It is important to note that the constructivist model can be combined with elements of other approaches in an instructional design, such as the behaviourist approach to establishing clear objectives, feedback and practice, providing a structure and guidance when designing and developing learning experiences.

Technological educational resource - GoConqr platform

GoConqr is an online platform that can change the perspective of the traditional teaching model to achieve improvements in student learning. This technological educational resource, among its functions, allows us to create or design creative mind maps, cards, tests, notes, slides, study calendar, online library, flow chart, online courses and study groups, allowing participation and collaboration and can be used by teachers and students.

Registration on the GoConqr platform

Your registration is done as follows:

- 1. Enter the GoConqr page. https://www.goconqr.com/es
- 2. Click on the "Register for Free" button and then click on the option to register with your email address and a few fields will appear that must be filled out with the requested information.
- 3. Read the terms and conditions, click accept and then click start now.
- 4. You will receive a message to the email you entered to confirm your account. Once confirmed, you can begin using this platform.

The use of technology can increase students' motivation to learn (Cevallos et al., 2020). The use of technological educational resources can attract students' attention as there are a variety of activities that can make learning innovative and, at the same time, both teachers and students can explore new ways of teaching and learning.

According to Manrique-Losada et al. (2020), the development of education is a variable that requires the attention of educators, as is the case of digital educational resources that allow teachers and students to interact, obtain information, create and, above all, know their benefits for their correct use. Regarding the educational process, although some of these resources have been recently introduced, their use is insufficient, due to the limited criteria for selecting some type of resource, which generates adverse results for students.

To advance in educational practice, it is necessary to deepen change. The role of teachers in facilitating learning and understanding of change by students.

When talking about innovating in teaching processes, Gómez (2022) stated that the use of the GoConqr platform as part of the learning strategies in the Notions of Law course, managed to address different social aspects, through reflection in a practical and easy-to-





understand way, one of them was the elaboration of diagrams that facilitated the teaching process and also the organization.

Other research by Giler et al. (2023) shows that by implementing the GoConqr-based virtual learning environment, teachers were able to improve their teaching experiences in the area of mathematics for eighth grade students. The integration of technology not only made learning more engaging, it also enabled collaboration by providing tools to enhance understanding, fostering an effective learning environment in the digital age.

All the information collected from different authors of existing research, to learn about the implementation of the GoConqr platform in the teaching process, forms a basis for this research, because it is not only about using these technological resources, but also identifying whether they have contributed positively to the teaching process.

Digital educational resources allow the teacher to change the way of teaching and the student to work at their own pace achieving academic objectives, forming an autonomous and responsible subject, for this reason the GoConqr tool would facilitate the learning of the first year high school students of the José Pedro Varela Educational Unit, changing the way information is received and processed, to create and transform the teaching process in the area of entrepreneurship and management, allowing teachers to be up to date in the use of the GoConqr platform and experience new resources in pedagogy applied in the classroom, which will make it easier for students to acquire knowledge of the subject in an innovative way and at the same time they are trained according to the current social demand where technology is part of our lives.

The aim of this research is to address a new concept on the correct use of the digital educational resource GoConqr, which will allow students to receive knowledge and learn in a didactic and practical way, where they can develop skills, abilities, as well as obtain improvements in their educational process. For this reason, it is possible to provide scientific evidence on the use of GoConqr as a technological contribution, to achieve favorable results in the teaching process.

The objective of this article is to determine the feasibility of the GoConqr digital resource as a technological tool within the teaching process of first-year high school students in science in the subject of entrepreneurship and management at the José Pedro Varela Educational Unit.

Methodology

A descriptive research was carried out in which information on technological-educational resources and components of the GoConqr platform was analyzed, which through its methods helped to obtain quantifiable information on the problem raised for subsequent analysis.





With this procedure we can determine how the use of the GoConqr platform contributes to the teaching process in the subject of entrepreneurship and management in the first year of unified general high school in sciences through the methodological strategies that teachers apply for their face-to-face classes.

The method used is the inductive one, which allows the analysis of information based on observations made about the use of the digital educational resource GoConqr, how students interact with the platform, organization, presentation of information, and how they benefit from the use of the tools and resources available in the area of Entrepreneurship and management at the José Pedro Varela Educational Institution. According to Ayala (2021), he mentions that "the researcher looks for interrelations between the research subject and everything around it, knowing that it must be carefully observed."

The research was carried out using a mixed approach, quantitative and qualitative approaches based on different techniques, such as non-participatory observation and survey, which helped to collect information from the research subjects based on questions about their respective topics (Arias, 2021). Therefore, the research will be done in a qualitative and quantitative way, where the study problem is addressed to obtain information for subsequent tabulation, analysis and subsequent interpretation.

In terms of the quantitative aspect, the information obtained on data regarding the use of the GoConqr technological resource in the teaching process in the area of entrepreneurship and management is highlighted. At the qualitative level, the results are analyzed and interpreted to understand the contribution of this platform.

It is worth mentioning that the quantitative method is the set of strategies to obtain and process information in numerical magnitudes for its subsequent interpretation, and the qualitative method is the procedures that facilitate the collection of information on the object of study (Paute & Vásquez, 2022). The combination of both plays a fundamental role in research, providing greater depth in the analysis and interpretation of data, bringing us directly closer to the problem investigated.

The processing of the collected information allowed us to demonstrate the use of this platform in the teaching and learning process, then qualitative research is used, using the deductive method for the flexibility of information processing.

Using observation as a technique through direct perception, the use of this resource for teaching can be evidenced in order to understand the reality of the research problem and obtain the information for its respective processing and analysis of results (Logroño-Herrera et al., 2023). The techniques applied were non-participatory observation to have a perspective of before and after the application of this digital resource and the survey





carried out on the students, to know how effective its application is, the results obtained serve to determine the contribution that the GoConqr platform had in the teaching process.

Tertiary sources of information such as articles and research by different authors related to the research topic were also used for its correct development.

Table 1

Population	N.	%	
First year parallel A students of Baccalaureate in Sciences	40	33.33%	
First parallel B students of Baccalaureate in Sciences	40	33.33%	
First parallel C students of Baccalaureate in Sciences	40	33.33%	
Total	120 100.0	00%	

Population and sample

The universe of study was 120 students, which makes up the total student population of the first year of Bachelor of Science and 1 teacher from the area of Entrepreneurship and Management, of the José Pedro Valera Educational Unit, of the canton La Libertad, belonging to the province of Santa Elena. Convenience sampling was carried out where the population was selected when they were conveniently available for the research.

Through this population, the general application of digital educational resources in the teaching processes in this area of study and the perspective that students have on their use are detected.

Results

The results have been included based on the analysis of three specific dimensions, as mentioned below:





Table 2

Results of dimension 1: usefulness of technological tools in education

QUESTIONS	Totally agree	ОК	Neither agree nor disagree	Disagree	Totally disagree
1 Do you consider that the use of technology tools to create mind maps helps to improve the presentation of the main ideas of the topic discussed in class?	83%	8%	9%	0%	0%
2. Do you think that Study Groups provide an online space where you can share your doubts, exchange resources, and contribute to the class?	42%	38%	21%	0%	0%
3. Do you consider the online library useful to promote the acquisition of knowledge in the subject?	81%	19%	0%	0%	0%
4. Do you consider that slide projection is a source of support in class?	91%	9%	0%	0%	0%

As can be seen in the results in Table 2 on the usefulness dimension of technological tools in education, of the total number of students surveyed, almost all of them fully agree and agree that the use of the technological tool should be considered to create mind maps to improve the presentation of the main ideas of the topic being discussed in class.

Additionally, regarding the consideration that study groups provide an online space where doubts can be communicated, resources can be exchanged and contributions can be made to the class, more than half of the students surveyed fully agree with this. This coincides with what was said by Nazar et al. (2018), who mention that as technologies become more accessible and interactive, different technological tools are used within the educational process. Viera et al. (2023) also narrates that there is a conviction that technologies are necessary to improve the learning process and make it more effective.





Table 3

Results on Dimension 2: Consideration of technological tools as sources of support

QUESTIONS	Totally agree	ОК	Neither agree nor disagree	Disagree	Totally disagree
 5. Did you find it complex to use the tests applied to evaluate learning through this educational resource? 6. Do you think 	0%	0%	8%	79%	13%
that when the use of digital resources is included in class, learning the subject becomes easier?	88%	12%	0%	0%	0%

In the case of Table 3, which deals with the dimension of consideration of technological tools as a source of support, it is observed that, of the total number of students surveyed, the majority say that they disagree that the use of applied learning assessment tests through an educational resource is complex, that is, they consider it easy to use, as also stated by Giler et al. (2023), who affirm that the use of ICT is becoming simpler and simpler, so this is an advantage to be taken advantage of by students.

Table 4

Results of dimension 3 on the use of the digital educational resource GoConqr

QUESTIONS	Totally agree	ОК	Neither agree nor disagree	Disagree	Totally disagree
7. Do you consider that the use of the GoConqr Digital Educational Resource was appropriate in the teaching process of the Entrepreneurship and Management subject?	81%	17%	3%	0%	0%





8. Do you consider that the teacher's use of the GoConqr educational resource in the subject was effective?	82%	18%	0%	0%	0%
9. Do you think that the use of the GoConqr tool encourages collaborative work in the classroom?	70%	23%	7%	0%	0%
10. Do you think that the subject of entrepreneurship and management can be better learned through the implementation of the digital educational resource GoConqr?	83%	18%	0%	0%	0%

Additionally, Table 4 defines the results of the dimension of the use of the digital educational resource GoConqr, where the majority of students consider that the use of this digital resource was adequate for the teaching-learning process of the Entrepreneurship and Management subject, also the majority considers that the teacher's handling of the resource was effective, and that they consider that the tool encourages collaborative work in the classroom, and that it seems to them that the subject of entrepreneurship and management can be better learned with the implementation of the digital educational resource GoConqr. Which also coincides with what was defined by Giler et al. (2023), who state in their descriptive and field study that at least 40% of students in their study said that the diversity of resources that GoConqr presents helps them to approach the study in a varied way, also because it has a wide range of resources that can be adjusted to different learning styles and individual requirements.

Conclusions

- It has been shown that digital resources are currently more interactive, innovative and easy to use, which in turn can be used in the educational field, and of course serves as a useful tool to manage both individual and collective work, whenever the dynamism between theory and practice is possible.
- On the other hand, it has been seen that the majority of first-year students of Unified General Baccalaureate fully agree or agree that technological resources are currently useful for aspects such as slide presentations, as well as for





collaborative work with their peers, and also for creating mind maps and other learning tools.

- Limitations are observed such as the fact that most students have recently started using the GoConqr resource, however, they are aware that its usefulness is adequate because it has various resources within this interactive tool, such as the organization of content on various topics, in this case the subject of Management and Leadership, as well as the possibility of generating the collaborative learning methodology, or problem solving, as well as the possibility of making mind maps with a single visual representation.
- Finally, the objective of this article has been achieved, which was to identify the digital resource GoConqr as a tool within the teaching process of the subject Entrepreneurship and Management within the Educational Unit of study, since it was seen as a useful resource within the teaching process of said subject.

Conflict of interest

There is no conflict of interest in relation to the submitted article.

Bibliographic References

Arias González, JL (2021). Research design and methodology. Editorial Enfoques Consulting

EIRLCONCYTEC.<u>https://gc.scalahed.com/recursos/files/r161r/w26022w/Arias_S2</u>.<u>pdf</u>

- National Assembly of Ecuador. (2011, March 31). Organic Law on Intercultural Education. Second Supplement to the Official Register No. 417 (March 31, 2011), Regulations: In force. Latest Reform: Official Register Supplement 434, 19-IV-2021.<u>https://www.evaluacion.gob.ec/wp-</u> <u>content/uploads/lotaip/2021/Anexos_Mayo_2021/a/LEY_ORGANICA_DE_EDUC</u> <u>ACION_INTERCULTURAL.pdf</u>
- Ayala, Maite. (2021, January 19). Interpretive paradigm. Lifeder.<u>https://www.lifeder.com/paradigma-interpretativo-investigacion</u>
- Cedeño Pincay, FM, & Zambrano Sornoza, JM (2023). Integration of information and communication technologies in the teaching-learning process. Cognosis Journal, 8(EE1), 73–96.<u>https://doi.org/10.33936/cognosis.v8iEE1.5615</u>
- Cevallos Salazar, J.E.,Lucas Chabla, XE,Santos Walls, J.F., &Tomala Bazan, J.L.(2020). Use of technological tools in the classroom to generate motivation in ninth grade students of the Walt Whitman, Salinas and Simón Bolívar educational units, Ecuador. Journal of Pedagogical Sciences and Innovation, 7(2), 86–





93.<u>https://repositorio.upse.edu.ec/bitstream/46000/7914/1/UPSE-RCP-2019-Vol.7-No.2-010.pdf</u>

- Coll, César, (2004). Educational psychology and educational practices mediated by information and communication technologies. A constructivist view., Electronic Journal Sinéctica, 25, 1-24.<u>https://www.redalyc.org/pdf/998/99815899016.pdf</u>
- Díaz Navas, LA (2023). Searching for digital information to improve the usability of ICT in the teaching-learning of unified general high school students [Master's thesis, Universidad Técnica del Norte].http://repositorio.utn.edu.ec/handle/123456789/14194
- Espinel Armas, E. (2020). Technology in the learning of students at the Faculty of Chemical Sciences, Central University of Ecuador. Journal of Current Research in Education, 20(2), 1-37.<u>http://dx.doi.org/10.15517/aie.v20i2.41653</u>
- Giler Marmolejo, del Rocío TM, Anchundia Álava, PB, González Baquerizo, LX, & Alzate Peralta, LA (2023). The use of the GoConqr learning environment for teaching mathematics in 8th grade in Ecuador. Multidisciplinary Peer-Reviewed Scientific Journal Pentaciencias, 5(6), 48–61. https://doi.org/10.59169/pentaciencias.v5i6.838
- Gómez del Castillo Garay, G. (2022). GOCONQR Technological Platform as a promoter of meaningful learning [Proceedings of the 3rd Distance Education Forum, Edutechnology: Quality for technology-based educational environments, July 4 and 5, 2022].<u>http://hdl.handle.net/20.500.11799/138363</u>
- Granda Ayabaca, DM, Jaramillo Alba, JA, & Espinoza Guamán, EE (2019). Implementation of ICT in the Ecuadorian educational field. Society & Technology, 2(2), 45–53.<u>https://doi.org/10.51247/st.v2i2.49</u>
- Jiménez Becerra, I. & Ortiz Jaramillo, M. (2018) Effect of an adaptive digital educational resource on the spatial skills of high school students. Espacios Magazine, 39(53)<u>http://www.revistaespacios.com/cited2017/cited2017-04.pdf</u>
- Karing Prada, L. (2021). Educational technological tools for meaningful learning in the area of natural sciences [Master's thesis, Libertador Experimental Pedagogical University, Gervasio Rubio Rural Pedagogical Institute, Rubio, Venezuela].<u>https://espacio.digital.upel.edu.ve/index.php/TGM/article/view/360/352</u>
- Latorre-Cosculluela, C., Liesa-Orús, M., & Vázquez-Toledo, S. (2018). Inclusive schools: cooperative learning and TAC with students with ADHD. Magis, International Journal of Research in Education, 10(21), 137–152.<u>https://doi.org/10.11144/Javeriana.m10-21.eatt</u>





- Logroño-Herrera, L., Ramos-Singaucho, D., & Tello-Coba, D. (2023). Digital resources in the subject of natural sciences. Multidisciplinary Peer-Reviewed Scientific Journal PENTACIENCIAS, 5(5), 228-244.https://editorialalema.org/index.php/pentaciencias/article/view/731/1018
- Manrique-Losada, B., Zapata Cárdenas, MI, & Arango Vásquez, SI (2020). Virtual environment for co-creating digital educational resources in higher education. Virtual Campuses, 9(1), 101–112.http://uajournals.com/ojs/index.php/campusvirtuales/article/view/632
- Moreira, D & Barros, D. (2020) Practical orientations for a synchronous and asynchronous communication in digital educational contexts (pp 193-208). OER -Educational Sciences Educational Sciences educational resources. <u>http://hdl.handle.net/10400.2/9661</u>
- Nazar, R., Chaudhry, I.S., Ali, S., & Faheem, M. (2018). Role of Quality Education for Sustainable Development Goals (SDGS). PEOPLE: International Journal of Social Sciences, 4(2), 486-501.<u>https://pdfs.semanticscholar.org/cefd/caed096ed9b7a7a4fa1668623f02f0a6a8c 8.pdf</u>
- Paute Cabrera, B., & Vásquez Bermeo, BH (2022). Development of digital resources to strengthen knowledge in the foreign language area for level A1 on the evera platform (emerging virtual environment to reinforce learning), academic year 2020-2021 [Undergraduate thesis, Universidad Politécnica Salesiana, Cuenca Campus, Cuenca, Ecuador].<u>https://dspace.ups.edu.ec/bitstream/123456789/22394/1/UPS-CT009710.pdf</u>
- Pineda Sánchez, MI (2018). Use of digital educational resources and autonomous learning of university students in a virtual education context (Master's thesis, University of Antioquia, Medellín, Colombia)<u>https://bibliotecadigital.udea.edu.co/bitstream/10495/12045/1/PinedaMar</u> <u>ia_2018_UsoRecursosEducativos.pdf</u>
- Serrano Pastor, RM, & Casanova López, Ó. (2018). Technological and educational resources for the flipped learning pedagogical approach. REDU Journal of University Teaching, 16(1), 155.<u>https://doi.org/10.4995/redu.2018.8921</u>
- Tamayo-Guajala, LP, Tinitana-Ordoñez, AG, Apolo-Castillo, JE, Martínez-Avelino, EI & Zambrano-Pérez, VL (2021). Implications of the constructivist model in the educational vision of the 21st century. Journal of Society & Technology, 4(S2), 364-376.<u>https://institutojubones.edu.ec/ojs/index.php/societec/article/view/157/445</u>





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Viera Trevisan, L., Pires Eustachio, J.H.P., Gallei Dias, B., Walter Leal Filho, W.
 &Avila Pedrozo, E. (2023). Digital transformation towards sustainability in higher education: state-of-the-art and future research insights. *Environment, Development and Sustainability*, 26, 2789–2810 (2024).https://doi.org/10.1007/s10668-022-02874-7







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