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THE VIRTUAL ENVIRONMENT IN THE AUTONOMOUS SECONDARY EDUCATION PROCESS

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Abstract

Virtual teaching is a modality in education in which the teaching-learning process happens through the internet, this modality allows students to learn more flexibly, adapting to their spatial-temporal circumstances, such as the social confinement caused by the pandemic that modified the lives of human beings. Educational institutions used social media as a connecting link through electronic devices. The insertion of new information and communication technologies ICT has played an important role in the educational system, making use of the tools provided by the Internet for greater interaction. The objective of the work is to carry out an exam related to the virtual environment of the autonomous secondary education process to unravel the possible actions that allow minimizing failures and solving existing problems. Putting desktop research into practice for the review and analysis of bibliographies associated with the topic. A structured survey was applied to an intentional sample of students in the field of ICT use. The work allowed to unveil the relevance of pedagogical methods during the exercise of secondary education

Introduction

The pandemic caused by SARS-CoV-2 impacted on society, transforming the way in which All the activities were taking place and the educational system was one of the most affected aspects. The report of the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020), registers that the pandemic has had an impact on educational systems, where higher education could experience the highest rates of school dropouts, which means that it will be a loss of 7.9 million students (UNESCO, 2020).

Virtual learning drastically replaced face-to-face scenarios. The educational subject put aside direct social contact to adopt other ways of relating to students through links through digital devices.

The performance of information and communication technologies (ICT) play a fundamental role in the progress of pedagogical systems, since they open up possibilities to improve teaching and instruction processes by stimulating changes in the way of transmitting and generating knowledge (Rodríguez, Pérez, & Torrez, 2018).

The educational crisis in the midst of a pandemic put all the governments of the world in trouble so that the systems did not succumb to the collapse. It was briefly organized in whatever way it could to continue distance teaching-learning, while households were confined to social isolation. This implied the transition from classroom training to virtual television or online teaching, depending on the possibilities (BOE, 2020).

In educational institutions, social communication media were used as a connection link. For this, home computers, telephones, emails, WhatsApp, as well as other electronic means were used (Vallespín, 2020). To this is added the improvised programs, videoconferences, technological platforms among others.

The didactic contingencies of virtual teaching are incalculable and demand a methodology that has to change the way in which teachers traditionally teach and students learn, which indicates that the teaching-learning processes undergo a transit through certain transformations that occur using virtual tools (Pando, 2018).

In Puerto Rico (Casanova, 2016) an exhibition was held in front of the San Sebastián University entitled the virtual teacher, demonstrating a change to the traditional paradigm. The objective of the study was to offer educators a universal overview of the skills necessary to practice as a virtual educator and thus promote effectiveness in the technology-mediated teaching modality, which is a means in order to offer a substantive modification in the teaching-learning process. For this, a well-founded investigation is deployed, whose deductions indicate that the role of the educator has changed over the years, to accommodate the reality of the generation of students who receive and the globalized world that professionals face, concluding that it is It is worth considering the importance of the role of the teacher and identifying the areas with the greatest opportunities for development in the face of a highly technological generation.

In the case of the Ecuadorian educational system, it is stated (Universo, 2020) that there are three million schoolchildren from educational and fiscal centers registered in 150 thousand educational centers, of which 2 million have the possibility of connectivity, but one million students do not have In the same way, those who do not have appropriate digital devices for

the teaching-learning process, even though most families have a cellular device, not all of them are up-to-date and have adequate connectivity for the virtual educational process.

The objective of the work is to carry out an exam related to the virtual environment of the autonomous secondary education process, to unravel the possible actions that allow minimizing failures and solving existing problems.

Materials and methods

A diagnosis was applied on the initial management of sanitary waste, generated in health establishments by the care of COVID patients. Descriptive methodology and observation were used; In addition, the qualitative and quantitative method that helped the analysis of the variables according to the information obtained in-situ, information collection formats were adopted through, the same that will evaluate the increase in the generation of sanitary waste during the pandemic between the years 2020-2021, considering sanitary waste as the unit of analysis.

The population consisted of all hospital personnel, delimiting the sample with workers in charge of internal waste management, using a non-probabilistic sampling test.

To quantify the amount of waste generation, it was obtained through a monthly consolidated monthly management and generation of sanitary waste provided by those involved in the study, for the characterization of the type of sanitary waste generated in the areas of care for COVID patients, for this A waste matrix was adopted applying the direct observation method in the study area, Ministerial Agreement 323 Official Gazette 450 of 20 - March 2019 was applied "Regulation Management of waste generated in Health Establishments" according to the objectives set out in the investigation, in addition to the Regulation for the prevention and control of contamination by hazardous waste (TULSMA, 2017), to establish compliance with the regulations, which are governed by the Ecuadorian state.

Analysis Discussion of the results

The compulsory social confinement caused by the pandemic modified the way of life of human beings and although this phenomenon implied social isolation, not all activities were completely paralyzed. In the attempt to maintain the course of life, the use of technological means that gave rise to telework and tele-education increased (Aguilar, 2020).

The digital society has reached an impact that could never have been imagined compared to other learning instruments such as television and radio, characterized by being a field of importance in education and values, determined essentially for two reasons, for a On the other hand, the level of freedom based on the fact that everyone can participate and on the other that it constitutes an instrument whose mastery of its use is inverse to the personal teacher-student relationship (Buxarrais&Ovide, 2011).

The insertion of new information and communication technologies (ICT) in the educational field impacted on the learning process of the student in the role of the teacher in the content and in the evaluation. The role of the educational subject faces a period of crisis, since on the one hand significant learning is generated and on the other the lack of training in the disciplines that gives rise to wide generational gaps.

Virtual learning drastically replaced face-to-face learning scenarios. The educational subject put aside personal contact, to enter a mediation process through digital devices. The relationship between educator-learner became asymmetric since educational participation did not occur on equal terms. Virtual reality introduced new ways of understanding the educational process and produced new questions related to the type of learning that is generated through virtual education and the social problems that arise from this type of virtual realities (Aguilar, 2020).

Self-regulation of learning is a widely investigated construct (Schunk & Zimmerman, 1998); (Aldridge & Fraser, 2011); (Zimmerman, 2008). It is currently considered a predictor of academic success in students.

The teaching-learning process, self-evaluation and co-evaluation are pedagogical practices framed in what is known as authentic evaluation, whose application in the classroom is one of the aspects that should be stimulated the most, since it is not widely used by teachers (López, Pérez, & Barba, 2016), (Basurto, Velásquez, & Rodriguez, 2021).

Virtual teaching is a study modality in which teachers and students make contact in a digital environment based on ICT and computer networks, using the facilities and tools provided by the internet and digital technologies. Among them we can mention the methodologye-learning that allows greater interaction during the teaching processes, it is the ability to adapt the ICT tools to pedagogical use. There are others that are reflected in figure 1.

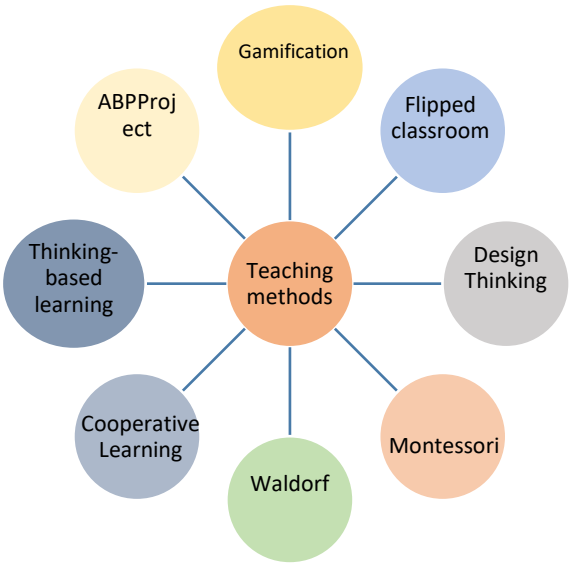

Figure 1. Teaching methods in virtual learning

Source: (IFP, 2020)

Themodeldesing thinking is an alternative teaching approach that is used by designers, in the search creative solutions for complex problems, it also serves to meet the needs based on the experience of students and teachers in higher education (Moreira, Zambrano, & Rodríguez, 2021).

The ABP project consists of a methodological proposal that allows as a didactic strategy that the participants tackle any problem in a collaborative way, integrating different areas of knowledge. It is a form of work that already has some seniority but has generated greater interest in recent years (Doménech, 2016). It presents a student-centered approach, but requires high teacher participation (Rodríguez A., 2016). In this way, students are responsible for the learning process and teachers dedicate themselves to making the guide, facilitating the resources (Martínez & García, 2017).

Playful aspects are present in the spaces of our life, where activities are gamified in different sectors such as education, companies, human resources, among others. Gamification is a fundamental factor to motivate and awaken the enthusiasm of people to contribute their skills and talents to the collective mission (Deterding&Dixto, 2011). In the educational context, it is used as a learning tool in different areas and subjects, forming part of the development of collaborative attitudes and behaviors in autonomous study (Caponetto, Earp, & Ott, 2014). It is a didactic process contextualized with significance and as a transforming object for the instructional process.

Technology advances and forces the creation of new methodologies for the teaching-learning process where the flipped classroom is introduced, which constitutes a methodology focused on the combination of two moments that mediate traditional instruction, classroom activities and activity outside of the classroom. school (Merla&Yáñez, 2016).

The flipped classroom consists of making an adequate management of the technologies that can be inside or outside the school classroom, allowing the use of ICT as a tool to strengthen the teaching of students. It also influences active learning, achieving autonomy in students, and also allows the learner to make use of resources such as videos, solving exercises and group work to understand content (Wendorf, 2019).

Cooperative learning is used in research due to its effectiveness in relation to academic achievements, as well as the affective, cognitive, and social development of students (Trujillo & Ariza, 2002) and they represent educational activities, with greater success in the last decade (Johnson, 2009).

For cooperative learning to be implemented in schools, teachers must acquire prior knowledge about the use of cooperation strategies. According (Moriña, 2011)orna citizenship that has been educated to compete you can get to cooperate. In this sense, it can be affirmed that not only do you cooperate to learn, but you must first learn to cooperate. This means that the cooperative learning methodology is a resource that appeals to diversity as content to learn.

The problem-based learning technique involves the participation of educators, students and other participants in educational training, since critical thinking competence is important in today's society (Quinter, Avila, & Olivares, 2017). According to (Restrepo, 2005) this teaching method directs students to take ownership of the research process, where the process of solving the problems that students face is organized and selected. The teacher oversees guiding and monitoring the learning process of the students and the supervisor of designing the guidelines of the process.

education Waldorfaims guide the child towards a clear and balanced development of his intellect, to an artistically rich feel and strengthening a healthy and active will, so that your thoughts, feelings, and actions can face practical contempt of life. It is put into practice that the school is a continuity of the home, and that enthusiasm and not external obligation are the factors that determine teaching (Moreno, 2010).

In Waldorf education, the protagonist is the game, as well as the experiences through the senses, which is the ideal way to generate learning, admiring the individual processes of each child, but forming appropriate stimuli without the need for cards or repetition exercises that provide the acquisition of skills and abilities for written language, it is intended to lead the child towards a clear and balanced development of his intellect in such a way that his thoughts, feelings and actions can face the daily challenges that life may present (Martínez L. ., 2018).

The methodMontessori is a different way of looking at education, in which it is sought that the boy or girl can bring to light all their potentialities through interaction with a prepared environment, rich in materials, infrastructure, affection and respect. It is an innovative child-centered approach to education and the child's desire to learn, where the learner guides rather than instructs, where students engage with activities that meet their interests, needs, and level of development (Estefó, 2016).

In the interest of fulfilling the objective of the work, a structured survey was carried out to a group of fourteen teachers from a secondary school located in the rural area of the province of Pichincha, to obtain information on the methods most used by teachers in the virtuality and use of ICT.

In relation to the active methods used to teach the classes, the results shown in the figure 2.

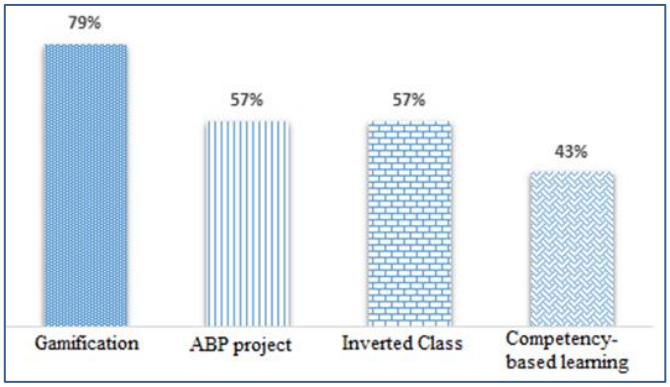

Figure 2. Active methods used to teach class

Source. Own elaboration based on the results of the survey

It was found that gamification is the most used method, followed by its order of PBL projects and flipped classes and finally competence-based learning.

Gamification is really a relevant method since it promotes the motivational aspect by awakening interest in knowledge on the part of students. It is significant to recognize that flipped class methods, PBL projects and competence-based learning are combined in a balanced way. Especially the flipped classroom is of vital importance to promote

motivation and interest in learning in students. All of this encourages a methodological teaching process to be guaranteed, aimed at strengthening student learning under the guidance of the student.

Figure 3 shows a graph that reflects the use of ICT in the teaching-learning process.

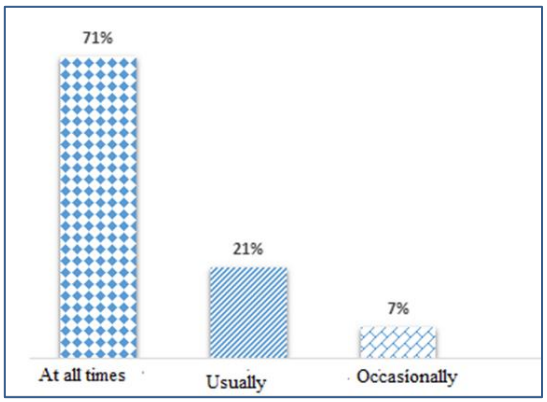

Figure 3. Use of ICT in the teaching-learning process

Source. Own elaboration based on the results of the survey

It is evidenced that 71% of teachers always use ICT in the teaching-learning process, while 21% do so almost always and only 7% occasionally.

Analyzing that there is acceptance when it comes to the use of ICT in the teaching-learning process, in a general way it is understood as an enriching and transforming method for education. This instrument is basic for students and teachers since it encourages the active element of the student in the face of the nature of exposure and constitutes an increasingly affordable means for society. Students recognize the incorporation of ICT in teaching as an element that ensures the participation of the educational community for a higher quality of teaching.

But it must be recognized that the ideal result would be achieved when one hundred percent of teachers always use ICT, since it must be recognized that there are still teachers who have not managed to assimilate the use of these tools for the development of an adequate process teaching-learning.

It is necessary to continue paying special attention to the preparation and professional improvement of students in relation to the use of ICT, especially in education carried out in rural areas. For this, various training activities and postgraduate improvement must be used.

In relation to the tools most used in ICT, Table 1 shows the statistical results of the survey.

Table 1. Most used tools in ICT ICT

tools	Frequency	DEGREE OF VALUES									
		1	%	2	%	3	%	4	%	5	%
Audios or podcast		2	14	2	14	3	21	1	7	4	29
Videos	14	7	50	0	0	1	7	2	14	2	14 Im

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banks and sounds		3	21	4	29	3	21	1	7	1	7
Slide shows		10	71	1	7	1	7	1	7	1	7
Infographics		1	7	3	21	4	29	2	14	1	7
Digital text documents		2	14	4	29	1	7	1	7	3	21
Spreadsheets		1	7	1	7	1	7	4	29	1	7
Word processor		0	0	2	14	0	0	2	14	3	21
Graphing		2	14	2	14	1	7	2	14	1	7
Video editing program		2	14	1	7	2	14	4	29	3	21

Source. Own elaboration based on the results of the survey.

The most used tool is related to the slide show, followed by a bank of images and sounds, as well as digital text documents. With a lesser importance, the surveyed students indicated the infographic, video editing program and spreadsheet. As less important it is pointed out the audios and podcasts.

The importance of these little sisters consists in the realization of integrated use depending on their importance in each class topic or exercise to be carried out. There is a tendency to recognize with more importance the traditional methods associated with the presentation with slides, it is time to begin to appreciate in each of the tools its importance as a specific facilitator, according to the type of classes or exercise teaching to be carried out.

In this way, a desired definition is not achieved on the importance and weight of the integrated use of tools for virtual education, so it is necessary to deepen its study through training and postgraduate courses, on the Virtual tools as a vital support for the educational teaching process

When evaluating the participation of collaborative works with other teachers, the results shown in figure 4.

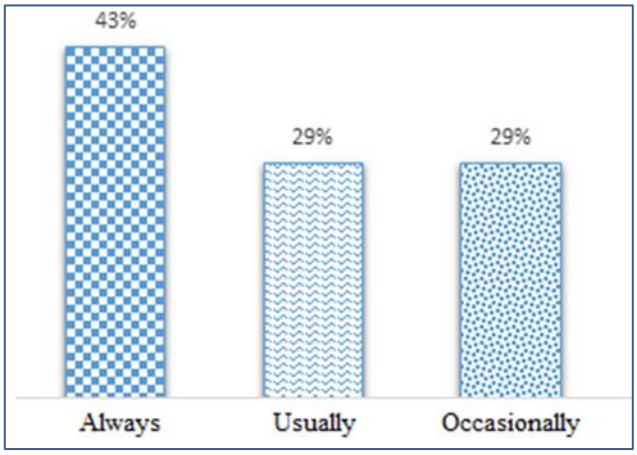

Figure 4. Participation of collaborative works

Source. Own elaboration based on the results of the survey

As it is observed that43% of teachers always participate in collaborative work, while 29% participate almost always and the same percentage suggests doing it occasionally.

It can be argued that less than 50% of teachers take advantage of collaborative work, always which constitutes a methodological weakness since it is a delay for the education system, because this type of work makes it easier for teachers to reflect, debate and contrast all their points of views, managing to agree to extend and unify pedagogical criteria.

Collaborative work can be promoted by making symmetrical and reciprocal relationships in the group, developing interactions based on dialogue and pedagogical reflection. Collaborative learning implies working together to solve a problem, having a common goal and ensuring that it is not individual action, but everyone as a group.

In relation to the virtual resources used by the teacher to keep up to date on the subject they teach and its didactics, the results are shown in Figure 5.

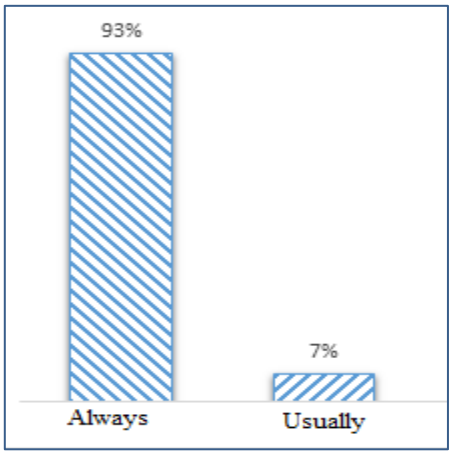

Figure 5. Virtual resources used by the teacher to keep up to date

Source. Own elaboration based on the results of the survey

It was found that 93% of teachers are kept up to date with respect to the subject they teach, while 7% do so sporadically or almost always.

It is good that the data reflects favorable since this indicates that teachers are constantly evolving cognitively. Discovering and using educational digital platforms to carry out dynamic works and presentations aimed at promoting knowledge of students is an advance, as well as experimenting with new tools in the classroom to offer the different proposals aimed at students.

Due to the above, it must be recognized that the ideal result would be achieved, when one hundred percent of the teachers use some recreation techniques that motivate the student, the classes can also be guided by outdoor recreational activities, exhibitions, performances, among others, so that students participate actively.

Conclusions

The development of the research allowed to examine the relationship between the virtual environment and the autonomous teaching process at the secondary level in a rural area of

the province of Pichincha, which allowed us to unravel the activities and measures aimed at minimizing failures and correcting the deficiencies of teachers in the educational process.

Virtual education can undoubtedly offer a valuable space to improve the teaching-learning process as a powerful alternative and educational computer instrument, capable of improving the quality of individual and collective student learning, as well as a basis and tool for improvement professional of the learners.

Among the main recommendations is to promote the guarantee of a methodological process to strengthen student learning under the guidance of teachers, to promote a contextualized didactic process that can creatively transform the teaching-learning process. For this, it may be valid to carry out other future research on the subject presented, in such a way that it allows to verify how much progress is made and evolves in the application of constructivist research methodologies and the use of ICT as a tool for the enrichment of virtual education , in the context of virtuality in rural education in Ecuador.

References

Aguilar, F. (2020). From learning in face-to-face scenarios to virtual learning. Estudios Pedagógicos(3), 12. doi: DOI: 10.4067 / S0718-07052020000300213

Aldridge, J., & Fraser, B. (March 18, 2011). Development and validation of an instrument to measure motivation and self-regulation of students in science learning. International Journal of Science Education, 2159-2179. doi: https: //doi.org/10.1080/09500693.2010.541529

Basurto, S., Velásquez, A., & Rodriguez, M. (March 2021). Self-evaluation, Co-evaluation and Hetero-evaluation as an innovative approach in pedagogical practice and its effect on the teaching-learning process. Power of Attorney, 828-845. doi: 10.23857 / pc.v6i3.2408

BOE. (2020). Royal Decree 463/2020, of March 14, which declares the state of alarm for the management of the health crisis situation caused by COVID-19. BOE-A-2020-3692, Ministry of the Presidency, Relations with the Courts and Democratic Memory. Consulted on 09/12/2021. Retrieved from: https://www.boe.es/buscar/doc.php?id=BOE-A-2020-3692

Buxarrais, M., &Ovide, E. (July-December from 2011). The impact of new technologies in education in values of the XXI century. Synthetics(37). Accessed 09/08/2020. Retrieved from: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-109X2011000200002

Caponetto, I., Earp, J., & Ott, M. (2014). Gamification and education: a review of the literature. ResearchGate. Retrieved from: https://www.researchgate.net/publication/266515512_Gamification_and_Education_a_Literature_Review

Casanova, A. (2016). The virtual teacher: a change to the traditional paradigm. Conference presented at the Teacher Professional Development Seminar: training, evaluation

and certification. 14. Obtained from: https://acceso.virtualeduca.red/documentos/ponencias/puerto-rico/1419-8509.pdf

Deterding, S., &Dixto, D. (May 7, 2011). Gamification: Toward a Definition. Retrieved from http://gamification-research.org/wp-content/uploads/2011/04/02-Deterding-Khaled-Nacke-Dixon.pdf

Doménech, J. (November 2016). Topographic notes for the trip to the ABP. Secondary, Education. Barcelona: Pedagogy Notebooks. AccessedRetrieved: from https://redined.educacion.gob.es/xmlui/handle/11162/130323

09/2021.Estefó, E. (2016). Influence of the Montessori Method in physical education and health. Chile: Austral University. Obtained from: http://cybertesis.uach.cl/tesis/uach/2016/ffe.79i/doc/ffe.79i.pdf

Godino, J., Batanero, C., & Font, V. (2007). The ontosemiotic approach to research in mathematics education. Semantic Scholar. doi: DOI: 10.1007 / S11858-006-0004-1

IFP. (November 21, 2020). The 8 most used educational methods in early childhood education. Obtained from The 8 most used educational methods in early childhood education. Obtained from: https://www.ifp.es/blog/los-8-metodos-educativos-mas-utilizados-en-la-educacion-infantil

IMEC. (2019). Desk Research, what it is, steps to follow and why it is important to use it. Desk Research, what it is, steps to follow and why it is important to use it. Madrid, Madrid, Spain. Retrieved from: https://www.cimec.es/desk-research/

Johnson, D. (June 1, 2009). An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning". Education Research, 38(5), 365-379. doi: https: //journals.sagepub.com/doi/10.3102/0013189X09339057

López, V., Pérez, A., & Barba, J. (2016). Students' perception of the use of a graduated scale for self-evaluation and co-evaluation of written work in the initial training of physical education teachers (FIPEF). Dialnet, 11(31), 37-50. Obtained from: https://dialnet.unirioja.es/servlet/articulo?codigo=5392812

Martínez, A., & García, M. (2017). PBL and technology in early childhood education. Media and Education Magazine, 50, 201-210. Obtained from: https://idus.us.es/handle/11441/52196

Martínez, L. (2018). Experience of adapting Waldorf education in the language acquisition process. Universidad de San Buenaventura Colombia, Bachelor of Preschool Education. Medellin: Faculty of Education. Obtained from: http://bibliotecadigital.usbcali.edu.co/bitstream/10819/5855/1/Waldorf_Escritura_Preescolar_Lis_2018.pdf

Merla, E., & Yáñez, C. (August 2016). The flipped classroom as a strategy for improving academic performance. Distance Baccalaureate (16). Consulted on 09 of 2021. Obtained from: http://revistas.unam.mx/index.php/rmbd/article/view/57108

oreira, J., Zambrano, M., & Rodríguez, M. (2021). The Desing Thinking model as a pedagogic strategy in teaching-learning in higher education. Knowledge Pole, 6 (3), 1062-1074. doi: 10.23857 / pc.v6i3.2421

Moreno, M. (February 11, 2010). Waldorf pedagogy. (U. Complutense, Ed.) Arteterapia: Papeles de arteterapia y educación artística para la inclusión social, 5, 203-209.

Moriña, A. (febrero de 2011). Aprendizaje cooperativo para una educación inclusiva: desarrollo del programa PAC en un aula de Educación Primaria. Estudios sobre educación (21), 199-216. Consultado el 09 de 2021. Obtenido de https://idus.us.es/handle/11441/97039

Pando, V. (2018). Tendencias didácticas de la educación virtual: Un enfoque interpretativo. Propósitos y Representaciones, 6 (1). doi:http://dx.doi.org/10.20511/pyr2018.v6n1.167

Quinter, V., Avila, J., & Olivares, S. (abril de 2017). Desarrollo del pensamiento crítico mediante la aplicación del Aprendizaje Basado en Problemas. Psicologia Escolar e Educacional, 21(1). doi:https://doi.org/10.1590/2175-3539201702111072

Restrepo, B. (2005). Aprendizaje basado en problemas (ABP): una innovación didáctica para la enseñanza universitaria. Educación y educadores, 8, 9-19. Obtenido de https://www.redalyc.org/articulo.oa?id=83400803

Rodríguez, A. (2016). Introducing Inquiry-Based Methodologies during Initial Secondary Education Teacher Training Using an Open-Ended Problem about Chemical Change. ASC publications, 93(9), 1528-1535. doi:https://doi.org/10.1021/acs.jchemed.5b01037

Rodríguez, K., Pérez, M., & Torrez, G. (octibre-diciembre de 2018). Implementación de un entorno virtual como herramienta didáctica para fortalecer el proceso enseñanza aprendizaje. EDUMECENTRO, 10(4). Consultado el 7 de agosto de 2021. Obtenido de: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2077-28742018000400004

Schunk, D., & Zimmerman, B. (1998). Aprendizaje autorregulado: de la enseñanza a la práctica autorreflexiva. Guilford. Consultado el 8 de 9 de 2021. Obtenido de: https://psycnet.apa.org/record/1998-07519-000

Trujillo, F., & Ariza, M. (2002). Experiencias Educativas en Aprendizaje Cooperativo. Publicaciones (32), 147-162. Obtenido de: https://www.orientacionandujar.es/wp-content/uploads/2015/11/Colecci%C3%B3n-en-unidades-did%C3%A1cticas-de-Experiencias-educativas-en-aprendizaje-cooperativo-.pdf

UNESCO. (06 de 08 de 2020). El Secretario General de las Naciones Unidas advierte de que se avecina una catástrofe en la educación y cita la previsión de la UNESCO de que 24 millones de alumnos podrían abandonar los estudios. Consultado el 8 de septiembre de 2021. Obtenido de: https://es.unesco.org/news/secretario-general-naciones-unidas-advierte-que-se-avecina-catastrofe-educacion-y-cita

Universo. (24 de abril de 2020). Un millón de estudiantes sin acceso a educación virtual durante la emergencia sanitaria. Consultado el 09 de 2021, de Un millón de estudiantes sin acceso a educación virtual durante la emergencia sanitaria. Obtenido de: https://www.eluniverso.com/noticias/2020/04/24/nota/7822794/millon-estudiantes-acceso-educacion-virtual-durante-emergencia/

Vallespín, I. (07 de 4 de 2020). CC OO alerta de la brecha digital entre los profesores para impartir clases en línea. Barcelona, España. Consultado el 2021. Obtenido de: https://elpais.com/espana/catalunya/2020-04-07/cc-oo-alerta-de-la-brecha-digital-entre-los-profesores-para-impartir-clases-en-linea.html

Wendorf, C. (2019). Aula invertida para el aprendizaje de dominio en los estudiantes del curso de metodologia de la investigacion de una universidad privada en Lima. Universidad San Ignacio de Loyola , Maestría en Educación con Mención en Docencia en Educación Superior, Lima. Consultado el 09 de 2021. Obtenido de: http://repositorio.usil.edu.pe/bitstream/USIL/9136/1/2019_Wendorff-Diaz.pdf

Zimmerman, B. (1 de marzo de 2008). Investigación de la autorregulación y la motivación: antecedentes históricos, desarrollos metodológicos y perspectivas futuras. Revistaestadounidense de investigacióneducativa. doi:https://doi.org/10.3102/0002831207312909