

## E-learning management process and its effects on the community

Proceso de administración de la educación virtual y sus efectos en la comunidad

**Margarita De Lourdes Alejandro Solano\***

### ABSTRACT

This research work raises the needs of virtual communities, from the mastery of technologies for the development of student competencies, to meet the commitment of quality standards in education, to generate high school graduates with performance skills so that they can face a working world that requires the application of computer tools. The descriptive statistics showed that the majority of students regularly connect to virtual classes as pedagogical support and reinforcement to comply with the activities of the educational cards of the Let's Learn Together at Home Plan. Students who cannot connect due to lack of internet access, receive the cards in person to comply with the Ministry of Education's requirements.

**Keywords:** Virtual Education - Methodology - Community - Virtual Education

### RESUMEN

El presente trabajo investigativo plantea las necesidades de las comunidades virtuales, desde el dominio de las tecnologías para el desarrollo de las competencias del estudiante, hasta cumplir con el compromiso de los estándares de calidad en educación, para generar bachilleres con capacidades de desempeño a fin de que puedan enfrentarse a un mundo laboral que exige la aplicación de herramientas informáticas. La estadística descriptiva permitió diagnosticar que la mayoría de estudiantes se conecta regularmente a las clases virtuales como apoyo pedagógico y refuerzo para cumplir con las

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\* Master in Informatics Education, Academic Vice Rector, Educational Unit "Guillermo Ordóñez Gómez", vicenocturnagog@gmail.com, margalesol\_mas@hotmail.com, <https://orcid.org/0000-0001-8692-202X>

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Page 31-44

actividades de las fichas educativas del Plan Aprendemos juntos en Casa. Los estudiantes que no pueden conectarse por falta de acceso al internet, reciben las fichas de forma presencial a fin de que se cumpla con lo dispuesto por el Ministerio de Educación.

**Palabras clave:** Educación Virtual – Metodología – Comunidad

## INTRODUCTION

The challenge of education in a digital era with an interdisciplinary approach, demands the change from the conventional school based on a single type of content to a new flexible curriculum that integrates the mastery of technological tools in a globalized world, these are used as learning strategies to achieve the development of a new scientific knowledge in order to make the student an innovative, creative, social and flexible professional to the great educational changes. (Solano, 2019, p.36).

The innovation of knowledge constitutes the development of faculties, abilities and capacities that allow the learner a superior learning with which he/she can develop in a society dominated by technology and access to sources of work that require cooperation, creativity and attitude to face the permanent changes of the labor world, which is currently competitive.

Schools, with digital platforms, have the option to make pedagogical processes more flexible for students through the articulation of web applications in order to continue with the educational service. (Sandoval, 2020, p. 1).

The current problem of the global pandemic, forced the Ministry of Education to take precautionary measures to safeguard the health of the entire educational community, implementing the plan "Let's learn together at home", forcing the education system to immerse itself in a new mode of study, synchronous and asynchronous virtuality has become a gap in education, Taking as a reference the UE "Guillermo Ordóñez Gómez", in a study conducted it is evident that 60% of regular education students connect through the zoom platform or teams, 35% by Whatsapp and 5% who do not connect and work with pedagogical cards, delivered physically in the IE or if applicable in their respective homes.

The Ministry of Education is in a constant monitoring of the faithful compliance with quality standards, for such reason the need of the Teacher regarding the application of a new methodology, in such a way that it can develop learning strategies based on the use of technological resources to meet the achievement of the proposed objectives in education. (Solano, 2019, p. 38).

Faced with the new educational scenarios, the challenge that most EI's face is to maintain virtual contact with students, so the digital illiteracy of teachers has contributed to reduce learning achievements in education.

However, perhaps the most significant effect that Web 2.0 has had is the transformation that it has generated in the roles and dynamics of the different actors involved in the training process, where the teacher goes from being the "possessor of knowledge" to being the "facilitator" of the training process, and the student goes from being an organism that stores information, to an active subject of his process, focused on developing communication skills, flexibility, argumentation of personal opinions, among others. (Figueredo, 2020, p. 146).

The importance of the development of meaningful learning, the good use of web 2.0 tools will provide the teacher with the necessary methodologies to induce the transformation of knowledge, promote the development of skills and attitudes so that the learner can get used to his own life project within a contemporary society. The direct beneficiaries are the teachers who will update their knowledge in the technological tools and the students who will sustain their knowledge under a new constructivist model.

The evolving technology of the 21st century requires continuous training in the mastery of web 2.0 tools, in this sense it is very important to be innovative to capture the attention of students and to be able to achieve the construction of meaningful learning that allows them to develop their language skills, the capabilities to function in a new society. (Solano, 2019, p. 40).

Virtual education currently plays a very important role in the educational process, guiding the student in the proper use of these resources will allow an optimal scientific training, the learner in the role of researcher will be characterized by constant self-training in the educational process.

Digital literacy "is a more complex process than mere training in the use of hardware and software" (Area, Moreira & Vidal, 2012, p. 25). An integrated and comprehensive model of digital literacy must develop different competency dimensions: instrumental, cognitive-intellectual, sociocommunicative, axiological and emotional. In order to develop these dimensions, skills for reading comprehension, written communication, autonomous learning and the use of Web 2.0 tools are essential for students to analyze and interpret information, communicate in writing using different tools and have the ability to learn by themselves. (Orozco, 2017, p. 147).

Transforming education is the duty of every teacher and fulfilling educational goals is an institutional obligation. The use of ICT in L2 teaching is currently a great challenge in the training of future teachers, as well as in the professional development of current teachers, because as interaction and collaborative learning paradigms emerge, the image of the teacher as a transmitter of knowledge becomes less valid (Elliot, 2009). In this

sense, participation in communities of practice (COP) is presented as a training and collaborative learning alternative that allows its members to generate and share knowledge on a specific topic. (Bedoya, 2018, p. 123).

Today's globalized world is subject to demands that entail structural changes, where learning in the management and application of technological resources is no longer a luxury but a necessity, therefore education in this digital era is indispensable, new learning requires scientific research based on the development of technical skills and the search for solutions to complex issues to efficiently impact the professional development of the learner.

Interactive virtual educational innovation provides the beneficiaries with a learning experience that goes beyond the acquisition of knowledge or specific skills, assuming the term innovation in a global way, which not only includes the traditional patents or development of hard technologies (Hard), but also encompasses its impact on the social and environmental, whatever its break in time and space or what presents its new quality, whether incremental or radical Suarez (2015) , as it offers a series of alternatives, ideas and initiatives to build and promote the schools of the XXI century, with a vision framed in the digital community, in line with today's society. (Cardoso, 2018, p.3)

The Ministry of Education in order to raise the levels of quality standards in each of the Educational Institutions, has implemented virtual platforms in order to meet the training needs of students, so that the teacher can develop learning strategies based on the use of technological resources to meet the achievement of student learning, For this reason, the virtual education adopted this year, due to the global confinement, allows fulfilling the educational purposes and adapting the teaching process to a system that requires technological tools to develop the essential skills necessary for the development of skills and competences of the student.

The teaching process requires organization and planning on the part of the educator, in this order of ideas, the planning of pedagogical activities requires thinking about the methodology and the most appropriate resources so that the programmatic contents can be developed in the students in an appropriate manner. (Sandoval, 2020, p. 3).

In this context, the proper use and application of ICT's plays a very important role in the educational process, allowing the teacher to create an innovative environment in order to induce the student towards a scientific training, transforming him/her into a researcher in order to build meaningful learning that promotes the development of skills and competencies to develop in a competitive society.

The contextual approach that allows virtual teaching of teacher availability at all times to provide information, solve queries or help solve problems, seems to provide students with greater self-confidence than in other teaching modalities, the same happens with the flexibility of schedules and the presentation of tasks, which facilitates that each

student can advance at their own pace, moving away from the learning environment the pressure and anxiety to meet deadlines and tasks. (Cardoso, 2018, p.7)

In this sense, digital tools constitute new spaces for knowledge management, where the student finds integrated sources of information he needs, accessing the full text of documents and virtual services, this friendly environment provides the required answers immediately, accessing the information that clears the doubts and guides the resolution of problems effectively, allowing a reliable scientific research.

Technological change is altering the way educators deliver subject matter content. The growth and widespread acceptance of the Internet has resulted in the creation of Virtual Learning Environments (VLEs) in teaching at any educational level. (Urdiales & Flores, 2020, p.1)

This virtual educational model requires the application of new methodologies and techniques to motivate students in their intellectual self-enrichment, in the self-discipline of study in order to develop intellectual abilities and skills that allow them to perform as integral professionals contributing significantly to the progress of their community.

Teachers are committed to the integral formation of young people responsible with society, the environment and good living, seeking continuous improvement in education, implementing learning standards of educational excellence, through the effective management of its resources for sustainable institutional development.

Communication tools are currently popular and easily accessible due to the great demand in the commercial market, assuming its use by society as a lifestyle, according to Perez et al, in his book "Educating in the digital age", states that: "the internet is an inexhaustible storehouse of information, a database, concepts and theories, an excellent and lively library available to everyone" (2012, p. 59). This statement leads to the world of Web 2.0 and the incorporation of these resources for the interconnection of learners and meaningful learning, allowing interaction in the classroom contributing with the achievement of the objectives set out in the skills to be developed under the scheme of the professional profile. (Solano, 2017, p. 25).

The growth and spread of Information and Communication Technologies (ICTs) has developed a massive interest in how computers, other devices and internet tools can benefit and enhance educational processes and encourage the use of technology in the classroom (Rahmany et al., 2014). One resource offered by ICTs are Virtual Learning Environments (VLEs) also known as Online Learning Platforms (OLP), Learning Management System (LMS), or Learning Course System (LCS). The different denominations can have specific utilities depending on the purpose of study. (Urdiales & Flores, 2020, p.1)

For this reason, new technologies allow access to all information through virtual platforms for the self-education of a young person or adolescent, the inexhaustible store

of information leads the student in the development of perceptive, associative and reactive skills to various events presented in pages linked to each other, a world full of information whose access allows the teacher to interact in an innovative environment, capture their attention and improve their collective expression through the development of their own talents.

In order to develop the skills required in each of the competency dimensions of digital literacy, it is necessary to consider, first of all, the scarce cognitive skills and structural knowledge with which students enter the university level. Backhoff and Tirado (1993) conducted an investigation at the Autonomous University of Baja California (UABC), where they used the Examination of Basic Skills and Knowledge (EXHCOBA) as an instrument. They evaluated structural concepts and cognitive skills and distributed the items in three sections: basic skills (elementary level), basic knowledge (secondary level) and basic knowledge for specialty (high school level). (Orozco, 2017, p.7)

The use of virtual platforms, are accesses that will admit the link between the technological world and the student. The digital tools will be the didactic resource that will allow the young and adolescent to become the own architect of the development of knowledge and understanding, creating a technological bridge that will lead the learner to be the precursor of his mental abilities.

The information age in which we live is characterized by the accelerated and exponential pace of production and consumption of fragmented knowledge, digital technologies have created a new scenario for thinking, learning and communication, have changed the nature of the tools available for thinking, acting and expressing oneself". (Gómez, 2012, p. 61). For such reason the internet shows a window into the digital world, a medium so powerful that it configures and shapes what is visualized, what one wants to do and what one plans to create, this process can be considered a space for interpretation and for action, a platform for the exchange of information and active communication. (Solano, 2017, p. 25), to create this information bridge, the incursion of new technologies in everyday contexts has made them present in the different spheres of society. According to the report presented by UNESCO in 2015 on the strategic approach to ICT in education in Latin America and the Caribbean, it demands that the educational system, in the countries of the region, requires an update of educational practices as well as contents, which should be in line with the advances of the new knowledge society. (Sandoval, 2020, p. 2).

The student can access these tools through various electronic devices and at any time, so it is essential that the teacher can induce the proper use of these technological resources and above all that they can master them. Teachers obtain better results in an interactive class based on the application of multimedia tools, than with a traditional class, because the student can interact with others and thus develop a collaborative work and strengthen their knowledge. (Solano, 2017, p. 21).

In this context, there are different technological tools that allow the learner to interact with their environment, the proper education in the management of different applications that are constantly updated, will lead to the acquisition of new learning that will allow access to these tools, achieving the development of cognitive skills of the student and the goals set in education.

It is important to highlight that the irruption of ICTs in school contexts highlights the importance of a new definition of roles, especially for students and educators. The former, thanks to these new tools, can acquire greater autonomy and responsibility in the learning process, which forces the educator to leave his classic role as the only source of knowledge. Lugo (2010) states that "this generates uncertainties, tensions and fears; a reality that forces a creative readjustment in school institutions". Therefore, for the new virtual modality in education, the educator must not only be able to apply technologies to the service of education, but must also have the skills and abilities to design new educational scenarios where students can learn to move and participate in the telematic space (Echeverría, 2000),

From the teaching point of view, one of the main causes of the success of a professional is quality education, in the XXI century we must know the new technologies, learning is no longer repetitive, it is based on the construction of knowledge, through the use of digital tools the student will have access to a wide collection of information that will allow him to master the web 2.0 tools, for this reason access to this information is essential.

In the new scenario for schools, the guidelines about virtuality, we must keep in mind a new variable in the teaching-learning process, the computer screen or mobile device, teachers are forced to modify their way of working towards an encounter with the new technological rules, becoming the organizer between students and objects of knowledge, permanently stimulating initiative and active learning with creation, communication and participation mediated by the articulation of ICT tools, as mentioned by Paba-Medina, et al (2020) "the expectations in the use of ICT to improve the training process are very high and the reality has fallen very short" (p. 17).

The educational system, through the new curricular proposal, admits a productive change in the educational community, through the adequate use of technological resources, even more so in a digital era where education implies mastering information and communication technologies; this same system intends to encourage the application and use of different strategic programs that generate productive changes in the curriculum.

The Ministry of Education has implemented the Educational Plan "Let's Learn Together at Home" in order to provide continuity to the educational process that allows the development of basic skills essential to qualitatively and quantitatively record the achievement of learning and progress in the comprehensive development of students.

This plan has, among other resources, pedagogical cards of Learning Experiences for children of Initial Education and Preparatory General Basic Education; in addition to pedagogical cards of projects for students of Elementary General Basic Education, Middle School, High School and Bacalaureate.

The activities proposed in the pedagogical cards are designed to work with the support of the family and in an autonomous manner; they are diverse and are designed to find solutions to everyday situations in order to recognize and value the student's potential as an individual and as an actor within groups and work teams.

The Educational Unit "Guillermo Ordóñez Gómez", has carried out the educational plan "We learn together at home" which is based on an educational strategy to meet the challenges of education in emergency contexts, for which in this period has been designed a Prioritized Curriculum by sub-levels. This curriculum is characterized by promoting an autonomous teaching-learning process, which is developed in a face-to-face or blended learning manner and is applicable to the diverse educational offerings and learning needs, according to the contexts of the community.

In accordance with the above, it can be said that it is perhaps myths, prejudices and high expectations that may be the most damaging to "virtual", open and distance education, conceived exclusively as school-based and face-to-face education, both in our country and abroad. While it is true that this offers a wealth of opportunities not only for education, but for other types of activities (interaction, informative, recreational, etc.), it is also true that the so-called Information and Communication Technologies (ICT) and the Internet have transformed human relationships, cognitions, customs and habits, generating both positions for and against the benefits and paradigm shifts towards the virtuality of education and, therefore, towards virtual education. (Göller, 2013, p. 7).

Under the pedagogical and cognitive aspect of "virtual", open and distance education, and the irruption of the acclaimed "competencies", "meaningful learning", etc., hand in hand with the process of globalization, the dialectic undertaken by those in favor and those against it, turns, in the first place, on the question of whether or not surfing is learning. The same applies to the question of whether or not interactivity on the Internet generates learning. This is followed by the dilemma of whether searching for information on the Internet is easy or not so easy. Then we come up against the question of whether the school or institution with the Internet is modern or remains the same. Next comes the question of whether communicating online results in better human communication. Then we move on to bigger issues, such as whether the hypermediality of the internet, i.e. its non-linearity, favors learning processes. (Göller, 2013, p. 9)

Given the reality of our educational system, where technological tools support virtual education as an active methodology that takes into account diversity and the access of all to education as fundamental principles of this task. Virtuality is applied as a strategy of pedagogical accompaniment by teachers. The activities and participation proposed by

teachers focus on the development of reading and writing, the different possibilities of expression and communication, mathematical thinking skills, rational and critical thinking, individual and cooperative work, life skills, values formation and emotional support.

## **MATERIALS AND METHODS**

Faced with the reality of the current educational system due to the health emergency, it is necessary to seek a balance between the teaching-learning processes, the current context and the reality of the students in the educational institutions. In order to carry out this research, descriptive statistics were used for the analysis of quantitative data, as well as to describe the different results with their respective statistical analysis and qualitative interpretations, in order to determine the essence of the cause or effect phenomenon supported by the results obtained. To reinforce the results of the statistical analysis, the following methodology is proposed:

In the development of participatory methodologies, it always starts from the context and the experience of the participants, providing a space for reflection and creative analysis of reality. The methodological principle is participation. For this it is necessary to achieve communication and direct consensus with the educational community and civil society actors.

## **RESULTS**

In the current context, educational activities at the Guillermo Ordóñez Gómez Educational Unit have been affected by the COVID-19 pandemic. From the data provided by the teachers of the institution, it can be affirmed that 15% of the students of the institution do not participate in the educational activities (withdrawn), although not in all cases parents have informed that they withdraw their children from the educational process. Some 5% of the students do not log on and 80% of the students log on (not all of them on a regular basis) and participate in the educational process.

Of the group of students who are presumed to have withdrawn (15%), it was determined that 17% do not enroll due to illness (COVID-19), marriage, change of institution. 17% are studying in the next higher year. 17% are studying in the next higher year. 33% withdrew from the group or did not connect. And 33% do not take evaluations for the 2019-2020 school year.

Of the group of students who are connected (80%), 56% of the students tend to connect constantly or permanently and 44% do so occasionally. These data show that the educational process has been maintained and will be maintained, providing the best alternatives to comply with the LOEI.

Students who connect occasionally have a variety of factors, including: unemployed parents, parents hospitalized for COVID-19, health problems of various family members, families who do not have a phone or internet (neighbors lend them phone and internet). Of the group of students who are connected (80%), 75% have no problem in the delivery and presentation of their activities, but 25% have problems in the delivery of their

activities, the representatives allege that the lack of knowledge of the operation of the computer tools complicated compliance.

Most students connect to virtual classes, it can be affirmed that science, as a model of interpretation of reality, allows to form more critical, reflective and responsible human beings; capable of understanding and questioning the world around them, thanks to virtual platforms, it is intended to educate the student towards a digital culture, the proper use of websites will allow a creative learning that involves the dual process of assimilation and training, through discovery and cognitive, procedural, attitudinal, social and metacognitive reconstruction of knowledge.

Given the need to interact in the new virtual communities, it is intended that teachers achieve mastery of technological tools as methodological strategies so that they can use these resources as a means to achieve their objectives and develop the planned skills, in order to improve the student's teaching-learning; taking into account that teachers will be the successful mentors in the development of the textual communicative approach and the learning routes that will be used as a reference guide.

Mastering and interacting with web 2.0 tools presents a new approach to learning, meeting expectations in a new scenario of relatively easy, immediate, generalized and inexpensive knowledge, where collaborative work networks that share interests, information and development projects are encouraged, in order to meet the needs of a diverse and complex community.

The changes generated in each process have allowed that in just fractions of seconds millions of data can be obtained from a computer, as well as a video call that can allow interaction with family, friends to share experiences and keep us informed, in these times of confinement by the Covid-19 pandemic, has become a fundamental tool for effective communication between virtual communities and is the only means that allowed us as individuals to consolidate the bonds of friendship and solidarity among family members. The commitment of the Educational Institutions is to generate competent high school graduates, with performance capabilities, so that they can face a working world that requires the application of computer tools, this leads to the continuous training of teachers so that they are the true trainers of children, youth and adolescents in all educational areas.

## **DISCUSSION**

The research problem is that virtuality in times of pandemic has not achieved the objectives of institutions that are free education with quality and warmth, since there are a thousand students at the country level who do not have internet to access virtual classes which leads to a dropout rate evidenced in studies conducted in educational institutions as indicated by the Minister of Telecommunications Andres Michelena, with these results there is evidence of a digital divide in the education system since many teachers were not trained to take on this digital challenge.

In this context it can be said that the educational community was not prepared for the technological evolution, despite the efforts made by the Government in terms of teacher

training, access to the topics of the projects that are transmitted on television and radio, many students have dropped out, and of the number of students who are connected very few attend and understand the contents programmed for the proposed objectives. The current scenario regarding virtual education is not promising, since due to the lack of connectivity, quality standards have not been met. For this reason, the present study allows promoting virtual education as a fundamental axis for the formation of human beings; members of the educational community must be trained in order to crystallize the educational objectives and break the paradigms in digital technology. The need for permanent feedback is evident so that the levels of knowledge can consolidate the learning required by the students.

## CONCLUSIONS

Educational Institutions base their principles on collaborative and participatory work and integrate all members of the Educational Community in the different learning processes. For this reason, and in accordance with the laws implemented by the Ministry of Education that allow the creation of environments of participatory coexistence without discrimination of race or society, an Educational Project model has been reconstructed to provide the student with a quality and warm education, prevailing the different values that forge the culture of young people and adolescents.

The student can access these tools through various electronic devices and at any time, so it is essential that the teacher can induce the proper use of these technological resources and above all that they can master them. Teachers obtain better results in an interactive class based on the application of multimedia tools, than with a traditional class, because the student can interact with others and thus develop a collaborative work and strengthen their knowledge. For this reason, it is necessary to establish strategies and activities that guarantee educational quality in the provision of educational services to families that do not accept the attendance of students in educational facilities; The Plan Aprendemos juntos en Casa (Let's learn together at home), the reflection among teachers on the adaptation, flexibilization and curricular prioritization for the organization of priority learning on the application of the curriculum in the educational emergency; as well as for the student evaluation; allows the balance, evaluation and planning of the actions of accompaniment and teacher tutoring for the work at home of the students.

The methodological strategies that teachers must apply to establish contact, communication, permanence and active search of all the students of the educational establishment, in order to know their needs and commit them and their families to remain in the educational system, entail making continuous phone calls and in extreme cases mobilization to the student's home in order to comply with the teacher's work.

## REFERENCES

Solano, M. D. L. (2017). Incidencia de los recursos tecnológicos en el razonamiento lógico y expresión lingüística de los estudiantes de la unidad educativa Santa Elena

- (Master's thesis, Universidad de Guayaquil Facultad de Filosofía, Letras y Ciencias de la Educación).  
<http://repositorio.ug.edu.ec/bitstream/redug/25370/1/ALEJANDRO%20SOLANO.pdf>
- Bedoya, J., Betancourt, M., Villa, F. (2018) Creation of a community of practice for the training of teachers in the integration of ICT to foreign language learning and teaching processes. *Íkala, journal of language and culture*. 23 (1), 121-139  
<https://www.redalyc.org/articulo.oa?id=255055383009>.
- Boude, O., Sarmiento, J. (2016) Web 2.0 tools: effect on Colombian youth learning. *Opción*. 32 (11), 143-163 <https://www.redalyc.org/articulo.oa?id=31048902010>.
- Göller, R. (2013). Virtual education or virtuality of education. *Revista Historia De La Educación Latinoamericana*, 14(19).  
[https://revistas.uptc.edu.co/index.php/historia\\_educacion\\_latinoamericana/article/view/1989](https://revistas.uptc.edu.co/index.php/historia_educacion_latinoamericana/article/view/1989)
- Orozco S. (2017 )Self-perception of learning skills in virtual environments. *Journal of Educational Research*. (25), 144-167  
<https://www.redalyc.org/articulo.oa?id=283152311007>.
- Paba-Medina, M., Acosta-Medina, J., & Torres-Barreto, M. (2020). Prioritization of citizenship competencies in a gamified context. *Panorama*, 14(27), 51-72.  
doi:<http://dx.doi.org/10.15765/pnrm.v14i27.1522>.
- Pérez, C., Suárez, R., Rosillo, N. (2018) Interactive virtual education, the paradigm of the future. *Athens*. 4 (44), 144-157.  
<https://www.redalyc.org/articulo.oa?id=478055154009>.
- Sandoval, C. H. (2020). La Educación en Tiempo del Covid-19 Herramientas TIC: El Nuevo Rol Docente en el Fortalecimiento del Proceso Enseñanza Aprendizaje de las Prácticas Educativa Innovadoras. *Revista Tecnológica-Educativa Docentes 2.0*, 9(2), 24-31. <https://doi.org/10.37843/rted.v9i2.138>.
- Solano, A., & de Lourdes, M. (2019). Fostering the reading habit through the use of web 2.0 tools. *Revista Mamakuna*, 10(2), 25-45.  
<http://201.159.222.12:8080/bitstream/56000/473/1/Mamakuna%2010%20-20biblioteca%20-%205.pdf>
- Urdiales, J., Armijos, L., & Flores, D. (2020). Students of a secondary school in Southern Ecuador and a Virtual Learning Environment (VLE): Impact of its implementation. *Revista Andina De Educación*, 3(2), 5-9.  
<https://doi.org/10.32719/26312816.2020.3.2.1>.