# PalArch's Journal of Archaeology of Egypt / Egyptology

# EVALUATION METHODOLOGIES FROM A CONSTRUCTIVIST PERSPECTIVE

Karina Eliana Castro Intriago, Lubis Carmita Zambrano Montes

Pontificia Universidad Católica del Ecuador, Portoviejo, Manabí, Ecuador.

Karina Eliana Castro Intriago , Lubis Carmita Zambrano Montes , Evaluation Methodologies From A Constructivist Perspective , Palarch's Journal Of Archaeology Of Egypt/Egyptology 18(10), 1072-1082. ISSN 1567-214x.

Keywords: Authentic evaluation; constructivist model, participatory methodologies; academic performance.

# **Abstract**

Evaluation methodologies constitute the fundamental pillar in the process of teaching-learning, being the beneficiaries of this interaction the teacher and student. The main objective of this article is to identify the evaluation methodologies applied from a constructivist perspective, emphasizing the different types of evaluation that are closely related to each other. The results obtained from the analysis are presented by means of a documentary bibliographic review that compiled the necessary information and allowed the analysis and deduction of clear and pertinent criteria on the importance of knowing how to evaluate the student in the educational context in order to develop an objective and fair academic performance, qualitatively and quantitatively and their corresponding feedback. The results showed that by executing an authentic and performance evaluation, with correct decision-making, favorable results will be obtained in the actors immersed in the student training process.

#### Introduction

The student's learning has a socio-emotional impact on the development of his life and the people around him, helps to locate and understand social problems, create full awareness of an inclusive society with charitable actions in a responsible and balanced way; Possessing essential knowledge for life depends on the knowledge construction process and the applied evaluative practices.

Lack of knowledge of evaluation strategies generates insufficiencies in the student training process where it is necessary to act based on the results of the process for the purpose of continuous improvement. In these circumstances, it is necessary to apply various evaluative

styles, both qualitative and quantitative that respond to the needs of the group and where the innovative capacity of the teacher to adapt his class to the classroom context is evidenced.

The educational dimensions and standards are in context in the correct evaluation practices and their innovations, which seek to give the student learning for life. The evaluative methodologies are created in order to give a systematized order to the knowledge acquired in the regular process of continuing education.

At a global level, educational quality is focused on improving evaluation processes, which are applied according to the context where the educational event occurs and is executed in each country supported by their respective education laws and that empower the teacher to carry out standardized evaluations to demonstrate the significant learning achieved by their students.

The advancement of education by competencies in the 21st century, manages to register a great change in evaluation techniques and globally influence the teaching of interdisciplinary areas, development of skills and achievements to be achieved by educational levels, with a high level of importance in the application of formative evaluations (Gómez, Miralles, & Chapman, 2017).

At the regional level, it can be seen that there is great similarity in the types of diagnostics, formative and summative evaluation, they indicate that these same methodologies are those that demonstrate the learning achievements established in the general education laws, which seek optimal standards in the system quality assurance (Zambrano, 2014).

The evaluative reality in Chile is supported by existing learning theories, having as a precedent the foundations of the philosophical foundations of education with an approach that makes rethinking the positions and techniques when teaching the class and inferring knowledge in the classroom. student, generates a practical diversity in evaluation techniques (Zapata, 2012).

The evaluation system in Colombia has had significant reforms that consolidate its practices, the advice it has from international organizations has an economic, cultural, and technological scope that orients the educational needs of the country and influences its efficiency and improvement (Ramírez &Orrego, 2012).

The levels of educational standards are similar, different types of evaluations and optimal resources are applied as learning tools that help to estimate the student's knowledge acquisition process and the teacher's capacity when reflecting on their content transmission-evaluation strategies (Zambrano, 2014).

Teachers apply different types of evaluations to measure the degree of understanding by the student within the classroom, over the years these techniques have evolved not only with the purpose of locating a grade, but also with the purpose of improving the quality of the knowledge acquired by the student in the process of assimilation of content, the teacher depends on innovating these educational practices, adapting the class, as well as its different evaluative methods, proposing correct strategies supported by the epistemological, disciplinary and pedagogical foundations of the national curriculum (Fuentes &Collado, 2019), where the main objective is framed by the question of how knowledge is built, transmitted and evaluated (Ministry of Education, 2016).

When observing the current educational curriculum, its contents are flexible, they are dynamically innovated in the teaching-learning process, it implies an affirmative change in

the student's behavior by having an inferential content acquisition when verifying its results, through what people speak, write or practice (Schunk, 2012).

The ability to reinvent yourself as a teacher and reuse techniques, opens a range of possibilities in content orientation. The evaluation methodologies when applied under certain parameters benefit the educational community in general, obtaining as a result a suitable student capable of assimilating and internalizing the contents and applying them to daily life.

#### Materials and methods

The research used is qualitative, it induces and analyzes the multiple approaches from a constructivist reality of how evaluative methodologies are applied, this research provides concrete analyzes in a correct way on the context of reality with exact contributions and conclusions (Hernández, Fernández, & Baptista, 2014). It is descriptive, open, and flexible, with an inductive logic from the particular to the general, where the information collected on the correct evaluation methodologies is analyzed. The bibliographic review was used, supported by the nature of the documents reviewed, such as texts, journals, articles, among others, which aims to progressively provide a synthetic analytical induction of the theory as a focus on how to evaluate.

# Analysis and discussion of the results

# Authentic evaluation of learning

The evaluation of student learning is linked to the daily participation in the classroom, observing, analyzing, and qualifying the real and authentic situations fostered in the interaction of the teaching-learning process, obtaining A significant result on the part of the student, it can be affirmed that this method is directly linked to formative evaluations, although in its orientation it has techniques for its own application (Villarroel& Bruna, 2019).

Authentic evaluation is considered an essential part of the teacher-student interaction, it favors the cognitive development of the student as they function in their daily environment, demonstrating their capacities, skills and mastery of the subject evaluated. The student must not only know the subject but its function, execution or application, the degree of response according to what was evaluated, activate their knowledge at the right time and with clear and precise ideas according to what is requested by the teacher and the way it is taught chair (Monereo, 2003).

In addition to this, there are currently trends to apply authentic evaluation that can be detailed as follows:

- Evaluation of student performance on a specific task.
- Situated or contextualized evaluation involves the form of time and space where it occurs.
- Developmental assessment focused on complete holistic student advancement.
- Dynamic and socio-cultural evaluation considering the potential of the student.

Both the teaching techniques of the teacher and those of the student are the main part to be considered in an authentic evaluation. It is recommended to take into consideration certain parameters when applying this evaluation, taking as an initial reference those presented by CarlesMonereo in 2003 in the evaluation of strategic knowledge through authentic tasks below, they are presented in table 1.

**Table 1.** parameters for evaluating a teaching sequence

# List of parameters

Sense of relevance about what must be learned and why it is necessary to learn it.

The student has the main role of their learning and of the socio-cognitive processes that the resolution of the specified task entails.

Activation of reflective critical thinking.

Capacity and mastery of strategies and processes put into practice when their use is necessary.

Sourse: (Monereo, 2003).

All these evaluation processes are joined by three main questions: what to evaluate, when to evaluate and how to evaluate? that when working together they grant the necessary degree of a correct learning evaluation (González, 2001).

#### What to evaluate?

It is essential to answer this question about the evaluation and how it is carried out, there is a functional nexus between learning and evaluation, because both are limited to what students assimilate, describe, and do, generate a change in development, act, people's skills, knowledge, and beliefs (Schunk, 2012).

This moment of what to evaluate should be used to assess the knowledge acquired by the student, their degree of understanding and application of the contents obtained, as well as their capacity for analysis and synthesis, the competences, skills, and values must also be considered developed throughout learning, having a specific evaluation with clear objective judgments according to the reality of the students and according to the indicators and standards planned for the class being taught, is the exact moment of greatest relevance to the teacher, Assessing the content assimilated in the student, issuing a criterion and assigning a grade according to the content that satisfies the parties involved in the educational community is complex if the contents of the subject taught were not clear and properly internalized (Tebar, 2010).

Evaluate together and clearly the behaviors, signals or expressions mentioned above, according to the subject or area of knowledge that describe or show the knowledge or do of the student with respect to the evaluation criteria and indicators respectively, it is necessary to detail that the planning of a class to comply with the predisposed and established parameters must be aligned with the contents selected and established in the Ecuadorian education curriculum, there must be the choice of correct topics and knowledge, ordered systematized and chained in sequence with current and innovative learning theories, techniques and models (Ferreyra, 2018).

# How to evaluate?

The application of the types of evaluation fulfills a main and fundamental role, it is linked to the content assimilated according to the established quality indicators, the purpose and the educational type, as well as the objectives imparted, to that is added the methods, techniques and Resources used in the context of class planning, which can be informal, such as observation, semi-formal, such as oral or written exercises, lessons, group work, debates, among others, and those of a formal nature, which are structured evaluations and that are carried out on stipulated and planned dates such as the beginning or closing of a school year (Gonzalez, Hernandez, & Hernandez, 2007).

Complying with an evaluation methodology must be executed in a comprehensive and complete way, it can be executed in different ways, these techniques are those that add a degree of immediate response to the question posed, how to evaluate, quantifiable and measurable improvements in knowledge are obtained of the student, the practical explanation of these techniques is presented in figure 1 (Basurto-Mendoza, Moreira-Cedeño, Velásquez-Espinales, & Rodríguez-Gámez, 2021).

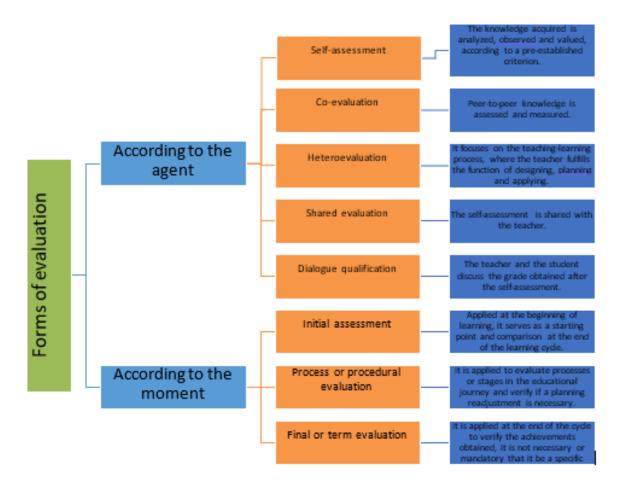
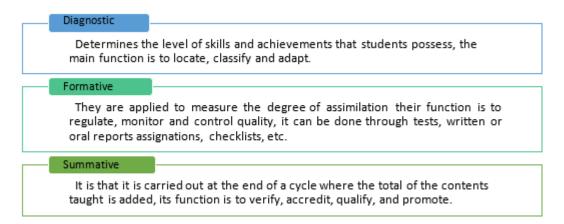


Figure 1. Forms of Evaluations

#### When to evaluate?

The ways of evaluating work in conjunction with the objectives set by the Ministry of Education in Ecuador that has created the Standards of Educational Quality and constitute the achievements that a student is expected to achieve according to their level or category of applied studies in conjunction with the types of evaluation approved by the same that seek the maximum objective in the student's teaching-learning process, these three great moments that define this level of concretion are the diagnostic, formative and summative evaluation, presented in figure 2 (Ministry of Education, 2016).



**Figure 2.** Types of Evaluations

All these evaluative processes can be applied in the context of a class day, they manage to establish solid bases in the acquisition of student content, develop critical-reflective, cognitive, holistic capacities and give people a future where they are able to function in their professional environment completely (Drago, 2017).

#### **Performance**

evaluation Authentic evaluation is the most practical and concrete way to grant credit to the student, when starting or presenting a certain assignment or task, this performance evaluation focuses on the Competency-Based Educational Model (MEBC), where the finished product is rated or valued by the student, allowing the teacher to be an observer, provide feedback and rate on the process developed and the skills acquired and / or used (EduTrends, 2016).

Competency education has taken on prominence since the last decades, it is one of the qualified advances and important for its efficiency and effectiveness since it regulates, regulates, and orders the student's learning process in a natural way, taking into account certain criteria to evaluate in a clear, pertinent and objective way (Martínez & Gallardo, 2018).

In this type of evaluation, it is immersed in the controlled follow-up of the step by step that the student applies when developing a task, the behavior used by this in the assignment process is analyzed and observed, the result is that the student is expected to demonstrate their accumulation of skills and abilities acquired clearly showing the evaluation process and the purpose for which it is executed (Educación, 2016).

# **Evaluation for decision-making**

The evaluation processes with technical criteria must be systematized, since they provide clear benefits with technical rigors that control and supervise at the time of decision-making within the teaching-learning process. Often the evaluation process focuses only on the measurable quantification, processing and interpretation of the data obtained, being a repetitive error, the evaluations must be accompanied by a reflection, orientation and guidance that allow making correct decisions that contribute to the objectives and proposed goals of education.

The evaluation becomes formative in nature when, when executing the decision-making, the proposed objective is implicit about what should be improved or redirected in the teaching-learning process, or in turn focus on feedback. These are intended not only to improve

student learning, but also to improve the teaching process itself and restructure the techniques applied by the teacher to the learner.

It is important to emphasize that, not only is the teacher who makes the final decision, on certain occasions some actors interact, those who implement and execute the entire process from the beginning to the end must participate, evaluating the decisions made allow feedback and correct errors in the evaluations carried out if it exists (Gallardo, et al., 2012).

#### **Constructivist evaluation**

Analyzing methodologies from a constructivist approach implies that first it is known that learning happens with the construction and modification of the knowledge, ability, virtue and behavior of all people, different social, cognitive, linguistic, and motor skills are learned (Schunk, 2012), these are developed throughout the student's life. Relate learning with theoretical methodologies and their educational approach are a basic point that enriches the teacher's evaluative practices, they have built a varied theme in this process, guided by their practice, a clear and concrete point of view is obtained on the options when measuring, evaluating, and qualifying quantitatively and qualitatively.

Constructivism as an evaluation method is focused on the reflective areas of the human being is the capacity for interaction and analysis obtaining significant learning with previous experiences and the new knowledge acquired and forms a permanent circle of social growth (Schunk, 2012). To evaluate the interaction and active analysis of the work groups in the process of transferring information between the teacher and the student, the exchange value of the same between the actors is measured, when working in cooperative learning it is possible to develop sociable beings, responsible, committed to the coexistence of the society in which they operate (Bustamante, 2017).

Generating a proactive participation in the teaching-learning process, collaboration in the exchange of knowledge, measuring the degree of perception - emotion transmitted by the student are part of the processes that are evaluated from a constructivist approach, where the important thing is the active role that the student plays in the assimilation of content.

From Piaget's point of view, the autonomous construction of knowledge should be measured by modifying and accommodating cognitive structures that starts from assimilating, accommodating and transforming information in the metacognition process, an essential content is explained and proceeds to the reorganization of the learning experiences transmitted, the capacity for analysis and critical thinking is valued, as well as the discrimination of the contents, being this domain the one that influences the future, in the ability to make decisions about aspects of life, clearly evaluates this process of restructuring, transforming and converting into its own, it uses co-evaluations and self-evaluations to measure interpersonal-group skills such as leadership, responsibility, cooperation and communication (Jaramillo &Simbaña, 2014).

Vygotsky's sociocultural constructivist approach analyzes the ability to acquire knowledge through the importance of the environment as part of the student's development, generates psychological processes, modifies thought, language, his degree of perception, attention and memory, the teacher when evaluating These competences must verify the ability to elaborate concepts based on their self-regulation of information, the attention and adaptation that this has, applying checklists with a series of formulations that establish the parameters and criteria to be used based on the essential contents, assertive, logical, creative, proactive communication, the degree of commitment to work. How the student acquires his knowledge,

and his interests must be respected, his way of presenting content must be clear and with a logical sequence (Bermúdez& Mendoza, 2008).

Bruner and his proposal for learning through problem solving, evaluates the student's ability to create cooperative situations where they can provide immediate solutions to the problems raised, provides knowledge by discovery, this method can be pigeonholed within innovative theories and vanguard that are currently used, this educational practice unifies all the actors of the educational community (Arias, 2018), which seeks changes and improvements to the current context in the application of its different methods such as Problem-Based Learning (ABP), Challenge Based Learning (ABR), Inverted Classroom, Gamification among others (Pérez, Fernández, & Martinez, 2014).

These innovative techniques evaluate the level of anticipation, adaptation, and participation that the student proposes when involving them in complex situations where they are the protagonists and the teacher guide. By working collaboratively in groups, they enhance knowledge for equality by making learning clear, correct and effective, the application of ABP and ABR, certain main moments are qualified (Aguilera, Manzano, Martínez, Lozano, &Casiano, 2017), where the student works in groups, has its own autonomy, is induced to be a participant, to observe, learn and critically and constructively discuss real solutions for the situations presented by the teacher who is a content facilitator; On the other hand, applying self-evaluations or peer evaluations encourages the evaluation of acquired learning, interpersonal relationships and improves critical thinking, among others (Marrero, 2019).

The application and evaluation of the flipped classroom or also known as flipped classroom, allows the student to assume an active role, promotes autonomous learning and critical thinking, achieves time savings and the use of tools such as educational videos or educational platforms, by present the teacher before class the resources to use, the evaluation process is carried out from the beginning of the class time with the validation of content proposed by the students within it, the method to be used to evaluate skills is a checklist (Aguilera Ruiz, Manzano León, Martínez Moreno, Lozano Segura, &CasianoYanicelli, 2017).

Gamification, being an innovative technique, the student through a video game that is closely related to the subject that is taught, be it roles or some other type of interactivity, the requirement to advance from the stage leads to solve the enigmas presented in Each phase of the game, the progress of the game is evaluated, a log of the achievements in the different scenarios achieved can be verified, as well as a brief summary of what happened within this, measurable with a very practical and consistent checklist for these innovative methodologies of teaching (Rodríguez Domenech & Gutiérrez Ruiz, 2016).

This type of innovative technique must be used under certain conditions to achieve the proposed objectives, the correct games must be proposed that help the capacity for concentration and content abstraction because it helps to modify neurons due to the interactive influence that it generates according to current digital skills (Meneses, Moya, & Rodríguez, 2020).

### **Conclusions**

The evaluation methodologies allow to guide the teacher in the practice of evaluation, in turn they grant the degree of importance required in the process of assimilation of content by the student, by applying different techniques or innovating positive changes to the existing ones. evidence that the proper use of them guides the student to their full cognitive development because they provide clear and relevant parameters at the time of their application.

It can be affirmed that the different ways of evaluating can be applied and executed to the student as long as there is a clear decision-making on the methods, techniques and instruments to be used, the impact they generate will depend on the choice of activities on which to focus the teacher to assess both the quantitative and qualitative.

It is concluded that constructivist methodologies generate an accelerated evolution in terms of the known culture about evaluations and that both the teacher and the student face new strategies to achieve successful changes when applying and promoting evaluation systems.

#### References

- Aguilera, C., Manzano, A., Martínez, I., Lozano, M. d., & Casiano, C. (2017). The flipped classroom models. International Journal of Educational and Developmental Psychology, 4(1), 261-266. Retrieved from https://www.redalyc.org/articulo.oa?id=349853537027
- Arias, WR (2018). Educational innovation an instrument of development. Obtained from https://nanopdf.com/download/la-innovacion-educativa-un-instrumento-de\_pdf
- Basurto-Mendoza, S., Moreira-Cedeño, J., Velásquez-Espinales, A., & Rodríguez-Gámez, M. (2021). Self-evaluation, Co-evaluation and Hetero-evaluation as an innovative approach in pedagogical practice and its effect on the teaching-learning process. Knowledge Pole, 6(3), 828-845. doi: http://dx.doi.org/10.23857/pc.v6i3.2408
- Bermúdez, M., & Mendoza, A. (2008). Teacher evaluation in Montessori pedagogy: proposal of an instrument. Scielo, 11(1), 227-252. Obtained from http://www.scielo.org.co/pdf/eded/v11n1/v11n1a13.pdf
- Bustamante, J. (May 2017). Cooperative learning: An essential competence in Higher Education. Scielo, 2(1), 26-35. Obtained from http://www.scielo.org.bo/scielo.php?pid=S2518-82832017000100003&script=sci\_arttext
- Drago, C. (2017). Teaching support manual. Assessment for learning. 108. Chile: Central University of Chile. Obtained from www.ucentral.cl
- $Education, \quad M. \quad d. \quad (2016). \quad National \quad Evaluation \quad System. \quad Obtained \quad from \\ \quad https://educacion.gob.ec/desempeno-del-estudiante/$
- EduTrends, O. d. (October 27, 2016). Eduteka. Monterrey. Obtained from http://eduteka.icesi.edu.co/articulos/edutrends-evaluacion-desempeno
- Ferreyra, HA (2018). Secondary school: curriculum, knowledge and practices in context. Sophia, 14(1), 1-11. Retrieved from https://www.redalyc.org/articulo.oa?id=413755833008
- Fuentes, A., &Collado, J. (2019). Transdisciplinary epistemological foundations of education and neuroscience. Sophia, Collection of Philosophy of Education(26), 83-113. Retrieved from https://www.redalyc.org/articulo.oa?id=441857903002
- Gallardo, K., María, G., Baltazar, D., García, E., Lázaro, R., & Ocaña, L. (2012). Decision making for formative evaluation: The planning process and determination of its mechanisms. Synectics(39), 1-19. Retrieved from http://www.scielo.org.mx/scielo.php?script=sci\_arttext&pid=S1665-109X2012000200011
- Gómez, C., Miralles, P., & Chapman, A. (April 12, 2017). The evaluation procedures in the History class. A comparative analysis through the opinions of teachers in training in Spain and England. Interuniversity Electronic Journal of Teacher Training, 20(2), 45-62. Retrieved from https://revistas.um.es/reifop/article/view/284631

- Gonzalez, M., Hernandez, AI, & Hernandez, AI (2007). Constructivism in the evaluation of learning from linear algebra. Educere. Journal of, 11(36), 123-135. Retrieved from https://www.redalyc.org/articulo.oa?id=35617701016
- Hernández, R., Fernández, C., & Baptista, P. (2014). Research Methodology (Sixth ed.). México, México: McGRAW-HILL / INTERAMERICANA EDITORES, SA DE CV Obtained from http://www.intercambiosvirtuales.org/libros-manuales/roberto-hernandez-sampieri-metodologia-de-la-investigacion-6a-edicion#more- 78680
- Jaramillo, L., &Simbaña, V. (2014). Metacognition and its application in virtual tools from teaching practice. Sophia, Collection of Philosophy of Education(16), 299-313. Retrieved from https://www.redalyc.org/articulo.oa?id=441846097014
- Marrero, E. (2019). Project Oriented Learning in Art and Work. Educere, 23(76), 841-849. Retrieved from https://www.redalyc.org/articulo.oa?id=35660459012
- Martínez, A., & Gallardo, K. (2018). Performance Evaluation and Authenticity in the Secondary Competency Model: A Mixed Study. REICE. Ibero-American Journal on Quality, Efficacy and Change in Education, 16(3), 103-122. Retrieved from https://www.redalyc.org/journal/551/55160077006/html/
- Meneses, I., Moya, M., & Rodríguez, M. (2020). Influence of Videogames on Student Behavior. International Journal of Psychosocial Rehabilitation, 24(1), 1692-1703. Retrieved from https://www.psychosocial.com/article/PR200269/9553/
- Ministry of Education. (2016). Curriculum of Basic General Education and Unified General Baccalaureate for the area of Social Sciences. . Quito: National Educational Authority. Ministry of Education.
- Monereo, C. (2003). The evaluation of strategic knowledge through authentic tasks. Educational Thought Magazine(32), 71-89. Obtained from https://www.researchgate.net/publication/260877790\_La\_evaluacion\_del\_conocimien to\_estrategico\_a\_traves\_de\_tareas\_autenticas
- Pérez, C., Fernández, E., & Martinez, A. (2014). Dare to innovate recipes to design teaching innovation projects. Spain: Unite.
- Ramírez, T., &Orrego, G. (2012). Evolution of the external evaluation of students in Colombian basic education. Educational Itinerary. Journal of the Faculty of Education, 26(60), 27-54. Obtained from https://dialnet.unirioja.es/servlet/articulo?codigo=6280189
- Rodríguez Domenech, M. Á., & Gutiérrez Ruiz, D. (2016). Innovation in the Social Sciences classroom using video games. Ibero-American Journal of Education, 72(2), 181-200. Obtenido de https://dialnet.unirioja.es/servlet/articulo?codigo=5819091
- Schunk, D. (2012). Teorías del Aprendizaje. Una perspectiva educativa (Sexta ed.). México: Pearson. Obtenido de https://www.freelibros.me/libros/teorias-del-aprendizaje-una-perspectiva-educativa-6ta-edicion-dale-h-schunk
- Tebar, L. (2010). La evaluación de aprendizajes y competencias en el aula. Fides et Ratio Revista de Difusión cultural y científica de la Universidad La Salle en Bolivia, 4(4), 86-98. Obtenido de http://www.scielo.org.bo/scielo.php?script=sci\_arttext&pid=S2071-081X2010000100009&lng=es&tlng=es
- Villarroel, V., & Bruna, D. (2019). ¿Evaluamos lo que realmente importa? El desafío de la evaluación auténtica en educación superior. Calidad en la educación. Revista Calidad en la Educación(50), 492-509. Obtenido de https://www.scielo.cl/scielo.php?script=sci\_arttext&pid=S0718-45652019000100492
- Zambrano, A. (2014). Prácticas evaluativas para la mejora de la calidad del aprendizaje: Un estudio contextualizado en La Unión Chile. 314. Bellatera, Chile, Chile: Universidad

Autónoma de Barcelona. Obtenido de https://www.tdx.cat/bitstream/handle/10803/284147/azd1de1.pdf?sequence=1

Zapata, V. (de 2012). Prácticas evaluativas docentes y su influencia en el clima social escolar: Un estudio de caso en una escuela municipal rural de la comuna de Temuco. 154. Temuco, Chile, Chile: UNIVERSIDAD DE LA FRONTERA FACULTAD DE EDUCACIÓN Y HUMANIDADES. Obtenido de http://repositorio.conicyt.cl/bitstream/handle/10533/184367/ZAPATA\_VIVIANA\_26 56M.pdf?sequence=1