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Contents



Educational evaluation as an indispensable process for institutional and pedagogical improvement: Possibilities and limitations

La evaluación educativa como proceso indispensable para la mejora institucional y pedagógica: Posibilidades y limitaciones

THEMATIC EDITORS

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Editorial.....	161
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MONOGRAPHIC SECTION (SECCIÓN MONOGRÁFICA)

PEDRO CÉSAR MELLADO-MORENO, DR. PABLO SÁNCHEZ-ANTOLÍN Y DRA. MONTSERRAT BLANCO-GARCÍA	166
Trends in formative and summative student assessment in Web of Sciences <i>Tendencias de la evaluación formativa y sumativa del alumnado en Web of Sciences</i>	
DRA. ANA CAROLINA MALDONADO-FUENTES	180
Representation of evaluation at school: a professional social learning <i>Representación escolarizada de la evaluación: Un aprendizaje social profesional</i>	
DR. RUBÉN NANCLARES Y FLOR ÁNGELA TOBÓN-MARULANDA	194
Collaborative curriculum feedback, characterizing the resonances of student experiences <i>Retroalimentación colaborativa de currículo: Caracterizando las resonancias de las experiencias discentes</i>	
MATHEUS LIMA FROSSARD, RONILDO STIEG Y DR. WAGNER DOS SANTOS	205
Assessment practices in three physical education courses in South America <i>Prácticas evaluativas en tres cursos de educación física en Sudamérica</i>	
DR. TIBURCIO MORENO-OLIVOS	217
Changing evaluation: a must in times of uncertainty <i>Cambiar la evaluación: Un imperativo en tiempos de incertidumbre</i>	

MISCELLANEOUS SECTION (SECCIÓN MISCELÁNEA)

DRA. ANDREA CÍVICO-ARIZA, DR. ERNESTO COLOMO-MAGAÑA Y DRA. ERIKA GONZÁLEZ-GARCÍA.....	230
Analysis of values of adolescents in Salesian educational schools in southern Spain <i>Ánálisis de los valores de adolescentes en centros educativos salesianos del sur de España</i>	
DRA. SONIA MARÍA FERREIRA-KOEHLER, GEORGIANO JOAQUIM PEREIRA-ANTONIO DOS SANTOS Y CAIQUE FELIPE DE SOUZA-CORREA.....	243
Teenagers at school: reflection groups upon the practice of citizenship <i>Adolescentes en la escuela: grupos de reflexión para pensar en la práctica de la ciudadanía</i>	
VÍCTOR MONTRE-ÁGUILA Y JAVIERA ARANEDA-MACHMAR.....	255
Lexical repertoire of teachers on democracy, citizenship and human rights <i>Disponibilidad léxica de profesores sobre democracia, ciudadanía y derechos humanos</i>	
DRA. SILVIA-MARÍA CHIREAC Y DR. GALO RODRIGO GUERRERO-JIMÉNEZ	268
Value of Respect for Quichua Language and Culture: concept of <i>Sumak Kawsay</i> <i>Valor del respeto por la lengua y cultura quichua: concepto del Sumak Kawsay</i>	
RAISA MICHELLE GAVILANES CAPELO Y BORIS GENARO TIPÁN BARROS	279
Environmental education as a strategy to face climate change <i>La Educación Ambiental como estrategia para enfrentar el cambio climático</i>	
Publication Guidelines of «Alteridad».....	292
Normas de Publicación en «Alteridad»	302



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Evaluating knowledge continues being a subject of analysis, discussion and debate, as the social impact of its results has a significant impact on educational institutions, on the lives of students and even on the family. The close relationship between teaching, learning and evaluation implies that the conception and practice of the evaluation of learning will depend on the concept of the teaching-learning process assumed.

Editorial

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Evaluation is an essential scenario for generating useful information, enabling informed decisions to improve educational institutions and teaching and learning processes.

Human beings are constantly evaluating the value given to certain objects, acts or situations. However, it is necessary to systematize, develop criteria and adapt the evaluation processes, techniques and instruments in each of the situations to be evaluated, so that this information generates relevant and timely evidence that allows a decision-making that is more suitable to each context.

Traditionally, evaluation was seen as a rigid process, aimed at certifying knowledge or standards, unrelated to the reflection and participation of the groups involved. However, even though traditional assessment remains present, more and more evaluation experiences are developing, focused on the process and improvement and opened to the participation of all the actors involved.

In recent decades abundant literature about evaluation has been produced in different areas. Thus, the objective of this monograph of the Journal "Alteridad" is to contribute to the analysis and discussion of theoretical and practical aspects related to the institutional and pedagogical evaluation processes in Higher Education, as well as to share the possibilities and limitations of experiences developed in different contexts and under different theoretical approaches.

The first article of the **Monographic Section** "Trends in formative and summative student assessment in Web of Sciences", presents a literature review with the aim of collecting the scientific production of the last decade on formative evaluation, as a complex and social model, against the more operational and individual summative evaluation through the Web of Science database. The results yield a number of research on formative evaluation that is significantly higher than research on summative evaluation. It is also noted that the evaluation of students continues to be an object of current research.

Following this line, the study "Representation of evaluation at school: a professional social learning" explores the place of evaluation in initial teacher training, specifically with the intention of going beyond the traditional technical-instrumental approach. In this context, a qualitative research is presented, which deepens on the social representations of the evaluation in future and unexperienced teachers. The study concludes that representation on evaluation is dynamic and, to a large extent, is based on professional social self-learning, developed both in higher education and in educative institutions. It is inferred the incidence of different actors in school communities in teacher literacy on evaluation, replacing the underlying emotional dimension, while evaluation is directly linked to consequences derived from the authority role of the teacher in the classroom.

For their part, the authors of the article “Collaborative curriculum feedback, characterizing the resonances of student experiences” address the need for university institutions to consider the participation of students in the development of their improvement processes. It is a qualitative research with a phenomenological point of view, and it uses the field diary and focus groups for generating information. At the same time, it expresses the value of the different experiences, understood as co-authors of the training developed in these institutions, for adjusting the proposals of the curricular components and improving the quality of the didactic process.

Regarding the article “Assessment practices in three physical education courses in South America”, analyzes and compares the moments and functions of the evaluation in three courses of teacher training in Physical Education (Ufes/Brazil, Cesmag/Colombia and Udelar/Uruguay). It is characterized by a mixed method investigation that is explanatory sequential. Its main results show an influence of the concepts that these countries have on evaluation, and that disciplines imply the fulfillment of the requirements of the evaluation instruments, bypassing other aspects such as the definition of criteria, functions, agents and/or moments of evaluation. The continuous training of teachers in terms of evaluation is one of the best options to solve these problems and promote teaching improvement.

Finally, the objective of the research entitled “Changing evaluation: a must in times of uncertainty” proposes solutions to essential problems affecting student learning and educational performance, especially those related to critical thinking at the University. The author, through a qualitative methodology, shows that evaluation is an idiosyncratic and contextualized practice; that the lack of teacher training is a factor that affects the concepts and practices of evaluation; and that the participatory evaluation emerges in this context. At the same time, the author concludes that assessments at the university level focus more on evaluating learning, rather than on how evaluating and the reasons for evaluating.

In the **Miscellaneous Section**, articles basically focus on value education and citizenship training, which are necessary themes during pandemic, in which most of the values that had oriented teachers during the last decades are being resignified; some of these are references for further research at the international level: the axiological hierarchy raised in the pre-pandemic opens up the possibility of comparative studies with post-pandemic values; as well as the need for socio-emotional formation in view of the announced post-pandemic and trans-humanist era.

The first article “Analysis of values of adolescents in Salesian educational schools in southern Spain” considers, on the one hand, that the hierarchy of values determines the actions and decisions of the individual; and, on the other, that adolescence constitutes a key age for axiological elections. A remarkable element of the methodological design, with a quantitative design and descriptive scope, is the use of the value test developed by the research group “Emerging values, social education and educational policies” of the University of Granada, proposed by Gerville et al. (2018), a reference in the subject of values. There is a better look of the affective, moral and individual values, in disregard intellectual values and political participation, as well as a greater satisfaction observed by women.

On the other hand, a research-action, “Teenagers at school: reflection groups upon the practice of citizenship”, shows the discussion of a group of adolescents from the State of São Paulo-Brazil, as an alternative to active citizenship. Among the topics discussed are self-knowledge, the role of school in society, family relations, health, gender relations, inequality, racism and injustice, among others. This is a contextualized experience rather than an emotional or subjective description; in addition to promoting articulation with new knowledge, it has allowed its implementation in school and other



contexts. The description of experiences like this is important to alert education professionals to the new routes that will be observed in school or in other contexts.

In the same line, “Lexical repertoire of teachers on democracy, citizenship and human rights”, describes from a qualitative approach the use of the main words on citizen formation used by History, Geography and Social Sciences teachers in Chile. The results show that the most widely used words around citizenship are respect, law, duties and individuals; in relation to human rights these are respect, rights and equality; and with regard to democracy these are claim, violation, constitution and grouping. While citizen training has become a key focus for the Ministry of Education, the authors argue that there are substantial differences in the words formulated in plans and programs. The study opens the discussion on the teaching of citizenship in this context.

In the article “Value of Respect for Quichua Language and Culture: concept of Sumak Kawsay”, based on the conceptions of good living (Sumak Kawsay), the authors investigate the common and differentiating values between the opinions of indigenous teachers and the contents of school texts used in Ecuador, related to respect for language and Quichua culture. The study is carried out in the Ecuadorian indigenous context. The results of the qualitative research mention that both teachers and educational materials convey the value of respect for the Quichua language and culture, particularly thanks to the policy of implementing intercultural bilingual education. The scope and challenges involved in good living in Ecuador and, above all, the bond created between students, educational agents and family make it significant.

The miscellaneous section finishes with the article “Environmental education as a strategy to face climate change”; an article that, in the face of the environmental crisis lived by humanity and the efforts it makes for greater socio-ecological resilience, proposes to determine the validity of an environmental education as a strategy that contributes to the reduction and adaptation to climate change. From a mixed approach, this study presents the results from three sources: student survey, teacher survey, and interviews with the authorities of three educational institutions. The issue of environmental education is not only original and relevant to the current situation, but to future generations.

Although the monograph on educational evaluation is a discipline that has been consolidated for decades, it remains being a major innovative challenge today in line with the changes that are being generated in the learning teaching process, basically due to the pandemic and the increase in the use of technology. Similarly, value education raises questions like what are these values? does humanity need an education based on values? is it possible to refer to re-significance of values? what is the role of educational institutions, authorities, and family in value education?, among others. In this sense, this number of “Alteridad” leaves open new questions for future research. With the development of the vaccine, the possibility of returning to face-to-face classes is discussed; however, it will never as it used to be.

Readers and researchers are invited to continue submitting their manuscripts to be arbitrated in “Alteridad”.



Monographic section (Sección Monográfica)

Educational evaluation as an indispensable process
for institutional and pedagogical improvement:
Possibilities and limitations

La evaluación educativa como proceso indispensable para la mejora institucional y pedagógica: Posibilidades y limitaciones



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Trends in formative and summative student assessment in Web of Sciences

Tendencias de la evaluación formativa y sumativa del alumnado en Web of Sciences

- ✉ **Pedro César Mellado-Moreno** is studying a PhD at Universidad de Castilla-La Mancha (Spain) (PedroCesar.Mellado@alu.uclm.es) (<https://orcid.org/0000-0001-8982-2120>)
- ✉ **Dr. Pablo Sánchez-Antolín** is a professor at Universidad de Castilla-La Mancha (Spain) (pablo.sanchez@uclm.es) (<https://orcid.org/0000-0001-9715-7044>)
- ✉ **Dra. Montserrat Blanco-García** is a professor at Universidad de Castilla-La Mancha (Spain) (montserrat.blanco@uclm.es) (<https://orcid.org/0000-0001-7752-3828>)

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Abstract

A professional point of view about student's assessment requires to think about a conventional method of assessment, which has remained the exams and tests conducted paper based as the main reference to assessing and qualifying the knowledge of students. In recent decades, has emerge alternatives to this model on educational research at the strategical, technical, temporal, and instrumental level. The objective of the study is to know the scientific production of the formative assessment research, related with a social and complex assessment model, in front of a summative assessment research, related with an operational and individual assessment model. To achieve the objective, the investigation uses a mixed methodology of quantitative and qualitative analysis of the scientific literature about formative and summative assessment on the last decade, comparing their principal bibliometrics indices and using Web of Science scientific data base. The results show a substantial difference on the number of investigations between formative and summative evaluation, a prevalent of the investigations of English-speaking countries and a relation between the scientific production on evaluation with other research fields. Conclusions of this article confirms the student's assessment as an object of research with a long historical overview on developed countries, but still remains to be a current interesting field with a relevant technology transfer to the rest of research areas.

Keywords: Educational assessment, examinations, teaching methods, systematic review, bibliometrics, education.

Resumen

Abordar desde una perspectiva profesional la evaluación del alumnado implica reflexionar sobre el modelo educativo tradicional, que ha empleado las pruebas de evaluación consistentes en la reproducción escrita de los contenidos como el referente fundamental para evaluar y calificar los conocimientos del alumnado. Sin embargo, en las últimas décadas la comunidad científica educativa ha planteado alternativas a esa evaluación en el plano estratégico, técnico, temporal e instrumental. El objetivo de la investigación es conocer la producción científica sobre la evaluación formativa, relacionada con un modelo complejo y social, frente a la evaluación sumativa, de carácter más operacional e individual. Para ello se ha utilizado una metodología mixta que analiza cuantitativa y cualitativamente la evaluación formativa y sumativa en la literatura científica a través de una revisión bibliográfica de las investigaciones de la última década, comparando sus principales indicadores bibliométricos y usando para ello la base de datos Web of Science. Los resultados arrojan un número de investigaciones sobre evaluación formativa notablemente superior a las investigaciones sobre evaluación sumativa, un dominio de la investigación anglosajona y una relación de la investigación sobre evaluación de la educación con otras áreas científicas. Entre las conclusiones se observa que la evaluación del alumnado es una línea de investigación con larga trayectoria histórica que continúa siendo un objeto de investigación de actualidad y generador de transferencia tecnológica entre las distintas áreas de conocimiento.

Descriptores: Evaluación del estudiante, examen escrito, método de enseñanza, revisión sistemática, bibliometría, educación.

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1. Introduction and state-of-the-art

The decisions made about student assessment reflect the epistemological positioning on the teaching-learning process as a whole. These positions have been varied throughout the twentieth and twenty-first century, with disparate theories and pedagogical visions that confront what to evaluate, what to do, and how to do it (Acosta-Baldivián & De la Cruz, 2016; Ballano-Olano et al., 2011; Escudero-Escorza, 2003; López-Pastor & Pérez-Pueyo, 2017), getting to elaborate about 50 different models distributed among those that employ a positivist paradigm oriented to the qualification (which we characterize as evaluation from the pedagogical framework of the technical rationality or summative assessment) or a qualitative paradigm oriented to learning (which we characterize as an evaluation from the pedagogical framework of critical rationality or formative assessment) (Gros-Salvat & Cano-García, 2021; López-Pastor & Palacios-Picos, 2012; Luzuriaga, 1985; Negrín-Fajardo & Vergara-Ciordia, 2006).

These pedagogical frameworks (technical rationality and critical rationality), which give rise to evaluative practices (summative and formative) and that make up the topic under study, are understood as different theories whose historical development explains their conceptualization, but they are not necessarily exclusive and can be integrated in a complementary way into educational practice, since, as presented below, they meet different needs.

1.1. Evaluation from the pedagogical framework of technical rationality: summative assessment

Based on Taylor's production model (Sancho, 2017), the positivist educational evaluation adopts an administrative and economic model with references such as Henry Fayol (Rodríguez-Laguía et al., 2010), a classical theorist of the functional administration approach

(Hernández-Palma, 2011), who established in 1916 a method of administrative evaluation based on segmenting and decomposing the elements of the whole, distinguishing between forecasting, organization, direction, coordination and control for its analysis, planning and subsequent evaluation (González-Díaz, 2010). These principles of business assessment were applied to education through the summative assessment to analyze student performance, controlling the proposed objectives and the time spent as a guarantee of objectivity and rigorous collection of evidence (Casanova, 2019).

For this reason, summative evaluation usually involves simple, scarce student assessment tools and techniques focused on experimental design, using standardized tests or personal interviews (Stufflebeam & Shinkfield, 1985), which are instruments that measure student performance, and that seeks evaluation to play a positive or negative operational reinforcement role that allows to observe the result of a finished product and that does not take into account the transformation process and the initiation conditions, thus simplifying human behavior (Pérez-Gómez, 2004).

It continues its historical journey by focusing on the curriculum development of Ralph Tyler, who proposes in his work *Basic Principles of Curriculum and Instruction* (1949) a model based on the design of objectives, indicating that teachers are guided by intuitive knowledge through which criteria are established on which materials to select, what content is appropriate, what procedures to perform and what to examine. While it admits the existence of a controversy around teaching the same thing and evaluating the students in the same way, it defends that there are common needs in students, or at least among American students at a specific historical moment of great schooling expansion in USA, characterized by a lack of systematic planning for the design of teaching practice (Wraga, 2017). Therefore, Tyler designs an evaluation for equal objectives for all, drawing up a double-entry



table that crosses the objectives proposed for the achievement of the subject with seven behavioral items, marking those that are considered to be satisfactorily achieved by the evaluator.

Years later, Bloom (1956) with his taxonomy of educational objectives deepens on Tyler's base approach (Tian et al., 2018) taking as precedent the taxonomic organization of species in biology, and trying to make a classification of learning similar to the classification of the species, and which is currently still used to classify knowledge from multiple disciplines (Bedford et al., 2017; Brewer & Brewer, 2010; Sisson & Mazzuchi, 2017; Sönmez, 2019). In the evaluative field, Bloom (Amer, 2006; Shugert, 1968) makes a more rational classification of Tyler's operational objectives and items in designing written tests that continue to evaluate student learning. Perhaps the most novel is William's notion (2006) of Bloom's work; stating that the intention of the evaluator should be considered as the differentiator that can overcome the nature of the instrument, since the same test can be used to perform both a summative and formative evaluation according to the objectives and evaluative strategy set by the teacher.

The next step in the evolution of summative evaluation is provided by Mager (1973), whose objective is to achieve maximum objectivity in the evaluation. For this reason, the author proposes to reformulate any objective that requires teacher interpretation or requires adaptation to the specific needs of the group or context, reformulating those objectives that are considered ambiguous. Thus, learning that cannot be observed clearly and unequivocally and evaluated by a questionnaire is problematic and must be replaced by another.

In the eighties, Stufflebeam (1985) stands out, which, in line with the Joint Committee on Standards for Educational Evaluation (Diamond, 1985), establishes a curricular evaluation model called Context-Input-Process-Product (CIPP) that determines the usefulness of what is taught and evaluated on what the "customer" wants

rather than the evaluator, basing the reliability of the evaluation standards on their applicability to the real world, its convenience in its ethical and constitutional character, and its accuracy in the acceptance it deserves through a technical judgment (Stufflebeam, 1985). Thus, it is essential to determine the decisions about what to evaluate and how to know the expectations of the student's families, the contributions of learning and evaluation to society, determine to what extent it is necessary, and whether the resources it requires are viable.

In the 90s and the third technological revolution in the field of information and communication emerges the so-called knowledge society (Barroso-Jerez, 2013; Taberner-Guasp & García-Marín, 2013), which has implications in the way we learn (Zambrano-Farias, 2017), the way we should teach (Muñoz-López et al., 2018), and the way we should evaluate (Juárez-Hernández & Ponce-López, 2020). But while the transformation and digitization of the economy and society takes place, hegemonic psychology and philosophy embrace behaviorism and positivism, which drive the approach from an evaluation of student learning that is objective, scientific and fragmented (Forde et al., 2016), to a scheduled and taxonomy-based teaching of operational learning objectives (Torres-Santomé, 2017) and a new boom in standardized evaluation tests (Rizvi & Lingard, 2010; Robinson & Aronica, 2016).

Under the pedagogical framework of technical rationality, summative assessment of student learning is defined as the search of objectives for results through the obtaining of evidence with a mainly accrediting and operative function of positive and negative reinforcements. The result of the summative assessment determines the distance between what the established standard considers acceptable and the measurable position the student is with respect to it. The operational objectives must be concrete, classifiable and fully understood by both the teachers and the students. Tests must be standardized,



universal, procedurally simple and designed on a large scale for the entire educational system, so they will preferably adopt the test format.

1.2. The evaluation from the pedagogical framework of critical rationality: formative assessment

Along with the development of the evaluation from the approach of technical rationality, different ideas of critical renewal arise in the face of traditional teaching based on authority, the teacher-center view, the passivity of students, the reproduction of social inequalities and the objectivity of teachers examining summative evaluations (Álvarez-Méndez, 2003; Barrios-Graziani, 2005; Campdepadrós-Cullell & Pulido, 2009). These are pedagogies that can be framed in both idealism and pedagogical materialism, according to the theoretical sources and bases used in each case for criticism (Murillo-Torrecilla & Hernández-Castilla, 2015; Vilanou-Torrano, 2015; Zuleta-Medina & Chaves-Torres, 2009) and that arise as a reaction to positivist pedagogy, understanding that learning and its evaluation are very complex processes as to reduce them to standards (Clarke & Moore, 2013), since learning is considered to be fundamentally practical elements, socially and historically constructed (Tapiero-Vásquez, 2000) where the student's interest in learning is thought as the main element (Wiliam, 2011) within an environment and family background that determines student outcomes more closely than the school itself (Chomsky, 2014).

Although Scriven (1967) created the term formative assessment, along with other American authors such as Stake (1967) or Stenhouse (1975), it is understood that summative assessment was a constraint to innovation and progressive improvement in education, since alternatives to traditional summative evaluation are rooted in the American progressive current that combined educational reform with social reform, in which Dewey is the most influential

professor (González-Monteagudo, 2001). Dewey (2002) relates the concept of evaluation to that of valuation, and does so in a twofold sense. He states that an assessment is to estimate something, to appreciate it, but also to issue a judgment that allows to compare it with another. In the first case, we face an intrinsic assessment, where things have value in themselves, are not subject to judgment and are therefore invaluable. In the second, we make an extrinsic assessment, whereby we can establish comparable and sortable categories to determine what is better and what is worse.

In Spain this movement is replicated through the Unified School, with Krausist and Orteguian inspiration, being Giner de los Ríos involved in pedagogy. According to Giner de los Ríos, exams are perceived by students as a questionnaire (García-Velasco, 2015), which distort the sense of education, causing ephemeral and apparent learning; thus, exams are not tools that help education but the opposite (Giner de los Ríos, 1894).

The alternative to evaluate students from a critical perspective acquires more theoretical power with the Freirean pedagogy, where punishment and suspense are left behind (Araújo-Freire, 2017) or to the banking education that is limited to the mechanical repetition of the content that has been presented to the students in class (Gomes-Arelaro & Martins-Cabral, 2017), trying to find out, through the evaluation, whether the students are able to access a certain knowledge by themselves (Delbosco, 2018) that will be useful for the social life of the human being (Gauterio-Cruz et al., 2014).

The Freirian view of the evaluation agrees with the critical analysis carried out by materialistic pedagogy, which relates education to work and analyzes pedagogy from a historical-cultural point of view (Barros-Ferreira & Vicentini, 2017). This is the case with Basil Bernstein (1975), who reflects on the need to examine the social implications and power relationships underlying the student assessment process and defines the role



of evaluation as the determination of content that must be socially transmitted and is conditioned by the ideology of the teacher, which causes a high difference between what each teacher teaches and what students learn. Apple (1994) agrees with the same approach, but understands that in addition to the economic one, it must be considered the influence of culture, so that it does not place the middle classes in terms of economic exploitation but of cultural subordination. These power relationships between classes set limits to what is possible in the educational system, where discourse and identity play a crucial role.

Thus, it is defended from the critical pedagogy a formative assessment with subjective (Becerra-Hernández & Moya-Romero, 2008), contextualized, permanent, heterogeneous, communicative, dialectic and designed characteristics to give timely information on the evolution of each of the individuals who are part of the teaching process (Antón-Sancho & Sánchez-Domínguez, 2020; Borjas, 2014; Fonseca, 2007; Maureira-Cabrera et al., 2020; Molina-Soria et al., 2020). An integrated formative evaluation in educational practice (Allal & Pelgrims Ducrey, 2000) with flexible objectives adapted to the personal needs and interests of each individual as a way to satisfy a public interest: educational inclusion (House, 2000). This formative evaluation aims to broaden the assessment toward skills and attitudes (Acebedo, 2016; Puiggali-Allepuz & Tesouro-Cid, 2021) to reorient the learning process focused on improving the pedagogical help provided to students (Valero-Flores, 2017).

From the pedagogical framework of critical rationality, formative assessment is defined as the individual and personal subjective search, and the evolution that each individual has experienced through educational intervention. The operative function of summative assessment creates the reporting function of the formative evaluation that is intended not to value knowledge, but to improve the teaching-learning process. The outcome of evolution is not deterministic and comparable, but it has an intrinsic and descriptive

value about the achievements obtained through flexible objectives adapted to each individual. The evaluation instruments are heterogeneous, permanently employed, contextualized and varied.

2. Methodology

The methodological approach of the study is the same of bibliometric studies, performing an analysis by means of descriptive statistics, focusing on the frequency analysis of the production of articles and their main bibliometric indicators such as the year, citations received, subject area, journal, institution of affiliation of the author and country in which each publication has been made (González et al., 2015), understanding that these are the most relevant indicators to the objectives of the study (Molas-Gallart & Ràfols, 2018), and studying the existence of positive or negative correlations (Reguant-Álvarez et al., 2018) between the scientific production on formative and summative assessment and the citations received in these studies over the last decade.

The initial quantitative analysis was performed using SPSS v.26 software. The Atlas ti software v.7.5.4 was then used for analyzing the five studies with the highest impact on formative evaluation and the five studies with the highest impact on summative evaluation in the period 2010-2020, assuming an impact definition associated with the number of times the item has been quoted (Belter, 2015).

The sample has been obtained by searching the research available in the scientific database Web of Science due to the high number of high-impact research available (Cuervo-Carabel et al., 2018) and which includes, in addition to its own database, search results in the City Colleges of Chicago (CCC), Derwent Innovations Index Database (DIIDW), Korean Journal Database (KJD), Medline, Russian Science Citation Index (RSCI), and SciELO databases. Two types of search have been performed, one with the Boolean operators TS=(“ evaluación formativa” OR “formative evaluation” OR “formative



assessment") to find the formative assessment studies, obtaining 7609 results; and the other with the Boolean operators TS=(“evaluación sumativa” OR “summative evaluation” OR “summative assessment”) to find the summative evaluation studies, obtaining 2664 results.

Subsequently, the date of publication has been applied as an exclusion criterion, limiting the search to the range 2010-2020. This has reduced the results of the search for publications on formative assessment to 5904 and those on summative assessment to 1921, thus constituting our final sample (N=7825).

All the data analyzed were obtained on January 1, 2021 at 12:00.

3. Results

On the total sample (N=7825), research on formative assessment (N=5904, 75.45 %) is superior than summative assessment (N=1921, 24.55 %), a distribution between the two types of evaluation whose difference increases later in the number of quotes received by the formative assessment (N=36 234, 78.31 %) versus the summative (N=10 035, 21.69%).

Table 1. Summary of publications

Year	Publications on formative assessment	Quotes to publications on formative assessment	Citations on publications of formative assessment	Citations on publications of summative assessment
2010	301	4868	96	1032
2011	330	4993	124	1127
2012	382	4534	122	1148
2013	453	4775	172	1342
2014	518	4265	160	1126
2015	574	3888	219	1122
2016	609	3084	220	1280
2017	670	2604	221	962
2018	738	1971	201	508
2019	695	975	199	325
2020	634	277	187	63
N	5904	36 234	1921	10 035

The evolution of publications on formative assessment has been much higher than the evolution in the number of publications on summative assessment. However, both are at a lower position than the peak reached in previous years, and still remain above the number reached in the starting year (2010) in both cases.

As for citations received by these publications, we can see how the number of citations obtained by publications on formative evaluation increases as we go back over time, while

publications on summative evaluation remain relatively stable since 2016.

These trends in the number of publications and citations show a significant positive correlation between the number of formative and summative assessment publications (0.888), a significant negative correlation between the number of publications in formative assessment and citations received (-0.830) and another significant negative correlation between the number of publications in summative assessment and the citations received (-0.603).



Table 2. Correlations between types and number of publications and citations

		Publications on formative assessment	Publications on summative assessment	Citations on publications of formative assessment	Citations on publications of summative assessment
Publications on formative assessment	Pearson correlation	1	.888**	-.830**	-.575
	Sig. (bilateral)		.000	.002	.064
	N	11	11	11	11
Publications on summative assessment	Pearson correlation	.888**	1	-.603*	-.239
	Sig. (bilateral)	.000		.050	.479
	N	11	11	11	11
Citations on publications of formative assessment	Pearson correlation	-.830**	-.603*	1	.892**
	Sig. (bilateral)	.002	.050		.000
	N	11	11	11	11
Citations on publications of summative assessment	Pearson correlation	-.575	-.239	.892**	1
	Sig. (bilateral)	.064	.479	.000	
	N	11	11	11	11
**. The correlation is significant at 0.01 (bilateral).					
*. The correlation is significant at 0.05 (bilateral)					

In terms of the areas of knowledge in which research is framed, although with certain alterations in the order, the five main areas agree in both cases: educational research, psychology, computer science, medicine and behavioral sciences.

To learn about the research interest of countries with more publications on formative and summative assessment, in Table 3 we present a

comparison between the frequency of publications of one type of publication and another compared with their publications in any other scientific field during the same period of study. In this way we can observe the relative weight of the research on formative and summative evaluation, separately and as a whole, compared to its total national production of scientific literature (Figure 1).

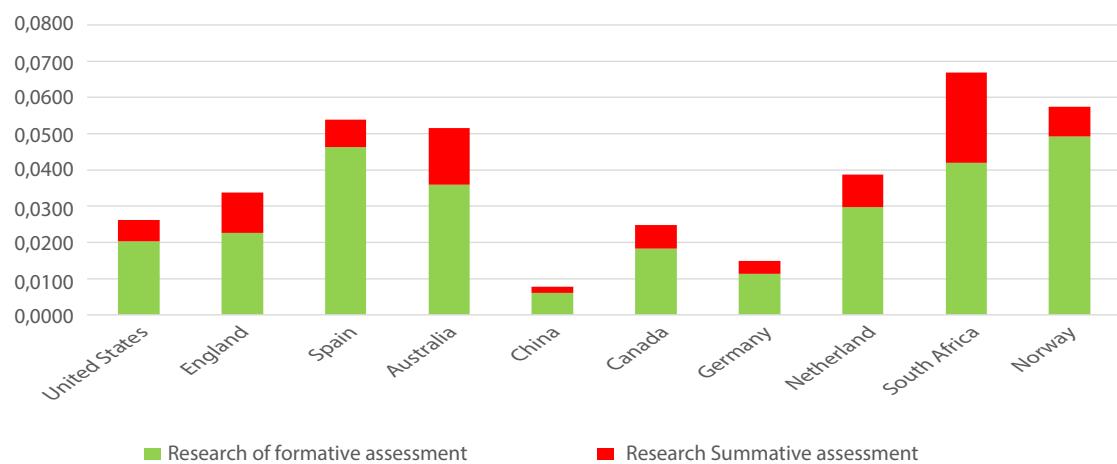
Table 3. Publications on Formative Assessment (EF), Summative Assessment (ES) and percentage of total publications (P)

	N	EF	P (EF)	ES	P (ES)	EF+ES	P (EF+ES)
USA	8 075 028	1633	0.0202	482	0.0060	2115	0.0262
England	2 069 459	468	0.0226	232	0.0112	700	0.0338
Spain	1 108 936	513	0.0463	84	0.0076	597	0.0538
Australia	1 096 645	394	0.0359	171	0.0156	565	0.0515
R.P. of China	4 577 317	274	0.0060	83	0.0018	357	0.0078
Canada	1 247 935	228	0.0183	82	0.0066	310	0.0248
Germany	1 902 147	215	0.0113	68	0.0036	283	0.0149
Netherland	691 213	206	0.0298	62	0.0090	268	0.0388
South Africa	240 616	101	0.0420	60	0.0249	161	0.0669
Norway	231 515	114	0.0492	19	0.0082	133	0.0574

An Anglo-Saxon domain (USA and England) occurs mainly when observing the absolute data, but if they are relativized according to the total scientific production of each country, the data can be viewed by eliminating the effect that these countries are the most research-producing countries in all scientific

fields. In this way, we can see that there are Anglo-Saxon countries where research in this field has greater interest, as is the case in South Africa and Australia, but also other non-Anglo-Saxon countries have an interest that can be considered relevant as Norway, Spain and the Netherlands.

Figure 1. Publication rate of formative and summative assessment on the total scientific production



For the most relevant evaluation studies, we have included in the following table the five studies with the greatest impact on

formative assessment (Table 4) and the five studies with the greatest impact on summative assessment (Table 5) of the decade.

Table 4. Studies (E) on formative assessment classified by author and year (A), country (P), keywords (PC), thematic area (AT) and sorted by a greater number of citations (NC)

A	E	P	PC	AT	NC
Curran, G.M. et al. (2012)	Effectiveness-implementation Hybrid Designs Combining Elements of Clinical Effectiveness and Implementation Research to Enhance Public Health Impact.	USA	Mental health services, collaborative care, bipolar disorder, clinical trials, efficacy, interventions, application science.	Psychology	861
Boud, D. & Molloy, E. (2013)	Rethinking models of feedback for learning: the challenge of design	Australia	Feedback, sustainable assessment, impact on learning; curriculum design.	Educational Research	421
Sadler, R. (2010)	Beyond feedback: developing student capability in complex appraisal.	Australia	Formative evaluation, feedback, qualitative evaluation; peer evaluation, evaluation criteria	Educational Research	381
Bennett, R.E. (2011)	Formative assessment: a critical review.	USA	Evaluation formative, Evaluation for learning.	Educational Research	372
Nicol, D. (2010)	From monologue to dialogue: improving written feedback processes in mass higher education.	Scotland	Dogo, feedback, workload.	Educational Research	361



Regarding the content of these research, trends in formative research point feedback as an essential element in formative assessment. A greater satisfaction is obtained with written feedback than with oral feedback when the protagonist of teacher feedback is moved to students (more dialogic), when more than one teacher (more collective) and more than one student (less academic burden) participate in the same process and when they are better sequenced (more cohesion). The feedback needs to provide information on evaluation criteria, work quality, and improvement tips to perform similar tasks in the future (feedforward).

Certain limitations are detected, such as the possible limited interest in participating

in the feedback. Therefore, it is identified as a need to improve the professional development of teachers through further research on the use of formative assessment, as well as to create learning environments that work effectively and improve the understanding of tasks, the quality of the responses and the assessment criteria established. It should me mentioned the research on the improvement of public health which, despite addressing a non-educational field, it provides evidence of some transfer of knowledge from the educational area to other scientific areas and how formative assessment helps provide a context that explains the results of summative evaluations.

Table 5. Studies (E) on summative assessment classified by author and year (A), country (P), keywords (PC), subject area (AT) and sorted by greatest number of citations (NC)

A	E	P	PC	AT	NC
Victoria, C.G., et al. (2011)	Measuring impact in the Millennium Development Goal era and beyond: a new approach to large-scale effectiveness evaluations.	Brazil	Childhood diseases, medical interventions, indicators, mortality.	Medicine	146
Veneable, J. et al. (2016)	FEDS:a Framework for Evaluation in Design Science Research.	Australia	Scientific research design, research methodology, evaluation systems, usefulness of evaluation.	Computer science	128
Wistone, N.E., et al. (2017)	Supporting Learners' Agentic Engagement with Feedback: A Systematic Review and a Taxonomy of Recipience Processes.	England	Medical students, higher education, peer review, summative assessment, feedback.	Educational research. Psychology	120
Boud, D. & Soler, R. (2016)	Sustainable assessment revisited.	Australia	Sustainable assessment, assessment purposes, self-assessment, assessment for learning.	Educational research.	106
Gogalniceanu, P., et al. (2010)	Is Basic Emergency Ultrasound Training Feasible as Part of Standard Undergraduate Medical Education?	England	Medical students; education; ultrasonography; general surgery.	Educational research. Medicine.	92

In turn, trends in summative assessment demonstrate a high efficacy of this type of assessment to collect large-scale data, allowing broad geographical coverage and obtaining results that provide far-reaching evidence. Summative assessment tools and techniques are

very important in the field of applied sciences for evaluating design and product results or for detecting effective work strategies. It allows to be combined with formative assessment as an early assessment strategy that can correct errors of the initial approach.



It can also be applied to the evaluation of student learning in which training strategies can be employed to ensure that students know the criteria in a task and then evaluate it in a summative way. The evaluation limited to the grade can also improve the process because it can be completed with informed judgments that reorient student learning. Thus, it is understood that using summative assessment exclusively is a reductionist approach and that it may be compatible with other non-summative elements, such as self-assessment, ongoing evaluation or intermediate evaluations to improve a flexible design process or use feedback at the end of the educational period.

4. Discussion and conclusions

Considering the 7825 scientific publications found in the Web of Science on formative and summative assessment, we can conclude that formative dominates summative, which is translated into a scientific impact that is even greater, with a multiplier effect between production and impact that explains that the difference in the percentage of citations is greater compared to the difference in the percentage of productions. A clear correlation has been found between publications of one type of evaluations and another, suggesting that there is interest in investigating one and the other, which is corroborated in the content analysis of summative evaluation investigations, in which the combination of summative assessment tools and techniques appears recursively with others of formative evaluation.

The mastery of scientific production on both types of evaluation corresponds to the Anglo-Saxon world and although they are carried out in education, it is not exclusive, as it can be applied to areas related to education such as psychology or behavioral sciences, but also others like computer science or medicine, by the existence of research using diverse evaluation methods and by the study of the academic performance of higher education students in these

areas. This shows that research in evaluation is not only increasing in education, but can also lead to advances in other branches of knowledge.

In short, the formative and summative assessment of students, in addition to having a long history as presented in the paper, turns out to be a line of research of interest that is present in the international academic field that publishes more research at the end of the decade than at the beginning, generating a large and relevant scientific production, with information between its different variables and that generates technology transfer with other areas of knowledge in their most practical contexts.

References

- Acebedo, M.J. (2016). La evaluación del aprendizaje en la perspectiva de las competencias. *Revista Temas: Departamento de Humanidades Universidad Santo Tomás Bucaramanga*, 11, 203-226.
<https://doi.org/10.15332/rt.v0i11.1756>
- Acosta-Baldivián, B.A., & De la Cruz, E. (2016). Evaluación del programa social de lactancia materna ofrecido a madres adolescentes(OSMAN) bajo el enfoque de Stufflebeam. *Investigación y Postgrado*, 31(2), 95-115. <https://bit.ly/3dlJ6Jo>
- Allal, L., & Pelgrims-Ducrey, G. (2000). Assessment of -or in- The zone of proximal development. *Learning and Instruction*, 10(2), 137-152. <https://bit.ly/3pv2Lcq>
- Álvarez-Méndez, J.M. (2003). *La evaluación a examen: ensayos críticos*. Miño y Dávila.
- Amer, A. (2006). Reflections on bloom's revised taxonomy. *Electronic Journal of Research in Educational Psychology*, 4(8), 213-230. <https://doi.org/10.25115/ejrep.v4i8.1217>
- Antón-Sancho, Á., & Sánchez-Domínguez, M. (2020). Metodología mixta Flipped Classroom y Aprendizaje Basado en Proyectos para el aprendizaje de la geometría analítica en Secundaria. *Enseñanza & Teaching: Revista Interuniversitaria de Didáctica*, 38(2), 135-156. <https://doi.org/10.14201/et2020382135156>
- Apple, M. (1994). Educación, cultura y poder de clase: Basil Bernstein y la sociología neomarxista de



- la educación. *Revista de Educación*, 305(305), 157-177. <https://bit.ly/3u5EZHn>
- Araújo-Freire, A.M. (2017). La actualidad de Freire: educación, política y ciudadanía. *Rizoma Freireano*, 23, 1-2. <https://bit.ly/3s4jhSg>
- Ballano-Olano, I., Llorián-González, S., Carbó-Marro, C., Martínez-Baztán, A., Vila-Mendiburu, I., Luna-Arcos, F., Villalba-Martínez, F., Francos-Maldonado, C., Garay, U., Etxebarria, A., Gaminde, I., & Larrea, K. (2011). *Evaluar la competencia lingüística del alumnado inmigrante*. Universidad de Deusto. <https://bit.ly/3qtVRW4>
- Barrios-Graziani, L. (2005). Visión crítica de las teorías postracionalistas de la educación. *Revista Iberoamericana de Educación*, 36(2), 1-7. <https://doi.org/10.35362/rie3622824>
- Barros-Ferreira, M.S., & Vicentini, D. (2017). A pedagogia socialista como possibilidade de superação da pedagogia toyotista: contribuições do materialismo histórico-dialético. *Revista Ibero-Americana de Estudos Em Educação*, 12(2), 1056-1068. <https://doi.org/10.21723/riaaee.v12.n2.9095>
- Barroso-Jerez, M.C. (2013). Sociedad del conocimiento y entorno digital. *Teoría de la educación; educación y cultura en la sociedad de la información*, 14(3), 61-86. <https://bit.ly/3s0GkgQ>
- Becerra-Hernández, R., & Moya-Romero, A. (2008). Una perspectiva crítica de la evaluación en matemática en la Educación Superior. *Sapiens. Revista Universitaria de Investigación*, 9(1), 35-69. <https://bit.ly/3pyJ3wm>
- Bedford, D.A.D., Georgieff, M., & Brown-Grant, J. (2017). Lifewide, lifelong comprehensive approach to knowledge management education-emerging standards. *VINE Journal of Information and Knowledge Management Systems*, 47(4), 467-489. <https://doi.org/10.1108/VJIKMS-12-2016-0068>
- Belter, C.W. (2015). Bibliometric indicators: Opportunities and limits. *Journal of the Medical Library Association*, 103(4), 219-221. <https://doi.org/10.3163/1536-5050.103.4.014>
- Bernstein, B. (1975). *Class, codes and control, Volume I: Theoretical studies towards a sociology of language* (Vol. 1). Routledge & Kegan Paul Ltd. <https://bit.ly/2OOeLsX>
- Bloom, B.S., Engelhart, M., Furst, E., & Hill, Walker-Krathwohl, D. (1956). *Taxonomy of educational objectives*. Longman.
- Borjas, M. (2014). La evaluación del aprendizaje como compromiso: una visión desde la pedagogía crítica. *Rastros Rostros*, 16(30), 35-45. <https://doi.org/10.16925/ra.v16i30.816>
- Brewer, P.D., & Brewer, K.L. (2010). Knowledge Management, Human Resource Management, and Higher Education: A Theoretical Model. *Journal of Education for Business*, 85(6), 330-335. <https://doi.org/10.1080/08832321003604938>
- Campdepadrós-Cullell, R., & Pulido, C. (2009). La sociología de la educación desde la pedagogía crítica. *Education in the Knowledge Society (EKS)*, 10(3), 57-73. <https://bit.ly/3qC84bw>
- Casanova, M.A. (2019). *Manual de evaluación educativa*. Muralla.
- Chomsky, N. (2014). *La (des)educación*. Crítica.
- Clarke, M., & Moore, A. (2013). Professional standards, teacher identities and an ethics of singularity. *Cambridge Journal of Education*, 43(4), 487-500. <https://doi.org/10.1080/0305764X.2013.819070>
- Cuervo-Carabel, T., Orviz-Martínez, N., Arce-García, S., & Fernández-Suárez, I. (2018). Technostress in Communication and Technology Society: Scoping Literature Review from the Web of Science. *Archivos de Prevención de Riesgos Laborales*, 21(1), 18-25. <https://doi.org/10.12961/aprl.2018.21.01.4>
- Delbosco, R. (2018). Educación, persona y política. Intuiciones y tensiones en P. Freire. *Revista Cultura Económica*, 95, 36-50. <https://bit.ly/2N6BrnR>
- Dewey, J. (1998). *Democracia y educación: una introducción a la filosofía de la educación*. Morata.
- Diamond, E.E. (1985). Development of the Joint Committee Standards for Evaluations of Educational Programs, Projects, and Materials. *Measurement and Evaluation in Counseling and Development*, 18(2), 51-57. <https://doi.org/10.1080/07481756.1985.12022790>
- Escudero-Escorza, T. (2003). Desde los tests hasta la investigación evaluativa actual. Un siglo, el XX, de intenso desarrollo de la evaluación



- en educación. *RELIEVE - Revista Electrónica de Investigación y Evaluación Educativa*, 9(1), 11-43.
<https://doi.org/10.7203/relieve.9.1.4348>
- Fonseca, J. G. (2007). Modelos cualitativos de evaluación. *Educere: Revista Venezolana de Educación*, 38, 427-432.
<https://bit.ly/3b9NFUA>
- Forde, C., McMahon, M.A., Hamilton, G., & Murray, R. (2016). Rethinking professional standards to promote professional learning. *Professional Development in Education*, 42(1), 19-35.
<https://doi.org/10.1080/19415257.2014.999288>
- García-Velasco, J. (2015). Taller de ciudadanos. La educación integral en la Institución Libre de Enseñanza. *Participación Educativa Segunda Época*, 4(6), 63-71. <https://bit.ly/37pa3bl>
- Gauterio-Cruz, R., Vinhas-Bigliardi, R., & Minasi, L.F. (2014). A dialética materialista de Paulo Freire como método de pesquisa em educação. *Conjectura: Filos. Educ.*, 19(2), 40-54.
<https://bit.ly/37lOngw>
- Giner-De los Ríos, F. (1894). O educación o exámenes. *Boletín de La Institución Libre de Enseñanza*, 257-263. <https://bit.ly/37ogn37>
- Gomes-Arelaro, R. L., & Martins-Cabral, R.M. (2017). Paulo Freire: por uma teoria e praxis transformadora. *Rizoma Freireano*, 23, 1-15.
<https://bit.ly/37oH9Z1>
- González-Monteagudo, J. (2001). John Dewey y la pedagogía progresista. En *El legado pedagógico del siglo XX para la escuela del siglo XXI*. Graó. <https://bit.ly/3bdN7gy>
- González-Díaz, J.E. (2010). Taxonomía de las funciones administrativas y las habilidades del líder empresarial. *Saber, Ciencia y Libertad*, 5(1), 155-164.
<https://doi.org/10.18041/2382-3240/saber.2010v5n1.2549>
- González, M.J.P., Guzmán, M.F., & Chaviano, O.G. (2015). Criteria, classifications and tendencies of bibliometric indicators in the evaluation of the science. *Revista Cubana de Informacion en Ciencias de la Salud*, 26(3), 290-309. <https://bit.ly/3bic61Z>
- Gros-Salvat, B., & Cano-García, E. (2021). Procesos de feedback para fomentar la autorregulación con soporte tecnológico en la educación superior: Revisión sistemática. *RIED. Revista Iberoamericana de Educación a Distancia*, 24(2), 107.
<https://doi.org/10.5944/ried.24.2.28886>
- Hernández-Palma, H. G. (2011). La gestión empresarial, un enfoque del siglo XX, desde las teorías administrativas científica, funcional, burocrática y de relaciones humanas. *Escenarios*, 9(1), 38-51. <https://bit.ly/3beCiL8>
- House, E.R. (2000). *Evaluación, ética y justicia*. Morata.
- Juárez-Hernández, L.G., & Ponce-López, I. (2020). Construcción y validación de un instrumento para evaluar el abordaje de la sociedad del conocimiento en docentes. *Apuntes Universitarios*, 10(1), 40-65.
<https://doi.org/10.17162/au.v10i1.417>
- López-Pastor, V.M., & Pérez-Pueyo, Á. (2017). *Evaluación formativa y compartida en educación: experiencias de éxito en todas las etapas educativas*. Universidad de León.
<https://bit.ly/3bgBEfX>
- López-Pastor, V., & Palacios-Picos, A. (2012). Percepción de los futuros docentes sobre los sistemas de evaluación de sus aprendizajes. *Teoría de la Educación. Educación y Cultura en la Sociedad de la Información*, 13(3), 317-341. <https://bit.ly/3k6414M>
- Luzuriaga, L. (1985). Ideas de la educación nueva. In *Textos de pedagogía: conceptos y tendencias en las ciencias de la educación*.
<https://bit.ly/2NC1O4C>
- Mager, R.F. (1973). *Formulación operativa de objetivos didácticos*. Marova.
- Maureira-Cabrera, O., Vásquez-Astudillo, M., Garrido-Valdenegro, F., & Olivares-Silva, M.J. (2020). Evaluación y coevaluación de aprendizajes en blended learning en educación superior. *Alteridad*, 15(2), 174-189.
<https://doi.org/10.17163/alt.v15n2.2020.04>
- Molas-Gallart, J., & Ràfols, I. (2018). Why bibliometric indicators break down: Unstable parameters, incorrect models and irrelevant properties. *BiD*, 40(40).
<https://doi.org/10.1344/BiD2018.40.23>
- Molina-Soria, M., Pascual-Arias, C., & López-Pastor, V. M. (2020). El rendimiento académico y la evaluación formativa y compartida en formación del profesorado. *Alteridad*, 15(2), 204-215.
<https://doi.org/10.17163/alt.v15n2.2020.05>



- Muñoz-López, I., Cuervo-Gamboa, L.M., González-Hernández, C.A., Bacca-Rozo, J.E., & Garzón-Gallego, K.J. (2018). Sociedad del conocimiento, revolución educativa y transformaciones de los paradigmas del modelo educativo. *Revista Electrónica en Educación y Pedagogía*, 2(3), 108-124. <https://doi.org/10.15658/rev.electron.educ.pedagog18.09020308>
- Murillo-Torrecilla, F.J., & Hernández-Castilla, R. (2015). Esperanza Crítica en educación para la justicia social. *Revista Internacional de Educación para la Justicia Social (RIEJS)*, 4(2), 5-9. <https://bit.ly/2NyEd4Y>
- Negrín-Fajardo, O., & Vergara-Ciordia, J. (2006). *Teorías e instituciones contemporáneas de educación*. Editorial Universitaria Ramón Areces.
- Pérez Gómez, A. (2004). *La cultura escolar en la sociedad neoliberal*. Ediciones Morata.
- Puiggali-Allepuz, J., & Tesouro-Cid, M. (2021). Influencia de variables contextuales en el enfoque de enseñanza: relación entre enfoque de enseñanza y estilo de aprendizaje. *Aula Abierta*, 50(1), 481-490. <https://doi.org/10.17811/rifie.50.1.2021.481-490>
- Reguant-Álvarez, M., Vilà-Baños, R., & Torrado-Fonseca, M. (2018). La relación entre dos variables según la escala de medición con SPSS. *REIRE. Revista d'Innovació i Recerca En Educació*, 11(11 (2)), 45-60. <https://doi.org/10.1344/reire2018.11.221733>
- Rizvi, F., & Lingard, B. (2010). Globalizing education policy analysis. In *Globalizing education policy*. <https://doi.org/10.4324/9780203867396>
- Robinson, K., & Aronica, L. (2016). *Escuelas creativas. Debolsillo*.
- Rodríguez-Laguía, F.J., Herraiz-Gascueña, M., & Martínez-Cano, A. (2010). *Las competencias básicas y la programación didáctica*. Universidad de Castilla-La Mancha. <https://bit.ly/3s2P99R>
- Sancho, J.M. (2017). Discourses and Practices around the Competencies in Education. *Fonseca, Journal of Communication*, 15, 127-144. <https://doi.org/10.14201/fjc201715127144>
- Scriven, M. (1967). The methodology of evaluation. In Tyler, R. W., Gagné, R.M. & Scriven, M. *Perspectives of curriculum evaluation*. Rand McNally
- Shugert, D.P. (1968). *A Rationale for Curriculum Decisions*. <https://bit.ly/3asJK5X>
- Sisson, P.W., & Mazzuchi, T. (2017). Organic and fundamental functions: New perspective on the multidisciplinary nature of knowledge management. *Proceedings of the European Conference on Knowledge Management, ECKM*, 2(September), 1296-1300. <https://bit.ly/2OJ5S3H>
- Sönmez, H. (2019). Examination of the reading comprehension skill according to revised Bloom's taxonomy. *International Journal of Language Academy*, 7(June), 127-147. <http://dx.doi.org/10.18033/ijla.4101>
- Stake, R. (1967). The countenance of educational evaluation. *Teachers College Record*, 68, 523-540
- Stenhouse, L. (1975). *An introduction to curriculum research an development*. Heinemann.
- Stuffelbeam, D.L., & Shinkfield, A.J. (1985). Introducción a la Evaluación. In Paidós (Ed.), *Evaluación Sistemática. Guía teórica y práctica*. (pp. 17-63). <https://bit.ly/3atGO9m>
- Taberner-Guasp, J., & García-Marín, J. (2013). La sociología de la educación ante la sociedad del conocimiento. *Praxis Sociológica*, 17, 47-66. <https://bit.ly/3dnHYoE>
- Tapiero-Vásquez, E. (2000). La evaluación crítica: dispositivo para la transformación escolar. *Pedagogía y Saberes*, 14, 51-55. <https://doi.org/10.17227/01212494.14pys51.55>
- Torres-Santomé, J. (2017). *Políticas educativas y construcción de personalidades neoliberales y neo-colonialistas*. Morata.
- Tyler, R.W. (1949). *Basic Principles of Curriculum and Instruction*. The University of Chicago Press.
- Valero-Flores, F.M. (2017). La evaluación formativa desde el enfoque por competencias en educación básica. *Educando Para Educar*, 32, 41-50. <https://bit.ly/2NFqJUX>
- Vilanou-Torrano, C. (2015). Pensamiento pedagógico en el idealismo alemán y en Schleiermacher, por José María Quintana Cabanas. *Historia y Memoria de la Educación*, 1(1), 497. <https://doi.org/10.5944/hme.1.2015.13206>
- Wiliam, D. (2011). What is assessment for learning? *Studies in Educational Evaluation*, 37(1), 3-14. <https://doi.org/10.1016/j.stueduc.2011.03.001>



- Wraga, W.G. (2017). Understanding the Tyler ratio-nale: Basic Principles of Curriculum and Instruction in historical context. *Espacio, Tiempo y Educación*, 4(2), 227.
<https://doi.org/10.14516/ete.156>
- Zambrano-Farias, F.J. (2017). Sociedad del conocimiento y las TEPs. *INNOVA Research Journal*, 2(10), 169-177.
- <https://doi.org/10.33890/innova.v2.n10.2017.534>
- Zuleta-Medina, A., & Chaves-Torres, A. (2009). La educación bajo el lente de la teoría crítica. *Plumilla Educativa*, 6(1), 50-61.
<https://doi.org/10.30554/plumillaedu.6.558.2009>





Representation of evaluation at school: A professional social learning

Representación escolarizada de la evaluación: Un aprendizaje social profesional

 **Dra. Ana Carolina Maldonado-Fuentes**, is a professor at Universidad del Bío-Bío (Chile) (amaldonado@ubiobio.cl) (<http://www.orcid.org/0000-0002-9198-5882>)

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Abstract

Training teachers as evaluators is a challenging task, as evaluation is a polysemous construct linked to power relations and school culture. It becomes an interesting study object as a specific learning during Initial Teaching Training, particularly when school communities expect to overcome the technical-instrumental approach. This qualitative study inquiry into the evaluation task as object of representation by primary education teachers, an educational level with a high number of enrolled students, in order to characterize the social representations on the evaluation of the teaching staff in training. Based on the assumption that social representations are built at different moments during the training route, a cross-sectional study design was implemented involving 18 students undergoing initial teaching training and 13 recently graduated students from two regional universities that are members of the Chilean Council of University Presidents. The data collection was based on focused interviews conducted from April to October 2019. The content analysis was carried out in five stages and data were organized in a consolidated sheet of emerging theoretical codes. The findings show dynamic representations about the evaluation task and the school evaluation system, as a result of social and professional self-learning at educational institutions. These results suggest that various actors from school communities impact on teachers and their literacy skill development related to educational assessment.

Keywords: Initial Teaching Training, primary school teachers training, school evaluation, assessment of learning, social representations, school culture.

Resumen

La formación del profesorado como evaluador constituye un desafío de la docencia, al ser la evaluación un constructo polisémico que está ligado a las relaciones de poder y a la cultura escolar. Esto invita a su estudio como objeto de aprendizaje específico en la Formación Inicial Docente, más aún si desde las normativas se alberga la expectativa de superar el enfoque técnico-instrumental. Esta investigación, de tipo cualitativa, indaga en la tarea de evaluar como objeto representado por docentes de Educación Básica, en cuyo nivel hay amplia cobertura, con el objetivo de caracterizar las representaciones sociales sobre la evaluación del profesorado en formación. Bajo el supuesto de que las representaciones sociales se construyen en distintos momentos del itinerario formativo, se implementó un diseño seccional cruzado, contando con 18 estudiantes en formación inicial y 13 egresados/nóveles de dos universidades regionales del Consejo de Rectores de Chile. La recolección de información se basó en entrevistas focalizadas aplicadas entre abril y octubre de 2019. El análisis de contenido se desarrolló en cinco etapas y los datos fueron categorizados con un libro consolidado de códigos teórico-emergentes. Los hallazgos revelan que las representaciones sobre la tarea de evaluar y el sistema de evaluación escolar son dinámicas, producto del autoaprendizaje social profesional en los centros educativos. Así, se interfiere la incidencia de distintos actores de las comunidades escolares en la alfabetización del profesorado sobre evaluación.

Descriptores: Formación Inicial Docente, formación de docentes de primaria, evaluación escolar; evaluación del aprendizaje, representaciones sociales, cultura escolar.

1. Introduction and state-of-the-art

Evaluating is one of the tasks that is commonly associated with the role of teachers in educational institutions. This skill is part of teaching and learning processes, “at the same time, it is an essential regulatory activity and a way to improve the learning of students” (Hernández-Nodarse, 2017, p. 2). This assessment and judgment-making is inherent to the human being and is related to various purposes (diagnosis, measurement, certification, classification or segregation), in the educational field. Hence, it is an object of interest in various disciplines, in Education Sciences.

It is also known that “the relationship between education and evaluation has been marked by power relations through assessment, test and punishment” (Londoño-Restrepo, 2015, p. 157); therefore, they are based on sanction. This representation originated in China (around the II century B.C.) and links to modern schools (19th century), in which prevails an interest in results over an assessment of teaching and learning processes. This situation is contrary to the principles of the Tylerian definition of Educational Evaluation (decade 1950), the purpose of which was to determine how much has been achieved from curricular programs with a permanent review of pedagogical actions and available resources.

It is also important to consider that evaluation is often viewed as a strenuous task for a teacher. On the one hand, assessment approaches are at the level of educational discourse, i.e., it is a polysemous construct that can have diverse conceptual bases, such as technical-instrumental logic, practical perspective or a critical-transformative approach (Saul, 2001; Escudero, 2003, Moreno-Olivos, 2014). On the other hand, assessment is an activity present in schools, where premises are not necessarily explicit. For example, a shared vision of learning has been naturalized as the main object to be evaluated, an idea enhanced by the incidence of psychometrics to measure individual achieve-

vements. Consequently, academic performance is a concern for students as well as for families, managers and institutional actors responsible for schooling. In addition to this, the role of the teachers as the main educational agent responsible for granting learning achievement inside the classroom. Thus, “the teacher, in his/her role as evaluator is very important in the development of this process and sometimes ... has a wrongly power that is threatening” (Perassi, 2014, p. 48), enhancing the hierarchical and controlling position.

In other words, evaluation tends to be reduced to a technical verification process of results according to predetermined objectives, without further reflection of the formative processes, which influence its conceptualization, even knowing that the educational evaluation responds to an ethical and political commitment, which is essential to transforming education and society (Calderón & Borges, 2013). From our point of view, attending to these representations could help to understand assessment and evaluation no longer as an instructional practice, but as a skill from which is possible to (re)orient the teacher training as the main point of this research.

1.1. From evaluated students to evaluators

One of the challenges of Higher Education Institutions in charge of initial teacher education (ITE) is to contribute to the preparation of teachers with educational assessment knowledge, in accordance with the expectations of the school system (Boyles, 2005; Brookhart, 2011; Charteris & Dargusch, 2018). However, empirical evidence has revealed that the educational processes of teaching students are complex, with multiple factors involved in the construction of their role: from being students to being teachers.

This journey is mediated by a set of conceptualizations, representations and previous interests that operate as tacit elements of practice that influence the construction of their professional



identity (Xu & Liu, 2009; Guerra & Montenegro, 2017; Hernández-Nodarse, 2017). In this way, it is normal to note that future teachers, after four or five years of formal training, tend to repeat the models observed during their previous school experience, revealing how difficult is to switch the mindset from evaluated student to evaluator.

Additionally, it is possible to affirm that the professional insertion of teachers is influenced by everything they learned at school before ITE (Lortie, 1975; Albaiud, 2004); where they return with unconscious representations related to the conceptions of teachers in the classroom. Thus, for example, there is a belief in objectivity as an expected quality of assessment or the need to control it in tests, since their results are associated with passing a subject. Assessment as quality assurance tools relies heavily on these aspects, pursuing social and share purposes.

Moreover, assessment focus on results is aligned with ideas of the Educational Reform of 1990 present in Latin America. Inzunza et al. (2011) have already warned us about this, stating that a technical approach has dominated the main policies on schools and teaching, and therefore teachers are «trapped in educational technology» without being «considered from their role as professionals». In this context, it is pointed out that those approaches have prevailed at school level, understanding education as a job that is mainly instructional and technical, generating strong pressures on the faculty to improve the achievement levels of the students. According to Cornejo et al. (2015), this phenomenon in Chile is related to the articulation of formal regulations in education. In other words, teaching assessment would be covered by a policy based on a set of criteria, such as efficiency-effectiveness, which could be analyzed during the training of the evaluator.

1.2. Assessment in Teacher Training

When reviewing assessment and evaluation as an object of teacher knowledge, a first point to

consider is the school record of those admitted to teaching programs. The literature on Initial Teaching Training provides evidence on the previous experiences these students have had during schooling, affecting the representation of their role (Marcelo & Vaillant, 2018). This includes their experiences at school and at teaching institutions. For this reason, it is relevant to relate both stages.

Second, authors such as Sureda-Negre et al. (2016), note the value of teaching in real contexts under the assumption that learning is built through the participation of the individual in social practices. It allows to see the approach that future teachers may have, and its influence on the evaluative decision-making of initial education teachers (Edwards, 2020), under the idea that evaluation is determined by the educational system (Remolina-Caviedes, 2012), and at the same time schooling is socially and culturally screened (Ferrière & Morin-Messabel, 2012).

Another element is the curriculum of teaching programs. The available background shows that future teachers are approaching professional practical training. This usually occurs in successive stages of access to schools after a first cycle of introductory subjects. It seems relevant to deepen on this stage, as future teachers face the challenge of discovering the reality of being a teacher during the ITE (Jarauta, 2017). This process often involves dealing with differences, which lead to changing initial conceptions about the profession and the job. Regarding the previously said de Oliveira-Chamon (2014) reports that there is a tension between the emphasis given to theory (knowledge) and to practice (classroom work) in the preparation of primary education teachers; since teacher training from an individual effort to a more complex logic of acting as teachers, confirming the need to enter the school system early. In addition, Hirmas- Ready (2014) points out that an approach based on technical logic predominates in Chile, characterized by theory preceding practice; and those conceptual



models and principles may prevail over a school reality, which should be further investigated.

Likewise, it is worth mentioning the research of Mendes and Rinaldi (2019) PE teachers studying a master degree in Primary School. This text informs how some of the participants, after facing some problems related to school and assuming a critical teaching position, manage to move from an embedded professional experience based on the symbolic evaluation as a result and selection, to a restructured one, which includes evaluation practices as a process and commitment. Following Bourdian tradition, this finding is explained by the nature of the professional environment created in an intrinsic and relational way in the different stages of the teaching career. Another example is Jiang et al. (2020), who studied the transition from pre-service teachers to beginner in English/LE teachers using the theory of social representations. These authors state that professional aspirations of future teachers are provisional during the ITE, since these may change when teacher applicants are exposed to factors such as classroom dynamics, school settings, and educational policy requirements. In other words, representations about the profession are being constructed by personal beliefs, previous learning experiences, teaching practice and the institutional culture of schools. Hence, it is interesting to survey the formation of future teacher as evaluator from a diachronic approach, considering their progress beyond the initial training stage.

1.3. Toward new assessment practices

Palacios-Picos and López-Pastor (2013) identify three profiles of teachers (trainers) in the ITE. First, the “Traditional Evaluator”, who performs summative and final evaluation, obtaining the score of a test and/or project, without involving the students in such processes. Unlike the previous one, the “Innovative Evaluator” often uses formative and continuous assessments tools, and tends to involve the student. Third, “Eclectic Evaluator”, usually performs formative

assessment, combines test with other learning and evaluation activities and may involve students. The most common cases are reported in the first and third profiles, from which it is inferred that it is complex to modify the assessment practices observed in ITE.

However, Murillo and Hidalgo (2018) mention that changing the type of assessment is one of the most repeated idea pointed out by teachers. In this case, aspects related to a social fair assessment (transparency, use of qualitative tests, evaluation of attitudes) are identified, giving multidimensionality to the concept. In addition, Kelly et al. (2020) incorporate historical backgrounds on teacher performance assessment and propose a Likert scale to evaluate five key dimensions of literacy assessment: validity, reliability, data analysis, fair assessment, and student choice. From our point of view, what is interesting about this research is that they clearly present some conceptual frameworks based on democracy or more comprehensive visions of education, which could enhance the (re)elaboration of teaching, learning and assessment representations, which is consistent with the expectation of moving toward a pedagogical look at the evaluative process (MINEDUC, 2018).

1.4. Theory of social representations

The concept of social representations was presented by Moscovici (1925-2014) in 1960 to distinguish scientific knowledge from the one based on common knowledge. Epistemologically, it is a construct that takes up the Dukhian tradition to give meaning to a type of dynamic character representation that is both individual and collective. Thus, representations “is a relationship between cognition and communication, information and meaning” (Remolina-Caviedes, 2012, p. 99), giving individuals the opportunity to build and reconstruct reality from a sociocultural perspective.

The distinction of three variables has been one of the pivotal contributions and empirical



research. Those are: attitude, information and field of representation. This three-dimensional composition allows to present the content and structure it as a whole, favoring its applicability in various disciplines, and giving stability and robustness to the construct. Another methodological advantage is the different methods to addressing and interpreting the findings: procedural, structural, psychosocial, and cultural approaches. The first two have generated empirical studies in Latin America (in Brazil, Mexico, Venezuela and Argentina) and Europe (Urbina-Cárdenas & Ovalles-Rodríguez, 2018). In general, the qualitative methodology is privileged and there is a tendency to use questioning techniques, oriented toward the understanding of meanings, derived from the verbalizations of the participants (Cuevas & Mireles-Vargas, 2016).

In this context, Castorina (2017) notes that the study of social representations is interesting for investigating various subjects in the field of Education, such as the identity of the teaching formation or the knowledge of teachers. In the case of this study, Gil-Rojas (2019), recognizes the evaluation of learning as a representative object, since it corresponds to a form of social knowledge. It is a social and historical construction, based on collective knowledge. In this way, evaluation can be described as social practice and as a value judgment on an educational process.

2. Methodology

Since this research aims to characterize social representations on the assessment for learning, a qualitative interpretative method was carried out (Flick, 2007). Thus, a cross-sectional design was performed, the advantage of which is to collect information at different stages of interest in the same training program, without needing a longitudinal design (Gewercc & Montero, 2015). In this study, the stages were: ITE students, alumni and teaching students of primary education tra-

ned in two regional universities of “Consejo de Rectores de Chile” (CRUCH), made up of top-ranked universities according with the National Accreditation Board in Chile.

Intentional and non-probabilistic sampling was performed, as it allows greater control of the process (McMillan & Schumacher, 2011). Participation was voluntary and with informed consent. The group consisted of 18 ITE alumni (cohort 2017) who have completed half of the curriculum and 13 alumni (cohort 2015 or earlier). The latter have a professional qualification and/or have worked as classroom teachers in learning centers recognized by the State in the past five years.

Biographical interviews were used to collect information (Flick, 2007). These were conducted in person by the researcher with a basic script that included a generating follow-up and closing question. The content and structure of the script were reviewed by expert judges. After piloting the process, interviews were performed between April and October 2019, with an average duration of 42 minutes (D. E.12.8). Subsequently, interviews were recorded, and their transcriptions were carried out in a double review process between audio and text; with a total of 10 to 12 pages per interview. Each of the texts (unique cases) coded according to predefined labels, in correlative order of numbers and by date. Thus, E1 is interview 1 (first) and E31 is interview 31 (last). For the data collection, thematic segments were identified as units of analysis, namely, pieces of speech from participants. In all texts, spelling norms were respected, and colloquial phrases were edited in order to standardizing language.

The content analysis was carried out from the procedural approach of social representations in different states. In addition, coding units and their meanings were adapted from Cuevas (2016). The first four stages¹, their analysis processes and main results are described below:



Table 1. Stages content analysis

Stage	Analysis processes	Key results
Understanding	Initial reading of the corpus and identification of recurrent subjects	Global agreements and shared terminology
Registration	Iterative reading of the corpus. Identification of unified codes review by expert judges. Emerging and theoretical code labeling. Audit for consistency analysis in coding	Initial Codes, Adjusted Codes, Consolidated Codes
Categorization	Organization of data according to the theoretical dimensions of a social representation. Final labeling and coding	Categories of analysis applied
Integration	Elaboration of analytical matrix by category and type of informant. Example in interview segments.	Analytical Matrix Thematic segments

Source: Own elaboration based on the PhD thesis, adapted from Cuevas (2016).

As shown in the table above, the research followed an inductive-deductive method for the interpretation of empirical sample. There were several stages of data analysis, monitoring aspects of credibility and consistency through inter-judge reviews in external audits (Guba, 1989), resulting in an organized corpus of data.

The following table shows the labels, acronyms and operational definitions for each of the fourteen final categories, the distribution of which was made in the theoretical dimensions of a social representation: attitude, information and field of representation.

Table 2. Categories of analysis of the evaluation as a represented object

Attitude towards assessment		It is made up of evaluative expressions in relation to the object of representation (Moscovici, 1979; cited by Cuevas, 2016, p. 122)
Negative emotions	En	Negative moods experienced when participating in an assessment, either as an evaluator or as an assessed subject.
Positive emotions	Ep	Positive moods, as a result of attaching importance to something or someone, in relation to evaluation or evaluative practice.
Personal disposition	Di	Inclination to act in a certain way in evaluative situations and/or to face the task of evaluation.
Expectations	Ex	Desires or hopes that arise around the evaluative system by the content that is evaluated.
Complaints	Qu	Claim, disgust, or resentment by the performance or behavior of someone linked to the evaluation and its implementation.



Information related to assessment		It relates to the organization of knowledge that a group possesses with respect to a social object (Moscovici, 1979; cited by Cuevas, 2016, p. 121)
Field of representation of assessment		Refers to the idea of image, social model, and the concrete and limited content of propositions concerning an object (Moscovici, 1979; quoted by Cuevas, 2016, p. 121)
Formal Learning	Af	Learning about the evaluation that is available in curricular or training in initial and continuous plans.
Professional Social Self-Learning	Asp	Valuation of peer communication and cooperation of other actors in the education system to inform or endorse what is known about evaluation.
Documents and regulations	DyN	Learning about evaluation based on texts and/or sources recognized as official references to educational policy at the country level.
Power relations	RdP	Actions of obedience and control in social interaction, consistent with the willingness to follow orders or instructions, without necessarily questioning them.
Assessment culture	Ce	Follow-up of routines and/or criteria of professional performance outside the classroom, usually based on claims of authority or custom that affect the decision-making of the faculty as evaluator.
Practice in the classroom	Pa	Individual performance of the faculty as evaluation agents. It is related to the construction and application of classroom-level assessment tools/procedures.
Types of assessment	TdE	Teachers' knowledge of the different types of and classification of assessments, apart from tests and exams.
Obstacles to assessment	OdE	Contextual aspects that are a barrier when performing assessment and that affect the making of evaluative decisions in the classroom.
Solutions to assessment	SdE	Proper professional knowledge to solve problems of assessment.

Source: Own preparation based on PhD thesis (2021).

3. Results and discussion

A key result was the operational definition of the assessment as a teaching task:

The teaching role focuses on learning assessment in the classroom. This activity varies in accordance with the assessment practices and regulations of the school system.

The following table shows how the evaluator is seen from literature and interviews and how are the teachers usually in charge of carrying out the assessment task.

3.1. Matrix results

The interview answers were classified according to the dimensions of social representation (attitude, information and field of representation), as shown in Table 3.



Table 3. Matrix in assessment analysis

Dimension	Acronym	Student ITE	Graduate	Total	
Attitude towards evaluation	En	05	06	11	13.1
	Ep	06	00	06	07.1
	Di	18	11	29	34.5
	Ex	15	08	23	27.4
	Qu	03	12	15	17.9
	Subtotal	47	37	84	27.0
Information on evaluation	Af	28	22	50	58.8
	Asp	07	11	18	21.2
	DyN	02	15	17	20.0
	Subtotal	37	48	85	27.3
Evaluation representation field	RdP	00	07	07	04.9
	Ce	16	12	28	19.7
	Pa	01	14	15	10.6
	TdE	12	17	29	20.4
	OdE	05	34	39	27.5
	SdE	14	10	24	16.9
	Subtotal	48	94	142	45.7
Total		132	179	311	100.0
		42.4	57.6		

Source: Own preparation based on doctoral thesis.

Figures showed that much of the interview segments focused on the field of representation dimension with a frequency of 45.7%. It is followed by the assessment information and attitude toward evaluation dimensions, with fewer cases. Most of these come from graduate students, except in the attitudinal dimension where the number of ITE student observations is highlighted. This reveals that, discussions were different depending on the participants of each group. Regarding to it is possible to anticipate certain dynamisms in the content of the assessment representation as they progress their training process, which is supported by other studies (Mendes & Rinaldi, 2019; Jiang et al., 2020).

3.2. Thematic segments and SR dimension

Personal disposition and expectations in the ITE student group prevail in the attitudes toward assessment. These refer to personal elements in the assessment task, betting on a new treatment and/or paradigm shift. For example:

Assessment must consider the subjectivity since all human beings have inner beings, and we need to be aware of this fact when evaluated them. (E12-Student ITE)

Children take all assessment activities as a competition. I think it is a big challenge as



a teacher to try to change that paradigm a little bit, since that model is not positive for every child. We must encourage fellowship and empathy among them. (E9-ITE student)

Explanations from affectivity and the omission of concrete knowledge of traditional assessment models must be pointed out, since those are findings related to our research field. Thus, there are positive or negative emotions among ITE students that show an emotional factor on the part of the interviewee. This is the case:

Assessment is a difficult process that can affect the child. I have seen how the students look at their grade and start crying. (E29-ITE student)

Another finding is how the perception of the difficulty of designing evaluations changes among the participants. This could be related to the acquisition of new knowledge as shown below.

At school I thought designing, revising, scoring, and submitting tests was an easy task. But, when I enter college and I realized it involved a method. We must be able to assess, we have rubrics, assessment tables and specific items. (E28-ITE student)

In the information dimension, most of ITE student's answers reveal a traditional conception of what assessment is. For instance:

In college we learn what assessment is. I have always thought that assessment was a grade, however, evaluating means realizing how the student is progressing. (E10-Student ITE)

I have already had two courses on assessment. The first one addressed assessment from theory and the second course, I'm taking now, is about design of assessment tools. (E27-ITE student)

In spite of the above, unlike ITEs, complaints stand out in graduate students, as seen in:

In multiple-choice tests, children just want to select an answer. They think those tests are

boring. They want to finish their test quickly because they do not represent a challenge. (E31-graduate)

It is complicated to assess each group of students. Because the number of children is significant. Then it is difficult to evaluate a child individually. However, each class should be assured of getting at least one assessment. (E15-novel)

From the interviews, it is concluded that there are disagreements about how to carry out the assessment task required in schools. In addition, there is discomfort regarding the difficulties that arise from the application of tests, since they are not associated with a positive description.

At the same time, novel interviewees recognize that insertion in learning centers has enabled them to better understand the contextual and normative aspects of assessment, showing professional social learning. Some answers are shown below:

Reflection on evaluation occurs among colleagues, just as when we address other technical aspects. Advice from colleagues at work was important. (E1-Novel)

We did a day of reflection and discussion before leaving school for winter break. We introduced and determined the assessment guidelines. (E18-Novel)

In teachers' staff meetings it is where we can share our experiences, where it is possible to design assessment tools for all our students; a type of comprehensive assessment model. (E16-Novel)

Finally, regarding assessment, ITE group tends to associate school culture with the design of instruments, especially test-type, which agrees with other studies of SR in similar populations (Maldonado-Fuentes et al., 2020). This claim is supported by the following statement: "When I designed my first assessment instrument, it was a very formal exam, including different types of items" (E10 ITE student). This finding could



be explained by the teachers' experiences, since according to Perassi (2010) there are instruments that have a greater use tradition in the classroom (tests, assessment tables or rubrics), contrary to those tools designed by school themselves.

It is important to highlight how students reduce the assessment process to a figure: "I think the easiest thing to do is for the assessment to be transformed into a number. An interval of grades is made based on a grade equal to 3 or 4." (E30-student ITE).

According to Mau (2020), this situation can be explained by a quantification model prevailing in society — a "metric society" — which, far from being neutral, develops a form of data-based governance, with impact on performance appreciation and comparability.

Different things happen with graduate/novel, who mention other types of assessment tools, reporting that in the field of 'the school', in addition to tests, dilemmas need to be resolved *in situ*. These conclusions are shown below.

We know the tools for a formative assessment which is a tool for measuring the learning process. (E17) [U1-Novel]

Today I had to conduct a questionnaire, because the student did not make the scheme. I had to perform another evaluation strategy. (E3) [Novel]

At the same time, these participants use power relations and different actors in the control of assessment, whose ideas are absent in ITE cases. For example:

Chiefs of Academic Planning Unit prefer to make everything simple for children in order to avoid parents' complaints. (E31-graduate)

I prefer to design assessment guidelines so that parents clearly know what I am focusing on. (E6-Novel)

This aspect relates to the statement that "assessment, as an educational element, has political bases, therefore, it can be approached from

conservative (the teacher has absolute power) or progressive perspectives (power is distributed between teacher and student)" (Maureira-Cabrera et al., 2020, p.194), to which we could add the impact that the interventions of other agents such as the family or the school management team may have.

4. Conclusions

Results show that assessment represents a function that is directly related to the role of teachers in the classroom, in which negative and positive emotions converge as well as expectations and complaints. Depending on the type of interviewee, segments tend to focus on conditions that would make the assessment process more difficult or easier. In other words, the starting point is a simplistic representation of the assessment process based fundamentally on the design of tools (ITE students), and progress is being made towards a more elaborate and complex approach of the phenomenon. This approach includes the results and interaction with others (parents, colleagues, or school principals), whose experience appears to be more visible at work. In this regard, we agree with Gil-Rojas (2019) who say that during initial training, in addition to analyzing formal theoretical models of evaluation, it is necessary to link this knowledge with the one coming from the needs and dynamics of the school communities.

Also, the data show that the role of assessment is difficult to understand at school, as it requires specialized preparation and knowledge, along with a broader sense built in interaction with others during ITE. In fact, one of the main contributions of this research is that such learning is transversally soften by professional social learning. In other words, as future teachers interact with other educational actors, they understand assessment in each learning institution and are aware of the environment of the school itself. From this, the future teacher develops a more



complex perspective of assessment as an object of professional knowledge.

A specific finding is how emotions impact assessment in relation to students and their parents causing some concern among participants. Thus, it can be assumed that understanding the consequences of the assessment task is associated with the power of teachers, as social actors within the classroom. The latter recalls Lumby's essay (2013), which records how every social organization, as a human association, can be understood as "fields of power" with instructions and rules that regulate the behaviors to be followed; something that appears to be undeniable.

Finally, the three-dimensional definition of the SR made it possible to understand that there is dynamism in the construction of social relations, since the elements of the representation field are mostly visible in the last stage of ITE. This is consistent with other studies in which teachers participate, since the assessment and qualification tasks correspond to teaching activities that are carried out in the workplace itself. However, in this case there is a relationship between the training experiences, ITE insertion in schools, and the graduate students, since these are topics that have not been deepened enough in Chile (Cisterns, 2011). In this sense, a contribution of this research was the cross-sectional design, which opens further studies into the attitudes, information and field of representation of assessment, considering different stages of the training process for teachers (pre ITE, during ITE and post ITE).

Note

¹ All phases and results are included and available at the Ph.D. dissertation titled "From Teachers as an Evaluated Student to Teacher as Evaluator: Representations About Evaluation in Primary Teaching Training" financed by BECA CONICYT-PFCHA/DOCTORADO NACIONAL/2017-21170257.

References

Alliaud, A. (2004). La experiencia escolar de maestros inexpertos. Biografías, trayectorias y prá-

tica profesional. *Revista Iberoamericana de Educación*, 34(1), 1-11.

<https://doi.org/10.35362/rie3412888>

Boyles, P. (2005). Assessment literacy. In M. Rosenbusch (Ed.), *National Assessment Summit Papers* (pp. 1-15). Ames, IA.

<https://bit.ly/3pSDg6I>

Brookhart, S. (2011). Educational assessment knowledge and skills for teachers. *Educational Measurement: Issues and Practice*, 30(1), 3-12.

<https://doi.org/10.1111/j.1745-3992.2010.00195.x>

Calderón, A., & Borges, R. (2013). La evaluación educacional en el Brasil: de la transferencia cultural a la evaluación emancipadora. [The educational evaluation in Brazil: from the transfer cultural to emancipatory evaluation]. *Educación*, 22(42), 77-95.

<http://bit.ly/2MnRiO6>

Castorina, J. (2017). Las representaciones sociales y los procesos de enseñanza-aprendizaje de conocimientos sociales. [Social representations and teaching and learning processes of social knowledge]. *Psicología da Educação*, 44,1-13.

<https://doi.org/10.5935/2175-3520.20170001>

Charteris, J., & Dargusch, J. (2018). The tensions of preparing preservice teachers to be assessment capable and profession-ready, *Asia-Pacific Journal of Teacher Education*, 46(4), 354-368.

<https://doi.org/10.1080/1359866X.2018.1469114>

Cisternas, T. (2011). La investigación sobre formación docente en Chile: Territorios explorados e inexplorados. [Research on teachers' education in chile: known and unknown territories]. *Calidad en la Educación*, 35, 131-164.

<https://dx.doi.org/10.4067/S0718-4565201100200005>

Cornejo, R., Albornoz, N., Castañeda, L., Palacios, D., Etcheberrigaray, G., Fernández, R., Gómez, S., Hidalgo, F., & Lagos, J. (2015). Las prescripciones del trabajo docente en el nuevo marco regulatorio de políticas educativas en Chile. [Job prescriptions for teachers under the new regulatory framework of educational policy in Chile] *Psicoperspectivas*, 14(2), 72-83.

<https://dx.doi.org/10.5027/PSICOPERSPECTIVAS-VOL14-ISSUE2-FULLTEXT-580>



- Cuevas, Y. (2016). Recomendaciones para el estudio de representaciones sociales en investigación educativa. [Suggestions for the study of social representations in educational research]. *Cultura y Representaciones Sociales*, 11(21), 109-140. <https://bit.ly/2Mq8z9c>
- Cuevas, Y., & Mireles-Vargas, O. (2016). Representaciones sociales en la investigación educativa. Estado de la cuestión: producción, referencias y metodología. [Social representations in educational research. The status of the issue: Production, referents and methodology], *Perfiles Educativos*, XXXVIII (153), 65-83. <https://bit.ly/3a3NxWe>
- De Oliveira-Chamon, E. (2014). Representações sociais da formação docente em estudantes e professores da Educação Básica. [Social Representation of Teacher Education for Undergraduates and Primary Education Teachers] *Psicología Escolar e Educacional*, 18(2), 303-312. <https://bit.ly/2MvaxW4>
- Edwards, F. (2020). The effect of the lens of the teacher on summative assessment decision making: the role of amplifiers and filters. *The Curriculum Journal*, 31, 379-397. <https://doi.org/10.1002/curj.4>
- Escudero, T. (2003). Desde los tests hasta la investigación evaluativa actual. Un siglo, el XX, de intenso desarrollo de la Evaluación en Educación. [From tests to current evaluative research. One century, the XXth, of intense development of evaluation in education]. *Revista Electrónica de Investigación y Evaluación Educativa*, 9(1), 11-43. <https://doi.org/10.7203/reieve.9.1.4348>
- Ferrière, S., & Morin-Messabel, C. (2012). L'ennui en contexte scolaire : effets de variation et typologie de représentations chez les futurs professeurs des écoles, selon le sexe de l'élève et son niveau scolaire. *Bulletin de Psychologie*, 522(6), 583-595. <https://doi.org/10.3917/bupsy.522.0583>
- Flick, U. (2007). *Introducción a la investigación cualitativa*. Morata.
- Gewerc, A., & Montero, L. (2015). Professional Knowledge and Digital Competency in Teacher Education. The case of Elementary Teacher Education Degree. *Revista Latinoamericana de Tecnología Educativa*, 14(1), 31-43. <https://doi.org/10.17398/1695-288X.14.1.31>
- Guba, E. (1989). Criterios de credibilidad en la investigación naturalista. En Gimeno Sacristán, J., *La enseñanza: su teoría y su práctica* (pp. 148-165). Akal.
- Gil-Rojas, J. (2019). Representaciones sociales de la evaluación en dos escuelas de secundaria de Guadalajara, México. [Social representations of evaluation in two high schools in Guadalajara, Mexico]. *Lenguaje*, 4(1), 173-200. <https://doi.org/10.25100/lenguaje.v47i1.7321>
- Guerra, P., & Montenegro, H. (2017) Conocimiento pedagógico: explorando nuevas aproximaciones. [Pedagogical knowledge: exploring new approaches]. *Educação e Pesquisa*, 43(3), 663-680. <http://dx.doi.org/10.1590/s1517-9702201702156031>
- Hernández-Nodarse, M. (2017). ¿Por qué ha costado tanto transformar las prácticas evaluativas del aprendizaje en el contexto educativo? Ensayo y crítico sobre una patología pedagógica pendiente de tratamiento. [Why Has It Been So Difficult to Transform Evaluation Practices of Learning in the Educational Context? A Critical Essay on a Pedagogical Pathology Still to Be Treated]. *Revista Electrónica Educare*, 21(1), 1-27. <http://dx.doi.org/10.15359/ree.21-1.21>
- Hirmas-Ready, C. (2014). Tensiones y desafíos para pensar el cambio en la formación práctica de futuros profesores. [Difficulties and challenges for a change in the practical formation of future teachers]. *Estudios Pedagógicos*, 40(Especial), 127-143. <https://dx.doi.org/10.4067/S0718-0705201400200008>
- Inzunza, J., Assael, J., & Scherpding, G. (2011). Formación docente inicial y en servicio en Chile. Tensiones de un modelo neoliberal. [In-service Teacher Education in Chile: Tensions of a Neo-liberal Model]. *Revista Mexicana de Investigación Educativa*, 16(48), 267-292. <https://bit.ly/3sXRnJ1>
- Jarauta, B. (2017). La construcción de la identidad profesional del maestro de primaria durante su Formación Inicial. El caso de la Universidad



- de Barcelona. [Constructing the professional identity of primary school teachers during their initial teacher training. The case of the University of Barcelona]. *Profesorado. Revista de Currículum y Formación de Profesorado*, 21 (1), 103-122. <http://bit.ly/39iafuo>
- Jiang, L., Yuan, K., & Yu, S. (2020). Transitioning from Pre-service to Novice: A Study on Macau EFL Teachers' Identity Change. *The Asia-Pacific Education Researcher*, 1-11. <https://doi.org/10.1007/s40299-020-00510-4>
- Kelly, M.P., Feistman, R., Dodge, E., Andresse, R., & Littenberg-Tobias (2020). Exploring the dimensionality of self-perceived performance assessment literacy (PAL). *Educational Assessment, Evaluation and Accountability*. <https://doi.org/10.1007/s11092-020-09343-7>
- Londoño-Restrepo, L.A. (2015). Relaciones de poder en la evaluación de los aprendizajes con docentes en formación. [Power relations in the evaluation of learning with teachers undergoing training]. *Entramado*, 11(1), 156-174. <http://dx.doi.org/10.18041/entramado.2015v11n1.21123>
- Lortie, D. (1975). *Schoolteacher*. The University of Chicago Press.
- Lumby, J. (2013). Distributed leadership: The uses and abuses of power. *Educational Management Administration & Leadership*, 41(5), 581-597. <https://doi.org/10.1177/1741143213489288>
- Maldonado-Fuentes, A., Tapia-Ladino, M., & Arancibia-Gutiérrez, B. (2020). ¿Qué significa evaluar? Representaciones atribuidas por estudiantes de formación inicial docente en Chile. *Perfiles Educativos*, 42(167), 138-157. <https://doi.org/10.22201/iisue.24486167e.2019.167.59208>
- Marcelo, C., & Vaillant, D. (2018). La formación inicial docente: problemas complejos-resuestas disruptivas. *Cuadernos de Pedagogía*, 489, 27-32. <https://bit.ly/3iOVSkD>
- Mau, S. (2020). Numbers matter! The society of indicators, scores and ratings. *International Studies in Sociology of Education*, 29(1-2), 19-37. <https://doi.org/10.1080/09620214.2019.1668287>
- Maureira-Cabrera, O., Vásquez-Astudillo, M., Garrido-Valdenegro F., & Olivares-Silva, M.J. (2020). Evaluación y coevaluación de aprendizajes en blended learning en educación superior. *Alteridad*, 15(2), 190-203. <https://doi.org/10.17163/alt.v15n2.2020.04>
- McMillan, J., & Schumacher, S. (2011). *Investigación Educativa. Una introducción conceptual* (5a ed.). Pearson Educación.
- Medina-Díaz, M. del R., & Verdejo-Carrión, A. (2020). Validez y confiabilidad en la evaluación del aprendizaje mediante las metodologías activas. *Alteridad*, 15(2), 270-283. <https://doi.org/10.17163/alt.v15n2.2020.10>
- Mendes, E., & Rinaldi, I. (2019). Trajetórias do habitus avaliativo no decorrer da carreira docente. [Trajectories of the evaluation habitus during teaching careers]. *Movimento (ESEFID/UFRGS)*, 25, e25031. <https://doi.org/10.22456/1982-8918.80352>
- MINEDUC [Ministerio de Educación de Chile] (2018). Política para el fortalecimiento de la evaluación en aula. <https://bit.ly/3qWZbZw>
- Moreno-Olivos, T. (2014). Posturas epistemológicas frente a la evaluación y sus implicaciones en el currículum. [Epistemological approaches to evaluation and their implications in the school curriculum]. *Perspectiva Educacional*, 53(1), 3-18. <https://doi.org/10.4151/07189729-Vol.53-Iss.1-Art.211>
- Moscovici, S. (1979). La representación social: un concepto perdido (2º ed.). En Moscovici, S., *El Psicoanálisis, su imagen y su público* (pp. 27-44). Editorial Huemul.
- Murillo, F., & Hidalgo, N. (2018). Concepciones de los Docentes sobre la Evaluación Socialmente Justa. [Teachers' Conceptions about a Socially Just Assessment]. *Aula Abierta*, 47(4), 441-448. <https://doi.org/10.17811/rifie.47.4.2018.441-448>
- Palacios-Picos, A. & López-Pastor, V. (2013). Haz lo que yo digo pero no lo que yo hago: sistemas de evaluación del alumnado en la formación inicial del profesorado. [DoWhat I Say, NotWhat I Do: Student Assessment Systems in Initial Teacher Education]. *Revista de Educación*, 361, 279-305. <https://doi.org/10.4438/1988-592X-RE-2011-361-143>
- Perassi, Z. (2014). Las prácticas evaluativas de docentes en ejercicio. Escuela "innovadora" vs. Escuela "tradicional". *Alteridad*, 9(1), 44-55. <https://doi.org/10.17163/alt.v9n1.2014.04>



- Perassi, Z. (2010). ¿En qué medida la evaluación colabora con la mejora escolar? *Revista Iberoamericana de Educación*, 54(4), 1-18. <https://bit.ly/3cdYE1i>
- Remolina-Caviedes, J. (2012). La evaluación en el contexto escolar de Francia y Portugal. Actores y representaciones sociales. *Revista Latinoamericana de Estudios Educativos*, 42(2), 95-117. <https://bit.ly/2LWSA2J>
- Saul, A. (2001). *Avaliação emancipatória: desafios à teoria e à prática de avaliação e reformulação de currículo*. 5. ed. Cortez.
- Sureda-Negre, J., Oliver-Trobat, M., & Comas-Forgas, R. (2016). Medidas para la mejora de la Formación Inicial Docente de los maestros según el profesorado de un Departamento de Pedagogía. [Measures to improve pre-service teacher training according to the faculty members of an education department]. *Revista Bordón*, 68(2), 155-168. <https://doi.org/10.13042/Bordon.2016.68210>
- Urbina-Cárdenas, J., & Ovalles-Rodríguez, G. (2018). Teoría de las representaciones sociales. Una aproximación al estado del arte en América Latina. [Approach towards a state of the art on theory of social representations in Latin America]. *Psicogente*, 21(40), 495-544. <https://doi.org/10.17081/psico.21.40.3088>
- Xu, Y. & Liu, Y. (2009). Teacher assessment knowledge and practice: A narrative inquiry of a Chinese college EFL teacher's experience. *Tesol Quarterly*, 43(3), 492-513. <https://doi.org/10.1002/j.1545-7249.2009.tb00246.x>





Collaborative curriculum feedback, characterizing the resonances of student experiences

Retroalimentación colaborativa de currículo: Caracterizando las resonancias de las experiencias discentes

Dr. Rubén Nanclares is a professor at Universidad Santiago de Cali (Colombia) and researcher of the research group FORMACCE and UNIPLURIVERSIDAD (runan10@yahoo.com) (<https://orcid.org/0000-0003-1425-4776>)

Flor Ángela Tobón-Marulanda is a professor and researcher at Universidad de Antioquia (Colombia) (flor.tobon@udea.edu.co) (<https://orcid.org/0000-0002-7386-1333>)

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Abstract

Universities as institutions of knowledge must have methodological pedagogical proposals that allow them to update the curriculum, although each institution adopts models that allow them to achieve this objective, one of the weaknesses is active participation of the students. This study reflects on the value of student experiences and their implications for the qualification of training processes in university education. The work is based on the qualitative paradigm from a phenomenological approach; Ethnomethodology and ethno-research-training are used. For the generation of the information, the field diary and focus groups dynamized by collaborative activities are used, and the analysis is made of a thematic and contrastive category. When characterizing the learning experiences, called resonances, it is found that the collaborative feedback of the curriculum allows to identify many resonances that normally remain unknown, i.e., they are not taken into account and that are treated as epiphenomena of the training process. In this work we consider the value and capacity of the learning experiences, which are conceived as curricular actors, that is, co-authors of the training experiences, who have knowledge that can be used to adjust the proposals of the curricular components, improving the quality of teaching, learning, pedagogical practice and qualification of the curriculum.

Keywords: Curriculum acts, collaboration, university education, learning experience, training, feedback.

Resumen

Las universidades como instituciones de conocimiento, deben contar con propuestas metodológicas de tipo pedagógico que les permitan actualizar el currículo, si bien cada institución adopta modelos que les permiten alcanzar este objetivo, una de las debilidades es participación activa de los estudiantes; en este estudio se reflexiona alrededor del valor de las experiencias discentes y sus implicaciones para la cualificación de los procesos de formativos de la educación universitaria. El trabajo se apoya en el paradigma cualitativo desde un enfoque fenomenológico; se utiliza la etnometodología y la etnoinvestigación-formación. Para la generación de la información se utiliza el diario de campo y grupos focales dinamizados por actividades colaborativas, el análisis se hace de tipo categorial temático y contrastivo. En el ejercicio de caracterizar las experiencias discentes que denominamos resonancias, se encuentra que la retroalimentación colaborativa de currículo, permite identificar muchas resonancias que normalmente permanecen en la opacidad, es decir que no son tenidas en cuenta y que son tratadas como epifenómenos del proceso formativo. En este trabajo consideramos el valor y capacidad de alteridad de las experiencias discentes, que son concebidos como actores "curriculantes", es decir, coautores de las experiencias formativas, que tienen conocimientos que pueden ser utilizados para ajustar las propuestas de los componentes curriculares mejorando la calidad de la enseñanza, el aprendizaje, la práctica pedagógica y la cualificación el currículo.

Descriptores: Actos de currículo, colaboración, educación universitaria, experiencia discente, formación, retroalimentación.

1. Introduction: The experience of students in university education

In recent years, different researchers have reflected on the importance of student knowledge. According to Teixeira (1978), since the beginning of the 19th century, the American John Dewey identifies that in pedagogical practice, the experience of the subjects must be recognized as a basis for developing a training that promotes the generation and appropriation of knowledge; Larrosa (2002) argues that experience "is what happens to us, what changes us. Not what happens to others, or what changes others" (p. 21), also Freire (2010), points out that: "It is impossible for us to teach content without knowing how students think in their real contexts, in their daily lives" (p. 127), it is important that both teachers and students talk and share their experiences,—interact—since it is a basic principle for knowledge acquisition.

By analyzing different studies defined in the field of university education in which the importance of the experience of students is addressed by taking into account their diversity, these can be grouped into three groups: the first with the researches of Oliveira, (2016) and Bia et al. (2005) that take advantage of the experience of the students before starting the training process, with the aim of adjusting the contents based on the needs identified in the students' demands; a second group with the researches of Woitowicz et al. (2014), Paula and Ortiz (2015), Rodrigues and Knupp (2012) using the experience of students during the training process, through collaborative activities and other strategies; the third group will be the researches of Oliveira (2014), Lima et al. (2014), Silva and Arruda (2013), Thees (2011), Navarro et al. (2011), Vargas, de Souza and Dias (2007), which seek to identify elements that will improve the training experience once the curriculum component has been completed (this term is used in this paper as a synonym of subject, course, even in a general way course plan and curriculum proposal).

It should be noted that both the first and the third groups identify elements that seek to

influence in the curriculum either before starting the training process or later in a new implementation of the curriculum component. On the other hand, research in the second group uses collaborative strategies as actions to improve the on-site training experience.

In addition to these researches that reflect on the importance of the experience, Oliveira (2014), when analyzing 149 narratives from students of FALE/UFJF points out that: "It is practically impossible to find any discussion on the contents learned (or not) at the university" (p. 8). We then see an almost generalized picture of university-level programs, which little consider the students' experience to strengthen the training processes, or which use it in an instrumental and bureaucratic way when applying evaluation surveys on the curricular components, that little affect their transformation.

As mentioned before, we are still far from what Hernández (1998 quoted in Paula & Ortiz, 2015) states about the organization of the curriculum, where he proposes that it should be done through projects with joint action between the students and teachers. Currently, the strategy of updating the curriculum is carried out by teachers or specialists in the field of curricular components, except in rare exceptions where there is active participation of the students, or experiences where they can transform the curricular proposal.

The experience and authority to design curricular proposals have been attributed to so-called "experts", who have "integral", specific or specialized knowledge of any subject or discipline. Nowadays, this idea is deconstructing itself in the educational field; for example, according to Oliveira (2016), experiential knowledge "is a knowledge that is devalued and often unknown by the actors of education" (p. 8-9). From this perspective, Macedo (2015) points out that: "Human experience is irreducible, it is a phenomenon mediated by multiple references, so it cannot be explained by models that pretend to be universalized" (p. 18), this authorizes us to see in



the classroom a rich environment where curriculum and training processes can be strengthened through the experience of the students.

A critical reading of this perspective allows to identify that the experience of both the teacher and the student is relevant and should be considered in implementing any educational action, including the construction or updating of the curriculum, since this allows to create a formative experience that interacts with its context, through the knowledge of those called by Macedo (2007) as "curricular" actors (teachers, students, among others), contributing to the strengthening of training proposals.

This position is not new though. According to Souza (1999), the literacy method created by Brazilian pedagogist Paulo Freire had different phases, one of which was to identify the vocabulary of students in order to prepare generating words, this whole process was created from the experience of the learners. In this regard, Gadotti (2008) states that the "initial diagnosis or assessment is a survey of students' prior knowledge of a topic, concept, procedure" (p.111). For its part, Kaplún (1998) calls this as a pre-initial phase, which should be the beginning of educational communication; its purpose is to identify the characteristics of the students in order to create the most appropriate means by improving the interaction between teachers-content-students.

In this sense, the best way to recognize the students' experience is the interaction. Thees (2011) in an article entitled: "Some implications of teaching attitudes for students' mathematical knowledge," describes a situation in which the lack of dialogue and the apparent lack of interest of the teacher in questioning the student eliminated their possibility to acquire new knowledge. From this point of view, it is found that the students' experience offers an alternative for teachers to analyze and improve their pedagogical practice through mediation and dialogue. In this sense, Tardif (2005) points out that the experience causes "a critical (feedback) effect of acquired knowledge" (p.53).

Likewise, Woitowicz et al. (2014), find that "the dialectical interaction between teacher-content-student allows to motivate the student to want to learn and get their attention" (p. 09); therefore, it is possible to point out that dialogue favors learning, but there is an implicit factor in fostering dialogue and in turn making better use of the experience of subjects, which is collaboration.

According to Barkley et al. (2007), collaborative learning is more difficult to develop because it has a philosophical perspective, i.e., it is not a technique or imposed process, but a way of acting of people when they are in groups, therefore, these are more complex processes. For authors:

Collaborative learning is a structured learning activity that addresses the main concerns related to improving student learning (...) it involves all students, valuing the perspective each can provide with their personal and academic experience. (p. 21)

According to the above, it is very important for a group to work collaboratively to create an environment of trust where information, ideas, and opinions are exchanged through an open and motivational dialogue, eliminating hierarchies and enabling the active participation of the members of the group. However, given the current reality of the educational system, it seems an illusion to want to develop actions that foster collaborative practices, even so, for Freire (1980), the utopian is not the unrealizable thing; on the contrary, through utopia, we can transform the dehumanizing practices that have historically naturalized in education, including favoring individualism or not speaking, for example, about relationships of gender, race or social class.

For this reason, Navarro et al. (2011) proposes that, from educational institutions, students should be trained to work collaboratively and with a multidisciplinary orientation.

Torres and Irala (2004), argue that in collaborative learning, the members of the group must participate actively and be focused on the same objective, because they are also responsible for indi-



vidual and collective learning, making collaborative learning a practice of resistance and re-existence needed by the educational system and society.

Thus, in this work, it is reflected around the value of the students' experiences, names as resonances (contributions made by students through the focus groups), which are observed by the collaborative feedback of the curriculum, when analyzing the proposals of four curricular components.

In the discussion in which the result is presented, these resonances are characterized, systematized and analyzed from macro categories: contents, activities and evaluation, and sub-categories: explicit, implicit or not included in the curricular component. In this process we find that these can be transformed into acts of curriculum, a concept developed by Macedo (2007), understood as: "Experiential creations, dense of significance, that define educational situations and structure curricular realities" (Macedo, 2013, p. 116); therefore, they do not remain as an idea or resonance, but instead manage to "interfere" the curriculum, adjusting the proposals of the curriculum components studied, improving the formative experience, and contributing to the quality of education.

2. Methodological Perspective

Taking into account the heuristics of this research, the qualitative phenomenological approach is relevant. Likewise, ethnomethodology was used (Garfinkel, 2006), which sees in the everyday life of the subjects and in their actions, i.e., in the ethnomethods, valuable in explaining their reality. According to Coulon (2005) ethnomethodology seeks "methods used by individuals to make sense and, at the same time, to carry out their daily actions: to communicate, to make decisions, to reason" (p. 32). In addition to the dialogue between phenomenology and ethnomethodology, we add another element, ethno-research-training, because in addition to being interested in the ethnomethods of the subjects investigated, this work was conducted in the classroom. According to Macedo (2010) this method

is based on the anthropological principle that the members of a social group or community know their reality better than external agents or specialists, which does not mean closing themselves off to readings from the outside, but to entering into intercritical dialogue between both positions.

2.1. Participating subjects

Field work was carried out in two public universities (one in Brazil and one in Colombia). In each context, two subjects of the sixth semester were chosen, for a total of 4 professors and their undergraduate students in child education (Colombia) and education (Brazil). Participants are varied, coursing from the third to tenth semester, although most are in the sixth or seventh semester. Table 1 details the total number of participants, due to work-ethical considerations, their identity is not revealed.

2.2. Information-generating devices

These devices enabled different perspectives to be collected from training experiences, for which the following were considered:

2.2.1. Observation Involved

This is a type of observation inspired by ethnomethodology, and it recognizes that the investigator is not a neutral subject, and that his/her presence causes "interference" in the group of individuals observed.

2.2.2. Field Diary

In accompanying each curriculum component, a field diary was used to record the dynamics of the classes and systematize their development for later analysis and contrast with the information collected.

2.2.3. Focus group

To define the aspects of the curriculum that should be the subject of collaborative fee-



back, three macro categories were created: content, activities and evaluation. Contents of the topics, which are addressed during the formative experience; the activities, understood as the forms of mediation proposed in the curriculum such as research, presentations, group work, individual, etc.; and the evaluation that has to do with the ways students are evaluated.

From these macro categories, two focus groups were conducted with students in each curriculum component, one at the beginning (AC-1) and one at the end (AC-2). Also, two sessions were held with the participating professors to filter the information using another collaborative activity (AC-3 and 4) (See Table 1). The collaborative activities, in addition to generating the information, facilitated systematization and analysis. The collaborative activities used are briefly described below:

Table 1. Systematization result of focal groups 1 and 2

Focus group	Name of collaborative activity	Acronyms	Participants by curricular component				Total Participants	Resonances by curricular component				Total Resonances
			1	2	3	4		1	2	3	4	
1	Collaborative activity 1: brainstorming (Expectations)	AC-1	17	15	12	14	58	41	62	34	42	179
2	Collaborative activity 2: Role play (ideal curriculum)	AC-2	13	16	13	14	56	36	35	43	40	154

Collaborative activities 3 and 4 (AC-3 and 4): Intercritical analysis in order to feedback the curriculum taking into account the results of the focus groups. A collaborative activity was created which was named as “intercritical analysis”. This activity was inspired by Beckmarking (Spendolini, 1994), mental maps (Buzan & Buzan, 1996) and Macedo’s intercritical analysis (2015).

Once the information from focus groups 1 and 2 was systematized, a content analysis of a thematic category was made (Vásquez, 1994, p. 49), where it was found that resonances could be classified according to the categories: explicitly included in the curriculum, implicitly included in the curriculum, or not included in the curri-

Collaborative Activity 1 (AC-1): Brainstorming (Furnham, 2001), implemented with a variant of the world Café (Brown & Isaacs, 2007), and the objective was to identify and map the expectations that students had about their formative process, based on the description and projection of the curriculum of the courses investigated. It was taken from the guiding question: What are the expectations students have about their training in the curriculum component? in the individual exercise, 802 resonances were collected, but in the group exercise they were reduced to 179.

Collaborative Activity 2 (AC-2): Role Play (Brell, 2006). The objective with this focus group was to create the ideal curriculum from the experience of the students to expand the curriculum. In this exercise, 154 resonances were identified.

culum. A filtered exercise was done with professors who guided the curricular components. Thus, 179 resonances proposed in focus group 1 were reduced to 131 in focus group 3 (see table 2) because some of these could be integrated, were not part of the curriculum component or were not clearly raised to be placed in any of the constituent elements of the courses. In AC-1 as a collaborative project activity, the resonances were expected not to be clear, ambivalent or unspecific. In contrast to the focus group 2 where the construction of a specific experience was requested, and where it is found that of the 154 resonances, 153 remained when performing the filtering exercise (see Table 3) because it was integrated with another resonance.



Once concluded this process, a counter-analysis was made (Macedo, 2015) in two moments: first, the initial curriculum implemented by professors was contrasted as well as the resonances created by the students who provided much of the information

to feedback the formative experience, identifying elements present or absent in the initial proposals of the curricular components, in contrast to the proposals of the curricular components collaboratively fed from the contributions of the students.

Table 2. Systematization result of collaborative activity 3

Intercritical analysis of resonances, expectations of focus group 1						Total Resonances
	Curriculum component	1	2	3	4	
Categories	Included in the curriculum explicitly	19	13	16	22	70
	Included in the curriculum implicitly	13	20	5	6	44
	Not included in the curriculum	2	6	3	6	17
Total		34	39	24	34	131

Table 3. Systematization result of collaborative activity 4

Intercritical analysis, focus group 2. Ideal curriculum						Total Resonances
	Componente curricular	1	2	3	4	
Categories	Categories explicitly included in the curriculum	14	13	26	22	75
	Implicitly included in the curriculum	11	15	6	13	45
	Not included in the curriculum	11	6	11	5	33
Total		36	34	43	40	153

In the second moment, discussions were created, which showed: "consensuses, often not resigned, open contradictions, paradoxes, striking characteristics, biases, transversalities, identifications and transduction" (Macedo, 2018, p. 92), convergences and divergences; giving us ideas to understand and characterize the collaborative feedback of the curriculum from the contrast of the distinctiveness of subjects of the two studied university contexts, in which the power of the students' experiences is emphasized.

3. Results and discussion: students' experiences, on-site curriculum events

The information gathered in the field work through the follow-up involved in the four curricular components allowed to identify some acts of curriculum present in the experiences of the

students, that normally remain unknown but were rescued from the collaborative feedback to reflect on its implications for training, along with the proposals of the curricular components investigated.

During the research, we found that resonances, i.e., contributions — ideas — made by participants in the focus groups, are not necessarily elements that should be considered to feedback the curriculum, as some of them are not clear or they are outside the scope of the curricular component. We also note that it is necessary to do a filtering process since although in the focus groups a lot of information was generated, and it was initially filtered by the same students, for a total of 333 resonances (see Table 1), a second filtering exercise carried out with the participating professors allowed to condense and clarify the intention of the students' experiences, decreasing the amount of resonances to 284, leaving them clearer and more structured to visualize their connection or criticism to the curricular proposal, hence we call on-site curriculum acts.



Each of the 284 resonances that resulted from the implementation of AC-3 and AC-4 were assigned a code and classified according to the curricular component (CC) to which they belong. They were further characterized by categories: explicit, implicit, or not included. The following discussion was created where resonances are characterized; to exemplify, some allow us to see common elements in the curricular components and demonstrate the power of the student experiences to feedback the curriculum.

3.1. Explicit Resonances

Resonances in this group can be easily placed in the proposal of the curriculum component initially implemented by professors, and in the resonances of the students proposed in the focus groups. While these resonances are easy to map, because they appear almost literally as content, activities, or forms of evaluation that must be present in the curricular components (CC), these are not always precise, for example, CC-1 appears in AC-3: "Group activities" (AC-1, Code.07), interpreted by the professor as: "Team organization for the conduction of the project". Something similar occurs in CC-2, where the professor at AC-4 interprets the resonance: "National Exams" (AC-2, Code.10), as part of the content: "Guidelines for Evaluation Systems such as ANA, PROVA BRASIL, ENEM, ENADE and State and Municipal Provinces. Analysis of national reviews (use of slides and printed material)" is already included in the course proposal. It indicates that these contents are relevant, as both the initial proposal submitted by professors and the resonances of the students coincide.

Another situation that can occur with explicit resonances is that sometimes they may be unspecific or ambiguous, for example CC-3 proposes as one of the contents: "Culture and the relationship with its inclusion, segregation and exclusion processes", and two resonances related with this topic were raised as: "Culture" (AC-1, Code.03) and "Exclusion" (AC-1, Code.04). On the other hand, in CC-4 there is: "The concept of

socialization from different perspectives", while the students express it as: "Socializing Contexts" (AC-2, Code.01), even in the filtering carried out with the professors in AC-3 and AC-4, it was possible to see ambiguity and place the resonances within the curricular proposal.

Another variant presented in this type of resonances was in relation to their intentionality, in CC-2 the activity presented is: "Evaluation using the printed form with the evaluation criteria", however, students place this topic as a form of evaluation in the curriculum component, when proposing: "Evaluation adjusted to the rubric" (AC-1, Code.24). On the other hand, in CC-3 an advisory activity is conducted to present different topics, such as: "LGBTI population, homeless children and street situation, and children in protection", but the students proposed them as contents: "Vulnerable groups (LGBTI, protection, addiction, workers,...)" (AC-2, Code.04), in both cases it is observed that these topics are part of the curriculum proposal and that they are relevant topics for the students. This allowed us to reflect that the content chosen is dynamic, i.e., it can be transformed and recreated according to the pedagogical intentionality or didactic transposition, allowing other possibilities to think about the curricular proposals.

3.2. Implicit Resonances

There are resonances in a second group that are not explicitly named in the curricular proposal, but these elements were addressed tacitly. Unlike the previous ones, these resonances are more difficult to locate and for mapping them it was necessary to use the notes of the field diary, in addition to filtering with professors through the AC-3 and AC-4, which offered more support to position them.

There is dichotomy in this type of resonances, because students explicitly included them in the focus groups, but they can only be tacitly related in the proposals implemented in the curricular components investigated. It is considered that for the collaborative feedback pro-



cess, these resonances, in contrast to the curricular proposal implemented, help to visualize some topics that are not clear, i.e., are important for the students but are not explicitly included in the curricular component.

One of the reasons may be time, as it often goes deeper into other content; another cause may be the relevance these resonances are addressed, because when considering others as more important, they end up being treated tacitly or transversely.

The lack of understanding and objectivity is not seen as negative, on the contrary, there is some intentionality from collaborative activities to make this happen, because implementation, creativity, autonomy and freedom are encouraged in the heuristic process. This type of resonances indicates that there are topics that need to be given a more explicit emphasis as students consider them relevant, for which in the analysis carried out through collaborative feedback they could have more emphasis to make them more explicit.

As mentioned above, there are resonances in this group that are not clear and those that were raised more generally, so we had to start from their intentionality to relate them to the curricular components, for example in CC-1 there is an activity: "Pedagogical workshop: What to work with nursery and preschool children? Experiences and languages in the curriculum of early childhood and pre-school education: Photography/cinema/theater/dance/body movement", the resonance proposed by the students associated with this activity is "ludic" (AC-1, Code.25). Also on CC-2 an activity proposed is:

Tools and forms of evaluation: Exam (written, oral, objective, dissertation), research work, seminar, debate, report, observation, game, production of texts, artistic production, experimentation, knowledge fair. Evidence Analysis and Comment Workshop. How to build evidence as an evaluation tool. (PCC-2)

The resonance associated with this activity was "Innovative proposals in the evaluation"

(AC-2, Code.21), and as seen in both cases the topic proposed by the curriculum component and the resonance of the students can be associated, despite not having an explicit relationship.

In this category, there are also some resonances that may be associated or complementary, unlike the contents of the initial curriculum proposal as seen in CC-3, where the content raised is: "Minor offenders, addictions to technologies, child workers"; in the resonances is seen: "Strategies for Working with Disabled Populations" (AC-1, Code.08), both topics can be associated in a topic that talks about special educational needs or vulnerability. On the other hand, in CC-4, the topic addressed is: "How do children develop school social knowledge?" In the resonances is observed: "Problems around the notion of childhood" (AC-2, Code.21), in this case both themes can be complementary, integrating them could deepen the construction of the social and subjective dimension of childhood.

3.3. Resonances not included

Finally, a third group of resonances were not included in the proposals of the curricular components; after the analyzes carried out by professors through AC-3 and AC-4, it was determined that resonances classified in this group are not part of the discussions of the curriculum component, because their ambiguity did not allow them to be placed in any of the macro categories (content, activities, evaluation), therefore they were rejected, explaining why they were not included.

Some of the resonances that remained in this category are not included in the curriculum component proposal or are not part of the discussions that are intended to be developed, for example in CC-4, the resonance presented was: "Cartographies" (AC-1, Code 40) as an activity, however, the professor does not believe that these are relevant to be introduced into the curriculum component proposal because: "a superficial activity would be made without epistemic training in research," i.e., it is a research that needs spe-



cific training to be used; therefore, and because there are other strategies, it is not used in the proposal of this curriculum component.

This group also includes resonances that are contrary to what was intended to be addressed in the curriculum component, in CC-2 is proposed: "Assess techniques so the students do not know that are being evaluated" (AC-1, Code.57), the reason for not including it is because, according to the professor: "We do not reinforce this idea, we fight it, because students need to know and even build the criteria by which they will be evaluated", as mentioned above, in the curriculum component, there are elements that allowed students to know the different ways of evaluating and being evaluated, but in no way it is intended to evaluate without the student knowing that it is being evaluated, as was proposed in the resonance; therefore, it was not included in the curriculum feedback; however, this gives rise to the teacher's explicit interaction with students about this situation.

Another type of resonances that are located in this group are those that are part of the contents of another curricular component, as is the case presented in CC-2, with the resonance: "Evaluation of people with special educational needs" (AC-2, Code 29); in the professor's justification is found: "There are no specific evaluative activities for special or inclusive education student in this semester, but it was already thought and will be added for the next one along with the other professor of the area." In this case, resonance is not included in the proposal of the curriculum component studied, but instead the professor suggested this topic to another professor who teaches a component on special education, which was considered relevant by the students but which directly affected another subject.

Finally in this group are placed the resonances that cannot be included in the proposal of the curriculum component due to logistical difficulties, as is the case of CC-3, where there is a proposal: "Field trips - 5 trips to different spaces" (AC-2, Code 41), the professor concludes that proposing five field trips is difficult, as there are

limits like time (they typically last more than two to four hours of the weekly program of the components), economic (resources available to the university and students are limited), and social (many students have part-time or full-time jobs).

However, out of the four curricular components investigated, no field trip occurred in CC-2, a trip was done in CC-4, in CC-3 two trips, and a micropractice was performed in CC-1. It is indeed a strategy used but not as often as it is mentioned in the resonance proposed by the students.

These are some of the characteristics of the resonances created from the experiences of the students; the analyses helped us to contrast and have intercritical analysis of the formative experience, to have a broad view of these realities through collaborative feedback of the curriculum, where we were able to observe the formative dynamics, evidencing the successes and blunders lived by students during the formative process, thus being able to generate alterities that qualify the formative experiences of the curricular components.

4. Conclusions

Professors must present the proposal for the development of curricular components before starting classes and must socialize it with students. However, according to the dynamic of collaborative feedback, there should be no complete, unfinished proposals, but rather a space for collective construction on-site, i.e., from the expectations and experiences of the "curricular" actors. Therefore, it is believed that the work with collaborative feedback of the curriculum is relevant to educational contexts, since it offers the possibility of promoting training in line with the demands, not only of the institution but also of the experiences of curricular actors, qualifying training and contextualizing curricula.

Regarding the curriculum components of the two universities investigated, it was identified that although there is some freedom and autonomy of professors to propose a curriculum that will consider resonances of the students, the eva-



luation is still difficult to conduct, because there is a quantitative system that requires expressing the result of the formative experience in numbers, leaving little room for more qualitative proposals; however, if a formative evaluation is used (Morales, 2010) it can be applied.

Throughout the research, it was evident that the horizontality between the curricular actors and the intercritical dialogue provided the conditions for collaborative feedback. In this way, environments can be generated where experiences are shared and proposals are refined from consensus, transforming the resonances of students into curriculum acts that can be incorporated into the proposals of the curricular components. In this sense, it was found that contradictions and differences are opportunities to review pedagogical practice, to think "out of the box," and to create alterities that strengthen formative processes, so they cannot leave aside the reflection on training and curriculum.

With regard to resonances, they are not always clear, coherent, or objective; even so, it should not be a problem or seen as a mistake, since the main objective is to identify all those curriculum acts that are ambiguous, i.e., not recognized either explicitly or tacitly. Therefore, collaborative activities implemented in the focus groups encouraged the creativity and autonomy of the participants, so that in this way they could express their experiences more freely, which, as seen in many cases, were alike or contrary to the demands. Hence, resonances imply the desire and the experiences of the students, hence the revealing power they have to reflect on the curriculum through the recognition of these acts, but they are almost always excluded, discarded or treated as epiphenomena of the formative process. In this work we consider their value and ability to modify the curricular proposals by improving the quality of teaching, learning, formative experience, pedagogical practice and by qualifying the curriculum.

Finally, we can affirm that the pre-established curriculum is a fiction, because the curricu-

lum is itinerant and socially constructed, where the narrative of "curricular" actors has the ability to modify, transform, transgress or deny the knowledge chosen as formative, which through an intercritical and sensitive dialogue can be customized in accordance with the curriculum acts of the actors involved in the training process, generating a broad experience and meaningful learning. Collaborative feedback of the curriculum is one of the ways to achieve this goal.

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References

- Barkley, E., Cross, P., & Major, C. (2007). *Técnicas de aprendizaje colaborativo. Manual para el profesorado universitario*. Ediciones Morata.
- Bia, A., Carrasco, M., Jiménez, M., Montes, A., & Moreno, M. (2005). *Aplicación del portfolio discente. Una experiencia interdisciplinar*. Universidad de Alicante, Instituto de Ciencias de la Educación. <https://bit.ly/3oqyACF>
- Brell, M. (2006). Juegos de rol. *Educación social: Revista de intervención socioeducativa*. Dedicado a: El juego, herramienta educativa (33), 104-113. <https://bit.ly/3wiGl1Y>
- Brown, J., & Isaacs, D. (2007). *O word café: dando forma ao nosso futuro por meio de conversações significativa e estratégicas*. Editora pensamento Cultrix Ltda. <https://bit.ly/3yncalx>
- Buzan, T., & Buzan, B. (1996). *El libro de los mapas mentales*. Como utilizar al máximo las capacidades de la mente. Ediciones Urano.
- Coulon, A. (2005). *Etnometodología*. Traducción de Teodora Estaban. Tercera edición. Colección: Teorema.
- Freire, P. (1980). *Conscientização. Teoria e prática da libertação. Uma introdução ao pensamento de Paulo Freire*. Editora Moraes.
- Freire, P. (2010). *Cartas a quien pretende enseñar*. Segunda edición. Editorial Siglo XXI.
- Furnham, A. (2001). El mito del brianstorming. *Revista Harvard Deusto Business Review* (105), 32-41.
- Gadotti, M. (2008). *MOVA, por um Brasil Alfabetizado*. Instituto Paulo Freire. <https://bit.ly/3pqNbz8>



- Garfinkel, H. (2006). *Estudios de etnometodología*. Editorial Anthropos.
- Kaplún, M. (1998). *Una pedagogía de la comunicación*. Ediciones De La Torre.
<https://bit.ly/2KWx5hW>
- Larrosa, J. (2002). Notas sobre la experiencia y el conocimiento de la experiencia. *Revista Brasileña de Educación*, (19), 20-28
<http://dx.doi.org/10.1590/S1413-24782002000100003>
- Lima, T., Consorti, F., Cândido, E., Gomes, C., & Ceolim, M. (2014). Estágio curricular supervisionado: análise da experiência discente. *Revista Brasileira de Enfermagem*. 67(1),133-140, Jan-fev. <https://bit.ly/3t4QJt6>
- Macedo, R. (2007). *Currículo. Campo, concepto e investigación*. 5^a Edición. Editorial Vozes.
- Macedo, R. (2010). *Etnopesquisa crítica. Etnopesquisa-formação* (segunda edição ed.). Liber livro editoria Ltda.
- Macedo, R. (2015). *Investigar la experiencia. Comprender / mediar saberes experienciales*. Editora Crv.
- Macedo, R. (2018). *Investigación contrastiva: Acerca de los estudios multicaso multiexperienciales*. Editora: UFBA.
- Morales, P. (2010). *La evaluación formativa*. Universidad Pontificia Comillas, Facultad de Ciencias Humanas y Sociales.
<https://bit.ly/3oCge3s>
- Navarro, C., Botella, P., Jarque, M., Gil, D., & González, C. (2011). *Implicación del alumno en el desarrollo de proyectos como estrategia didáctica en la búsqueda del proceso de aprendizaje y aprendizaje. Una experiencia de estudiante*. <https://bit.ly/2Zo39zW>
- Oliveira, F. (2014). *A perspectiva discente sobre a formação profissional em letras/UFJF*. (Tese de doutorado, programa de pós-graduação em linguística, da faculdade de letras da Universidade Federal de Juiz de Fora).
<https://bit.ly/3pqlcQn>
- Oliveira, K. (2016). *Docente ou discente? somos todos (in) formadores de opiniões*. IV semana de matemática. Universidade do Estado da Bahia-campus X. Departamento de Educação-DEDC. Texeira de Fretas.
<https://bit.ly/3qVtQ9N>
- Paula, A., & Ortiz, R. (2015). *Proyecto escolar: alternativa para ampliar el saber docente y discente*. Primer congreso de educación de los grandes dadoras. Escuela, familia y sociedad: construyendo nuevos caminos. <https://bit.ly/3cQeqNu>
- Rodrigues, P., & Knupp, J. (2012). *A relação docente e discente no ensino superior: os processos ensino e aprendizagem*. XVI Encontro Latino Americano de Iniciação Científica e XII Encontro Latino Americano de Pós-Graduação-Universidade do Vale do Paraíba. <https://bit.ly/2M8SHrW>
- Silva, E., & Arruda, S. (2013). *Descrição das relações tridimensionais do saber discente na orientação da prática no ensino superior*. II Jornada de didática e I seminário de pesquisa do CEMAD. Docência na educação superior: caminhos para uma práxis transformadora <https://bit.ly/3r9YjkL>
- Spendolini, M. (1994). *Benchmarking*. Grupo Editorial Norma.
- Souza, S. (1999). *Método Paulo Freire: princípios e práticas de uma concepção popular de educação*. <https://bit.ly/3ooOXj1>
- Tardif, M. (2005). *Docencia de conocimientos y formación profesional*. 5^a edición, Editora Vozes.
- Teixeira, A. (1978). *A Pedagogia de Dewey*. In Dewey, John, *Vida e educação*. 10. ed. Melhoramentos.
- Thees, A. (2011). *Algumas implicações das atitudes docentes pelo saber matemático discente*. XIII Conferência Interamericana de Educação Matemática-XIII CIAEM-XIII CIAEM-IACME. <https://bit.ly/3qVs4oZ>
- Torres, P., & Irala, E. (2014). *Aprendizagem colaborativa: teoria e prática. Complexidade: redes e conexões na produção do conhecimento*. Senar. <https://bit.ly/3qPaAL8>
- Vargas, A., De Souza, M., & Dias, S. (2007). *A Satisfação do Discente em Instituições de Ensino Superior: um estudo de caso*. V Simpósio de Gestão e Estratégia em Negócios Seropédica. <https://bit.ly/39k9h0O>
- Vázquez, F. (1994). *Análisis de contenido categorial: el análisis temático*. Unitat de Psicología Social. Universitat Autònoma de Barcelona.
<https://bit.ly/36aH5eT>
- Woitowicz, E., Szumilo, M., & Lindino, T. (2014). *Desafios da Interação docente-conteúdo-discente no Ensino de Geografia de uma Escola Pública do Município de Marechal Cândido Rondon-PR*. Congresso Brasileiro de Geógrafos. Anais do VII CBG. <https://bit.ly/3iTNd0b>





Assessment practices in three physical education courses in South America

Prácticas evaluativas en tres cursos de educación física en Sudamérica

- Matheus Lima Frossard** is studying a PhD at Universidad Federal del Espírito Santo (Brazil) (matheusmlf@hotmail.com) (<https://orcid.org/0000-0002-2273-7535>)
- Ronildo Stieg** is studying a PhD at Universidad Federal del Espírito Santo (Brazil) (ronildo.stieg@yahoo.com.br) (<https://orcid.org/0001-8698-4087>)
- Dr. Wagner dos Santos** is a professor at Universidad Federal del Espírito Santo (Brazil) (wagnercefd@gmail.com) (<https://orcid.org/0002-9216-7291>)

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Resumen

El artículo tiene como objetivo analizar y comparar las prescripciones de los momentos y de las funciones de la evaluación en los planes de disciplinas de tres cursos de formación de profesores en Educación Física (Ufes/Brasil, Cesmag/Colombia y Udelar/Uruguay). Se caracteriza por ser una investigación de método mixto de tipo secuencial explicativo. Utiliza los programas de estudios de los cursos y los planes de disciplinas como fuentes. La metodología siguió tres etapas: a) análisis de la frecuencia de palabras; b) prueba de hipótesis para la proporción; y c) análisis crítico documental. Los resultados mostraron que los momentos y las funciones de evaluación prescritos en los planes de Cesmag/Colombia y Udelar/Uruguay están influenciados por las concepciones de evaluación presentes en los lineamientos gubernamentales de estos países. Ufes/Brasil se caracteriza por una política descentralizada, sin orientación gubernamental sobre la práctica evaluativa, y esta definición recae en los docentes. Se concluyó que la principal preocupación de las disciplinas consiste en las prescripciones de los instrumentos, faltando aún matizar la definición de los criterios, funciones, agentes, momentos y concepciones de la evaluación. También señala la urgencia de pensar una formación continua en evaluación para los docentes que laboran en la educación superior; especialmente teniendo en cuenta el área de Educación Física propiamente dicha, los desafíos de las prácticas evaluativas alineadas con el contexto del desempeño profesional y la incorporación de *habitus* que potencien la profesionalidad docente.

Descriptores: Formación docente, evaluación, currículo, educación física, políticas educativas, América Latina.

Abstract

The article aims to analyze and compare the moments and functions of the evaluation defined in the discipline plans of three training courses for Physical Education teachers (Ufes/Brazil; Cesmag/Colombia; and Udelar/Uruguay). The research uses a mixed method of explanatory sequential type. It uses the political projects of the courses and the discipline plans as a source. The methodology followed three stages: a) analysis of the frequency of words; b) hypothesis test for proportion; and c) documentary critical analysis. The results showed that the evaluation and function prescribed in the plans of Cesmag/Colombia and Udelar/Uruguay are influenced by the concepts of evaluation present in political projects and government guidelines at those countries. Ufes/Brazil is characterized by a decentralized policy with no governmental guidelines on evaluative practice, leaving this definition to the teachers. It was concluded that the main concern of the prescriptions is on the definition of the instruments. It is also necessary to qualify the definition of the criteria, functions, agents, moments and evaluation conceptions. It is evident the urgency to think about continuing education in evaluation for teachers who work in higher education in the training of new teachers, above all, taking into account Physical Education itself, the challenges of evaluative practices aligned with the context of performance and the incorporation of the environment in the teaching practice.

Keywords: Teacher education, assessment, curriculum, physical education, educational policies, Latin America.

1. Introduction

Teacher training aims to provide a process of building professional identity also known as professionalism (Nóvoa, 2017), starting from the idea of the necessary qualities for the training of teachers and focusing on the concept of environment, where the student is placed in a field of forces and powers in which each one builds his/her position in relation to himself/herself and others (Bourdieu, 1989). This formation is understood as a space of positions and decision-making, allowing the “incorporation of durable provisions, and the possibility that this heritage will be transferred through a process of professional socialization” (Nóvoa, 2017, p. 1119, our translation).

Teaching practice is a space for the construction, training and production of knowledge in a formative way, which assumes knowledge related to teacher training linked to scientific knowledge and professional teaching practice, and educational evaluation is one of them (Nóvoa, 2004).

The preparation of future teachers for evaluative practices is directly linked to the theoretical discussion on the subject during training, either in specific disciplines or in activities presented throughout the course (Deluca & Klinger, 2010; Paula et al., 2018; Stieg et al., 2018); experiences that enable the future teacher to practice peer-to-peer evaluation (Sluijsmans & Prins, 2006; Tejada & Ruiz, 2016; Maureira-Cabrera et al., 2020), self-assessment (Kearney, 2013) or evaluation in the context of basic education (Frossard et al., 2018); and evaluation in higher education (Picos & López-Pastor, 2013; Hamodi et al., 2017).

Although evaluation is an important element in the curriculum, Picos and López-Pastor (2013) show that there is little specific discussion on the subject throughout the teacher training course. This shows that the future faculty will similarly examine how they were evaluated when they were students (Poleto et al., 2020). The absence of reference, from which students can

modify and create their own evaluation system, causes them to reproduce and not modify their evaluative practice (Picos & López-Pastor, 2013).

Thus, the evaluation is not carried out in a simple and linear way, but is constructed in a space of record and interpretation of the data, based on the constant exercise of reading clues and evidence, from which value judgments and decision-making are issued (Frossard et al., 2020). Evaluation, understood as an indivisible practice, uses instruments for students to question the teaching and learning processes under construction and not yet built, offering elements to analyze the relationship that students establish with learning (Santos, 2005, Santos et al., 2014).

The importance of content is known; however, it is needed to assume an evaluation concept based on a permanent evidence-interpretation exercise, which seeks to identify “knowledge obtained” “knowledge not fulfilled” and “knowledge in progress” (Esteban, 2003). Therefore, evaluation is seen as a process of reflection, contributing to the ability of teachers and students to perceive signs to achieve complexity levels in the interpretation of their meanings and to incorporate them as facts relevant to the teaching-learning dynamics.

Hence, the aim of the article is to analyze and compare the requirements concerning the moments and functions of the evaluation (Castillo-Arredondo & Cabrerizo, 2010) in the discipline plans (DPs) of three courses of teacher training in Physical Education (PE) (Ufes/Brazil, Cesmag/Colombia and Udelar/Uruguay). The analysis of this research focused on the questions: What do professors prescribe to evaluate students in the DPs? Do professors prescribe timing and functions of the evaluation? What are the guidelines provided by training curriculum to the evaluation? How does this set of prescriptions take into account the challenges of evaluation in the PE when incorporating an environment that enhances teaching professionalism?

It is understood that the preparation of future teachers in the area of evaluation is also related to the



way in which they are being evaluated during teacher training courses. This turns out to be interesting to investigate, since the students of these courses will have to implement evaluation methodologies and practices in their professional practice, specifically in the PE classes in a school context.

The importance of teacher training courses in the formation of a body of assessment knowledge and practices that enable the production of experiences for teaching PE in basic education is highlighted. In addition to the theoretical discussions on the subject and the situations of teaching practice experienced by students during the training, the way in which they are evaluated is also a didactic tool with direct impacts on their learning. This reinforces the need to investigate how teachers in PE courses prescribe evaluative practices and understand assessment in their disciplines.

2. Methodology

It is a mixed method research with explanatory sequential nature. It establishes a statistical analysis of quantitative data and a critical documentary analysis (Bloch, 2001) for qualitative data. According to Creswell and Clark (2011), the purpose of this type of research is to use a quantitative element to explain the initial quantitative

results. This method improves the assessment of trends, comparisons, and relationships between groups through quantitative data, and qualitative data should be able to explain the mechanisms and reasons behind the quantitative results.

2.1. Delimitation of sources

The participating institutions are part of the research collaboration agreement established in 2018 between Ufes, Udelar and Cesmag, through a research project titled *Avaliação educacional na formação inicial de professores em educação física na América Latina: diálogo com os alunos*. This project received financial support from the Universal Edict CNPq, with process number 435.310/2018-6.

For collecting the data, the Higher Education Institutions (HEI) were contacted to request the curricula that guide (CG) the teacher training courses in PE and the plans of all the disciplines that make up the curriculum of these courses. Sources come from documents available by each institution as shown in Table 1. DPs and CG of the courses are for the years 2014 (Ufes/Brazil) and 2017 (Cesmag/Colombia and Udelar/Uruguay) which were still in place at the time of data collection (July 2020).

Table 1. Quantity of DPs and CG analyzed by HEI

	Ufes/Brazil	Cesmag/Colombia	Udelar/Uruguay
Number of DPs	61/61 (100 %)	84/84 (100 %)	34/63 (54 %)
CG	1/1 (100 %)	1/1 (100 %)	1/1 (100 %)

Source: Own elaboration.

2.2. Data Analysis

The analysis process followed three steps. The first was to organize the data in frequency tables, which allowed to analyze the information that each discipline prescribed on evaluation. In the second step, statistical tests were performed to compare

whether the results found in the previous step showed statistically significant differences between the HEI. Finally, a qualitative analysis of the DPs was carried out, relating it with the literature that discusses the subject and the government documents that act as curricular guidelines for teacher training courses in the three countries.



Step 1

CG of the three courses and all DPs were read in full. In this research, the document called "CG" is understood as an instrument reflecting the educational proposal of the training course. This document helps to understand the guidelines and, in some cases, the assessment concept assumed by the course, and a document was done in Excel to organize the prescriptions according to each HEI.

"DPs" are understood as those documents prepared by teachers of the teacher training courses, the prescription of what will be taught and how it will be evaluated. In the three institutions, similar sections were identified: general objectives; content; methodology; evaluation; and bibliography. For this study, the section of the evaluation was specifically assumed, which allowed understanding how teachers assume and propose evaluative practices. For the analysis of these documents, a table was created in Excel per institution. In the first column, all the disciplines of the courses were distributed, and in the rest, the topics investigated: timing; instruments; criteria; functions; and agents of the evaluation. Thus, when reading the plans, what was prescribed for evaluation by each discipline was identified and marked on the table.

This article focused on timing and functions of the evaluation. Therefore, a second reading of the plans was performed to identify the evaluation moments that were proposed (initial, procedural and/or final) and the functions assumed (diagnostic, formative and/or summative). This process identified the information of the evaluation disciplines prescribed in each course.

Step 2

To compare the proportion of each variable analyzed, considering the different institutions surveyed, the Proportion Hypothesis Test (Bussab & Morettin, 2017) was used, whose null hypothesis

indicates that there are no statistically significant differences between the established proportions.

Thus, Chi-square test and Fisher's exact test were used for comparing variables. For this, 5 % ($\alpha = 0.05$) was considered as a significance level and R software version 3.6.2 was used as a facilitator.

Step 3

Based on the probative paradigm proposed by Ginzburg (1989), CG of the courses and DPs are privileged sources that provide clues and evidence about the actions, thoughts and intentions of each professor. These documents are considered culturally constructed tools full of intention, because according to Bloch (2001), everything a man says or writes, everything he does or touches, can and must talk about him.

According to Ginzburg (1989), it was possible to identify, through words, the evaluative practices of CG courses in the three HEI studied. We agree with Bloch (2001) when indicating the need for research personnel to take an active attitude, because archaeological texts or documents, even the most seemingly clear and accommodating, speak only when we know how to question them. DPs were explored by analyzing the clues and evidence (Ginzburg, 1989) left by them and the intentions of those who produced them, mainly with regard to the requirements of the moments and the functions of the evaluation. Findings are articulated with authors and government documents—curricular guidelines—that guide teacher training courses in each country.

3. Results

Analyzing the evaluation proposals prescribed by teachers in the DPs, it was possible to establish some approximations and distances among the information covered in the evaluation section in the plans of each course of the three HEI. Table 2 presents the topics investigated, the frequency and proportion they appear in the discipline plans of each HEI.



Table 2. What part of evaluation is prescribed in DPs?

	Ufes/Brasil	Cesmag/Colombia	Udelar/Uruguay
Moments (initial, procedural and final)	22 (36 %) a	32 (38 %) a	16 (47 %) a
Instruments	49 (80 %) a	83 (99 %) b	30 (88 %) a
Criteria	24 (40 %) a	76 (90 %) b	25 (74 %) c
Function (diagnostic, formative and summative)	12 (20 %) a	28 (33 %) ab	14 (41 %) b
Agents (hetero-evaluation, co-evaluation and self-evaluation)	1 (1,6 %) a	34 (40 %) b	8 (24 %) b

Source: Own elaboration.

The proportions followed by the same letter do not differ statistically from each other using chi-square test or Fisher's exact test ($\alpha = 0.05$).

The main concern of Ufes/Brazil is to present the evaluation instruments to be used during the academic semester. In addition to the instruments, Cesmag/Colombia and Udelar/Uruguay also highlighted the prescription of the criteria. The moments, functions and agents appeared to a lesser extent in the DPs of the three courses.

When comparing the three courses of the HEI, it can be observed that parts of the DPs that prescribed the "moments" of the evaluation do not present statistical differences, considering the level of significance adopted. With regard to the "instruments" and "criteria", a higher proportion is observed for Cesmag/Colombia. However, unlike with "instruments" and "criteria", parts of the DPs that prescribe them are statistically different for Ufes/Brazil and Udelar/Uruguay. The scenario found in Ufes/Brazil may be a concern, as 60% of

disciplines do not have evaluation criteria and therefore do not show what they consider important for students to learn and evaluate accordingly.

With regard to the topics "Functions" and "Agents" of the evaluation, it was noted that the highest proportion of DPs prescribed by them was from Cesmag/Colombia and Udelar/Uruguay, which did not have statistically significant differences between them. Although the proportion of DPs prescribed to the evaluators is small in the three courses analyzed, it is emphasized that only one discipline of the Ufes/Brazil identified this prescription.

Table 3 shows the information prescribed about the moments and functions of the evaluation, as well as the frequency and proportion they appear. For ratios different to zero, a comparative analysis between HEI is also presented.

Table 3. Moments and evaluative functions prescribed in the DPs

Moments	Ufes/Brazil	Cesmag/Colombia	Udelar/Uruguay
Initial	0 (0 %)	0 (0 %)	0 (%)
Process	22 (36 %) a	32 (38 %) a	13 (38 %) a
Final	0 (0 %)	0 (0 %)	3 (9 %)
Functions	Ufes/Brazil	Cesmag/Colombia	Udelar/Uruguay
Diagnostic	1 (1,6 %) a	18 (21 %) b	0 (%)
Formative	7 (11,5 %) a	25 (30 %) b	10 (29 %) ab
Summative	6 (10 %) a	5 (6 %) a	5 (15 %) a

Source: Own elaboration.

The proportions followed by the same letter do not statistically differ from each other using the Chi-square test or Fisher's exact test ($\alpha = 0.05$).



It could be seen that most of the DPs evaluate during the teaching-learning process (procedural), and only three plans of the Udelar/Uruguay evaluate at the end of the process. Among the disciplines of the three HEI that proposed procedural evaluation, no statistical differences were found at the significance level adopted.

Training was most significant in all three courses. There are statistically significant differences between Ufes/Brazil and Cesmag/Colombia when analyzing diagnostic and formative functions. Cesmag/Colombia disciplines are more concerned about assuming diagnostic and formative evaluation compared to Ufes/Brazil. No statistically significant differences were identified between the IES with respect to summative function.

4. Discussion and conclusions

The need for a harmonious and synchronous process between teaching, learning and evaluation is highlighted. For Castillo-Arredondo and Cabrerizo (2010), evaluation requires prior planning to ensure adequate monitoring of the rhythm and time of the teaching process. The design of the evaluation must be carried out in the same way as the teaching processes are thought and projected; it implies the prediction of: what, why, how, who, and when to evaluate? It is understood that proper evaluation planning can promote the union of their participation in the teaching-learning process. This requires greater teacher dedication regarding time, since it ceases to be understood as a point element and becomes part of the development of educational processes.

Although the DPs percentage of the courses in the three HEI does not provide enough information on the timing of the evaluation, it is possible to note a preference for procedural evaluation, where it occurs throughout the school period.

We highlight the difference between the time of evaluation and the function. Although, in some cases, the moment favors a certain function, since it is usually associated with the initial eval-

uation and the diagnostic function, as well as the procedural with the formative and the final with the summative, all being independent elements.

According to Castillo Arredondo and Cabrerizo (2010), the function of the diagnostic evaluation is to obtain information on the current state of the students, allowing a planning and adaptation of the didactic processes to the reality. On the other hand, the formative function serves as a strategy for improving, adjusting and regulating educational processes. It allows the teacher to identify his/her effectiveness and modify aspects of his/her performance, as well as to encourage students in their learning process, allowing them to know their real status and reorient their learning. Summative evaluation has a verification function; in which the idea is to check the results of learning by allowing to decide on promotion or retention in the educational cycle.

DPs "Body, Movement and Biochemical and Nutritional Knowledge" of Ufes/Brazil, "Anatomy" of Cesmag/Colombia, and "Exercise Physiology" of Udelar/Uruguay, provide clues about the summative and/or formative function assumed by the evaluation in each discipline.

There will be three learning evaluations each semester. Grades may consist of the average amount of school work performed. In order for students to pass the discipline, they must reach an arithmetic average in accordance with the Rules of the Ufes. Score 1-20 points; Score 2-20 points; Score 3-20 points; Verification of practices and complementary activities-40 points. (Body, Movement, Biochemical and Nutritional Knowledge, Ufes/Brazil, our translation)

[...] adopted continuous evaluation as an evaluation system, hence, from the first moment collaborative work will be carried out to develop in the course or outside it, exams, oral presentations and other forms that allow to observe the advances or difficulties presented by the students in the teaching-learning process. (Anatomy, Cesmag/Colombia, our translation)



Evaluation, as an important component of the curriculum, is used for a dual purpose: as another way of learning and as a means of certifying the student's learning (or performance, more precisely). During the course, at least two different evaluations will be carried out, which may be in written, although no other modalities are excluded. (Physiology of Exercise, Udelar/Uruguay, our translation).

The discipline offered by Ufes/Brazil PE course presents an evaluation process with three evaluations throughout the semester and it assumes the summative function. Its main concern is to verify what is learned and review the grades for approval or disapproval by the student. The discipline of the Cesmag/Colombia course also presented a procedural evaluation using different instruments; unlike the plan of Ufes/Brazil and the plan of Cesmag/Colombia which demonstrated the concern to observe the teaching process, learning, progress and difficulties of students, approaching a formative function. Udelar/Uruguay plan also adopts an evaluation process with dual function, formative and summative.

The evaluation function is related to the decision-making process, i.e., what use is made of the results of the evaluation process. In the examples of the three DPs, different purposes are perceived that impact student learning. It is understood that evaluation should not be limited to transmit-verify-register, but also focus on learning in a collaborative way between teachers and students that allows understanding the phenomena studied, reorganizing them and producing new knowledge.

Although there is no government curricular guideline for teacher training in Brazil to guide the evaluation, there is a general regulation of the Ufes/Brazil that presents an evaluation proposal for all teacher training courses (including PE courses), which consists on evaluating the frequency of students in classes and the grades obtained in school work, approaching only the summative function.

Art. 107. The verification of learning shall be carried out during the academic period and shall correspond to the verification of attendance and the grades obtained in the homework assigned by the Departments.

Art. 108. A minimum of 2 (two) school assignments per academic term will be required in each discipline.

§ 1º Homework shall include evidence, reports of work carried out, written or oral tests, projects and their defenses, monographs, supervised practices and other practical work thought by the Departments, depending on the nature of the disciplines. (UFES, 2014, p. 28, our translation)

It is possible to observe the influence of the Ufes institutional document on the evaluation requirements of the DPs of the Ufes/Brazil PE course, so the main concern of teachers was to prescribe evaluation tools to meet the minimum requirement of two school assignments per school year (four months). In addition, it was noted that 20 plans (31%) highlighted in the evaluation section the relationship with grades and frequencies required for approval/disapproval. It provides clues about the influence of the evaluation assumed in the general rules of the Ufes/Brazil and the absence of a discussion of the subject in the PE course which, despite being based on a cultural conception, it does not present guidelines on evaluation for the teaching practice in the same direction.

As for the Brazilian government document, *Lei de Diretrizes e Bases da Educação* (Brazil, 1996) it does not provide guidance for evaluative practice in higher education, but instead its guidelines are restricted to basic education. In the context of secondary education, the document states that procedural and formative evaluation are the responsibility of educational institutions, while the federal government will set the expected performance standards, which will be a reference in the national evaluation processes.



In addition, three resolutions have been published in recent decades that prescribed the national curriculum guidelines for teacher training in Brazil: CNE/CP No. 1/2002 (Brazil, 2002), No. 2/2015 (Brazil, 2015) and No. 2/2019 (Brazil, 2019). Because CG of the Ufes/Brazil Course is 2014, its implementation was based on CNE/CP Resolution No. 1/2002 (Brazil, 2002). This document states in Art. 3 that evaluation is an integral part of the training process and a tool for diagnosing gaps and measuring results. However, the document does not provide an assessment concept.

CNE/CP Resolution No. 2/2015 (Brazil, 2015) focuses on seeking external evaluations of the regularization of training courses. CNE/CP No. 2/2019 (Brazil, 2019), establishes a common national curriculum for training courses for teachers of basic education and, in Chapter VIII, presents specific guidelines on the internal and external evaluation process. Similarly, the three resolutions do not define concepts of evaluation.

It is believed that the Brazilian context does not have a centralized policy to guide the evaluation of teaching and learning in higher education. The definition of evaluative concepts and practices is left to the educational institutions and the training courses. Specifically in the case of the Ufes/Brazil PE course, the DPs give clues that this has been a more individual choice of teaching staff in each discipline than a collective decision.

The lack of clarity identified in the prescriptions of evaluative practices in relation to the moments, criteria, functions and agents, shows a gap in the teacher training courses in relation to this topic. As a result, it points to the need for government documents to guide this evaluative practice in higher education, associated with a policy of continuing education.

Unlike Ufes/Brazil, the CG course in Cesmag/Colombia presents guidelines for the evaluative practice of teachers, showing the adoption of the continuous evaluation system. From the very beginning work is done to develop

tools and evaluation methodologies inside and outside the course which allow to observe the teaching-learning processes.

Likewise, the student regulations of the institution mention evaluation as an integral formation process of the students, in which it is sought to respond to values and competences and to monitor the progress and difficulties of the students. Out of the 84 DPs analyzed in Cesmag/Colombia, 17 (21%) had guidelines provided by the institution for teachers to carry out a formative and continuous evaluation with criteria based on competences and skills.

Jiménez (2020) said that the design of PE for teacher training courses followed the guidelines of the Ministry of National Education (MEN) and created Quality Guidelines for Bachelor of Education (Colombia, 2014) and Resolution No. 18583 issued on September 15, 2017 (Colombia, 2017) regulating the characteristics of degrees. In addition to these documents, the Colombian System of Teacher Training and Policy Guidelines (Colombia, 2013) describes the Colombian educational system, its purposes and functioning, and highlights an evaluation concept for teacher training.

The conception is based on the book of Juan Manuel Álvarez Méndez (2007), who understands evaluation as a moment that allows the teacher to know and improve his/her practice and must collaborate so that the students learn and overcome their difficulties. Thus, it stresses that evaluation must take two paths in teacher training courses:

[...] one, create relational learning environments for the future teacher and evaluate his/her knowledge process and ways to educate. Additionally, train the teacher for educational action including evaluation. Thus, the educator is evaluated and formed as an evaluator. The other way is to consider evaluation as part of a continuum and it must be procedural, continuous, integrated into the curriculum and learning. Consequently, evaluation should not be understood as a discrete, discontinuous,



isolated or insignificant task. (Colombia, 2013, p. 66, our translation).

In addition, it was possible to perceive a relation between the evaluation proposed in the Colombian government document with the DPs, the course PE and the institutional regulations. The national orientation in evaluation for teacher training has been the same as assumed in the CG course in Cesmag/Colombia.

It is important to highlight the dual role that the evaluation assumes in the Colombian document that when assuming a conception of continuous training, students are evaluated and trained as an evaluator. Its potentiality is pointed out in teacher training courses, where teaching and evaluation practices fulfill their role and serve as an example.

The evaluation indicated in the documents of the Colombian government and in the DPs of Cesmag/Colombia has a formative perspective of the process and not only of the results; therefore, it must be incorporated from the beginning of the work and must provide permanent data on the development of learning. In this way, it promotes continuous and personalized learning, without subjecting to equal parameters and levels for all students, adjusting the rhythms and styles of learning (Vlachopoulos, 2008).

In the Spanish context, the concept of continuous evaluation has been used in the General Education Law of 1970 and remains in force in current legislation at all educational levels (Spain, 2006). Another characteristic that resembles the evaluation of the Cesmag/Colombia course to the Spanish educational context is its orientation toward competences. It provides clues about the influence of Spanish authors on the conceptions of evaluation and teacher training in PE of Cesmag/Colombia.

Like Cesmag/Colombia, CG of the Udelar/Uruguay course also guides the practice of teachers in terms of evaluation, but it must be modeled in two roles: formative and forming. In addition to certification, evaluation processes

should be understood as a learning mechanism that adds value, allowing a new encounter with knowledge, consolidating itself as an educational practice linked to teaching.

General Education Law No. 18437 (Uruguay, 2008a) does not have a conception or guidelines for the evaluative practice of teachers. However, this topic is explored in the National Integrated Plan of Teacher Training (Uruguay, 2008b), which analyzes in depth a conceptual and theoretical framework to support evaluation policy in Uruguay. The document differentiates the certification evaluation. The former can and should contribute to learning, while the latter reflects institutional need, and both are needed.

In the above line of thinking, the evaluation/certification should encompass partial and final results and the whole learning process that the student performs, understood as a change of reference schemes in the critical understanding of reality and in the possibility of acting on it. In this sense, tests in general, including traditional exams, should be directed to be 'on' knowledge, i.e., reflection, criticism, application, transfer, troubleshooting, etc., more than 'of' knowledge [...]. (Uruguay, 2008b, p. 86, our translation).

Since 2008, Uruguay has adopted a national teacher training policy that assumes a concept of phenomenological and critical evaluation for this context. Article 44 of the document emphasizes that the evaluation of a discipline must be consistent with the formative objectives and the criteria defined by each national department. Thus, the assessment "[...] in a phenomenological and critical way proposes the triangulation between the vision from the hetero-evaluation of the teacher, the self-evaluation of the student and the subgroup/group co-evaluation" (Uruguay, 2008b, p. 86, our translation). Although the PE is not included in the national document for teacher training in Uruguay, it is possible to observe a proximity between the government proposal and the evaluation requirements presented in the DPs and CG of the Udelar/Uruguay PE course.



Comparing the PE courses of the three HEI, Colombia and Uruguay present a national assessment concept for teacher training that guides teaching practice. Colombia provides HEI with greater autonomy to define the details of the academic structure, and the documents present a concept of continuous formative evaluation with criteria based on competences and skills also present in Cesmag/Colombia. In Uruguay, the logic of internal organization along with the national departments favor and contribute to a unification of the concepts of formation and evaluation with a phenomenological and critical perspective in the case of Udelar/Uruguay. On the other hand, the Brazilian context did not show the existence of government curricular guidelines designed to orient evaluative practices for teacher training courses, evidencing a more decentralized policy among the three countries analyzed.

It is necessary to consider the complexity of the curricula of teacher training in PE, because of its diverse areas of knowledge that move in the biological, pedagogical, sports dimensions, etc. The prescriptions of evaluative practices in the DPs are more related to the incorporation of the environment from the tradition of the knowledge area of teacher training and the nature of the discipline, showing that the evaluative practice is a reflection of the teacher professionalism related to his/her formative career and the context of his/her work. It is understood that evaluating learning from the content of discipline is important, however, it is also necessary to build evaluative practices that encourage the formation of vocational performance repertoires. In other words, teachers of the training course, in addition to evaluating the knowledge covered by their discipline, must project the challenges of teaching practice in the school context for their students. This is an important way of thinking and seeing evaluation in the context of teacher training, specifically in PE.

References

- Álvarez-Méndez, J.M. (2005). *Evaluar para conocer, examinar para excluir*. Morata.
- Bloch, M.L.B. (2001). *Apologia da história ou o ofício do historiador*. Zahar.
- Bourdieu, P. (1989). *O poder simbólico*. Ática.
- Brasil (1996). *Lei de Diretrizes e Bases da Educação Nacional*. Lei número 9394, 20 de dezembro de 1996. <https://bit.ly/2S7jw29>
- Brasil (2002). Conselho Nacional de Educação. Institui Diretrizes Curriculares Nacionais para a Formação de Professores da Educação Básica, em nível superior, curso de licenciatura, de graduação plena. Resolução CNE/CP n. 02/2002, de 19 de fevereiro de 2002. Brasília, *Diário Oficial da União*, seção 1, p. 1-9. <https://bit.ly/2Qs5d80>
- Brasil (2015). Conselho Nacional de Educação. Define as Diretrizes Curriculares Nacionais para a formação inicial em nível superior e para a formação continuada. Resolução CNE/CP n. 02/2015, de 1º de julho de 2015. Brasília, *Diário Oficial da União*, seção 1, p. 8-12. <https://bit.ly/3tXK6bA>
- Brasil (2019). Conselho Nacional de Educação. Define as Diretrizes Curriculares Nacionais para a Formação Inicial de Professores para a Educação Básica e institui a Base Nacional Comum para a Formação Inicial de Professores da Educação Básica (BNC-Formação). Resolução CNE/CP n. 02/2019, de 20 de dezembro de 2019. *Diário Oficial da União*, Brasília, 23 de dezembro de 2019 - Seção 1, p. 115-119. <https://bit.ly/3bTNA8T>
- Bussab, W.O., & Morettin, P.A. (2017) *Estatística básica*. Saraiva.
- Castillo-Arredondo, S., & Cabrerizo, D.J. (2010). *Avaliação educacional e promoção escolar*. Unesp.
- Colombia (2013). Ministerio de Educación Nacional. *Sistema colombiano de formación de educadores y lineamientos de política*. <https://bit.ly/2Qv0SRF>
- Colombia (2014). Ministerio de Educación Nacional. *Lineamientos de calidad para la licenciaturas en educación*. <https://bit.ly/3vnoypv>



- Colombia (2017). Ministerio de Educación Nacional. *Resolución 18583 del 15 de septiembre de 2017.* <https://bit.ly/3tZk6fC>
- Creswell, J.W., & Clark, P.V.L. (2011) *Designing and Conducting Mixed Methods Research.* 2nd Edition, Sage Publications.
- Deluca, C., & Klinger, D.A. (2010). Assessment literacy development: identifying gaps in teacher candidates' learning. *Assessment in Education: Principles, Policy & Practice*, 17(4), 419-438. <https://doi.org/10.1080/0969594X.2010.516643>
- España (2006). Ley Orgánica nº 2, de 3 de mayo de 2006, de Educación. *Boletín Oficial del Estado*, Madrid, mayo, 2006. <https://bit.ly/3bA6XUf>
- Esteban, M.T. (2003). *Avaliação: uma prática em busca de novos sentidos.* DP&A.
- Frossard, M.L. et al. (2018). Apropriações das práticas avaliativas para o exercício da docência de estudantes de licenciatura em Educação Física. *Journal of Physical Education*, 29, 1-13. <https://doi.org/10.4025/jphyseduc.v29i1.2970>
- Frossard, M.L., Stieg, R., & Santos, W. (2020). A avaliação na formação de professores em educação física: experiências de estudantes de sete universidades federais brasileiras. *Educação Unisinos*, 24, 1-16. <https://doi.org/10.4013/edu.2020.241.38>
- Ginzburg, C. (1989). *Mitos, emblemas, sinais: morfologia e história.* Companhia das Letras.
- Hamodi, C., López-Pastor, V.M., & López-Pastor, A.T. (2017). If I experience formative assessment whilst studying at university, will I put it into practice later as a teacher? Formative and shared assessment in Initial Teacher Education (ITE). *European Journal of Teacher Education*, 40(2), 1-20. <https://doi.org/10.1080/02619768.2017.1281909>
- Jiménez, M.M. (2020). Indução profissional docente na Colômbia: desafios para a formação inicial e contínua. *Formação Docente: Revista Brasileira de Pesquisa sobre Formação de Professores*, 12(23), 53-66. <https://doi.org/10.31639/rbpfp.v12i23.287>
- Kearney, S. (2013). Improving engagement: the use of 'authentic self-and peer-assessment for learning' to enhance the student learning experience. *Assessment & Evaluation in Higher Education*, 38(7), 875-891. <https://doi.org/10.1080/02602938.2012.751963>
- Maureira-Cabrera, O., Vásquez-Astudillo, M., Garrido-Valdenegro, F., & Olivares-Silva, M.J. (2020). Evaluación y coevaluación de aprendizajes en blended learning en educación superior. *Alteridad*, 15(2), 190-203. <https://doi.org/10.17163/alt.v15n2.2020.04>
- Nóvoa, A. (2004). *Formação de professores e trabalho pedagógico.* Educa.
- Nóvoa, A. (2017). Firmar a posição como professor: afirmar a profissão docente. *Caderno de Pesquisa*, 47(166), 1106-1133. <http://dx.doi.org/10.1590/198053144843>
- Paula, S.C., Ferreira-Neto, A., Stieg- R., & dos Santos, W. (2018). Ensino da avaliação nos cursos de educação física da América Latina. *Estudos em Avaliação Educacional*, 29(72), 802-830. <https://doi.org/10.18222/eae.v29i72.5326>
- Picos, A.P., & López-Pastor, V.M. (2013). Haz lo que yo digo pero no lo que yo hago: sistemas de evaluación del alumnado en la formación inicial del profesorado. *Revista de Educación*, 36, 279-305. <https://doi.org/10.4438/1988-592X-RE-2011-361-143>
- Poleto, F.M., Frossard, M.L., & Santos, W. (2020). As prescrições de avaliação dos cursos de formação de professores em educação física. *Revista Práxis Educacional*, 16(43), 542-568. <https://doi.org/10.22481/rpe.v16i43.7057>
- Santos, W. (2005). *Currículo e avaliação na educação física: do mergulho à intervenção.* Proteoria.
- Santos, W., Rostoldo-Macedo, L., Martins Cassani Matos J., da Silva-Mello, A., & Schneider, O. (2014). Avaliação na educação física escolar: construindo possibilidades para atuação profissional. *Educação em Revista*, 30(4), 153-179. <https://doi.org/10.1590/S0102-4698201400400008>
- Sluijsmans, D.M., & Prins, F. (2006). A conceptual framework for integrating peer assessment in teacher education. *Studies' in Educational Evaluation*, 32, 6-22. <https://doi.org/10.1016/j.stueduc.2006.01.005>
- Stieg, R., Vieira, A.O., Frossard, M.F., Ferreira Neto, A., Santos, W. (2018). Avaliação educacional nos cursos de licenciatura em educação física nas IES brasileiras: uma análise das disciplinas específicas. *Curriculum sem Fronteiras*, 18, 639-667. <https://bit.ly/2Sw1GXx>



- Tejada, J., & Ruiz, C. (2016). Evaluación de competencias profesionales en educación superior: retos e implicaciones. *Educación XXI*, 19(1), 17-38. <https://doi.org/10.5944/educxx1.12175>
- Ufes (2014). *Regimento Geral*. <https://bit.ly/3tX1ugr>
- Uruguay (2008a). Ministerios de Educación y Cultura. *Ley General de Educación: Ley n. 18.437*. Dirección Nacional de Impresiones y Publicaciones Oficiales, Montevideo. <https://bit.ly/2QsR22y>
- Uruguay (2008b). Administración Nacional de Educación Pública (ANEP). *Sistema Único Nacional de Formación Docente 2008*. Documento Final. <https://bit.ly/3bDwnAb>
- Vlachopoulos, D. (2008). ¿Evaluación final o evaluación continua?: un estudio sobre la valoración de los sistemas evaluativos por los estudiantes de lengua griega antigua. *Classica, Revista Brasileira de Estudos Clássicos*, 21(1), 7-24. https://doi.org/10.14195/2176-6436_21-1_1





Changing evaluation: a must in times of uncertainty

Cambiar la evaluación: Un imperativo en tiempos de incertidumbre

 **Dr. Tiburcio Moreno-Olivos** is a professor and researcher at Universidad Autónoma Metropolitana (Mexico) (tmoreno@cua.uam.mx) (<https://orcid.org/0000-0002-0392-6621>)

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Resumen

El objetivo de la investigación cuyos resultados se presentan en este artículo consistió en generar información que permitiera comprender la complejidad del proceso educativo, con la intención de proponer soluciones a problemas fundamentales que afectan el aprendizaje y el logro educativo del alumnado. Se realizó una investigación cualitativa en una universidad pública, la técnica para la recolección de los datos fue la entrevista semiestructurada a profesores que imparten las materias de la formación básica. Entre los principales resultados destaca que la evaluación del aprendizaje es una práctica idiosincrática y contextualizada, que la falta de formación docente es un factor que afecta las concepciones y prácticas de evaluación y, que las formas participativas de evaluación son incipientes, entre otros. Las principales conclusiones indican que la evaluación sigue centrada en la figura del profesor; que el personal docente valora tanto el dominio del contenido disciplinar como las habilidades mediante las cuales el alumnado expresa dicho dominio (habilidades de comunicación verbal y escrita, aprendizaje autónomo, creatividad, pensamiento crítico...), que se emplea una metodología diversa y amplia que incluye exámenes escritos, participaciones en clase, exposiciones, trabajos escritos (ensayos, ejercicios, resúmenes), entre otros. Estas estrategias se centraron en la evaluación del aprendizaje, más que en una evaluación *para* el aprendizaje y *como* aprendizaje.

Descriptores: Evaluación, evaluación del aprendizaje, evaluación para el aprendizaje, educación superior, profesorado, investigación cualitativa.

Abstract

The aim of this paper is to discuss the design and major results of a qualitative study on the evaluation practices of faculty from a public university. Data was collected using semi-structured interviews to faculty members who teach undergraduate general courses. The main results of the study include: that the evaluation of students' learning by faculty is an idiosyncratic and contextualized practice; that the lack of teacher training is a factor that negatively influences evaluation conceptualizations and practices; and, that participatory forms of assessment and evaluation are very incipient. Some main conclusions of the study are: evaluation is still very much faculty-centered; faculty value both the mastery of disciplinary content and the skills through which students express this mastery (verbal and written communication skills, autonomous learning, creativity, critical thinking...); faculty use a diverse and broad evaluation methodology, including written exams, class participation, presentations, and written products (essays, exercises, summaries). They focus these strategies on the evaluation of learning, rather than on an evaluation for learning and as learning.

Keywords: Evaluation, learning evaluation, evaluation for learning, higher education, faculty members, qualitative research.

1. Introduction

This article derived from the research project: “Perspectives and teaching-learning practices of critical thinking at the university”, whose main objective was to generate information that would allow understanding the complexity of the educational process, with the intention of proposing solutions to problems that affect the learning and educational achievement of students.

The research focused on the subjects that integrate basic training: Sustainability and environmental culture, Introduction to mathematical thinking and Academic Literacy, which are taught in the first quarter in all the degrees offered at the university. The emphasis on these three key areas of the formative process is because it is considered that their in-depth study can provide information on the dynamics of the educational model as a whole, around academic writing practices; argumentation practices (critical thinking); and learning evaluation.

During the conversations with professors, different topics of their interest emerged, and evaluation of learning was selected in this paper, since it is considered by some authors as the “touch-stone” of the curriculum, given the significant effects it has on both teaching and learning. As mentioned by Hargreaves et al. (1998, p,183) “evaluation is the tail that begs the dog”.

Evaluation is a subject that has evolved in recent decades as seen in the literature consulted (Reyes et al., 2020; Jiménez, 2019; Moreno, 2020). Some authors point to innovations in this field, and although its background is long ago, it is in the second half of the 20th century and so on, when its analysis expands and deepens (McMillan, 2013).

Since the objective was to analyze the concepts and evaluation practices of the faculty, these were the initial questions that guided the research: How is the evaluation process developed in the subjects of basic training? What is the methodology used to evaluate students? Who participates in the evaluation and how is that

participation? From the content taught, what information was really learned by students? How do professors know that students have learned?

1.1. Theoretical framework

In recent decades, evaluation in education – and, particularly, learning evaluation – has undergone a major transformation and has boomed worldwide. A first change concerns the concept of learning evaluation. For a long time, the term learning evaluation has been used, most recently as assessment as learning (Dann, 2014; Earl, 2003), learning-oriented evaluation (Carless, 2015), evaluation for learning (McMillan, 2013; Moreno, 2020; Brown, 2019), and shared and formative evaluation (Molina et al., 2020; Fuentes & Salcines, 2018), as an alternative to traditional evaluation. In other words, a mutation in language is identified to refer to evaluation as a participatory, formative and shared process between teachers and students, with learning as the main objective.

However, this is not just a change in language, but these expressions imply depth and important practical implications. These terms refer to a significant transformation of the notion of evaluation, which consisted of measuring the knowledge acquired by students, and which was observed in their ability to reproduce—as reliably as possible—knowledge in an assessment. Currently, the emphasis is placed on the acquisition and development of competences, understood as a complex and integral construct that includes knowledge, skills, techniques, arrangements, attitudes and values, among others. This new vision is not about educating them to memorize an enormous amount of data and inert information, but to be able to select the appropriate schemes, as well as when and how to use them to respond effectively to the problems or situations of their personal and social life. Problem and situations that are characterized as complex, ambiguous, incomplete and challenging (Denyer et al., 2007).

This change in the evaluating perspective affects its contents, i.e., what is being evaluated.



To a large extent, the content of the evaluation is determined by the programs of study, but professors at the university, considering autonomy, have a more room to interpret, adapt or modify the educational program of the institution. This also has a notable impact on how to evaluate learning as it opens the door to use more flexible, collaborative, participatory, democratic and human methodologies among participants (Santos, 2003; Ibarra et al., 2020).

A second change concerns the actors of the evaluation; time before the main protagonist of the evaluation was the professor with the full decision-making power to design, manage and conduct the evaluation. Students played a passive role, whose participation was limited to responding to the instruments provided to them. Nowadays it is known the benefits that the participation and involvement of students have in their own evaluation process (Heritage, 2007).

(...) research on evaluation as learning has documented the benefits of student participation during the learning process – particularly how peer evaluation and self-evaluation improve meta-cognition and learning as a result of active participation in the evaluation of their own work. (McMillan, 2013, p. 6)

However, in order for students to have a significant participation in the evaluation, two conditions are required: 1) professors must generate a classroom culture that promotes self-assessment and peer evaluation. In this scenario, the classroom is seen as a place where students feel respected and valued and consider that they contribute to the class; and 2) students must possess the skills to create a learning community in which individual differences are known. Compliance with codes of conduct in the classroom, such as: listening others with respect, respecting speaking time, responding positively and constructively, and valuing the different skills of their peers, will enable all learners to feel safe in a learning environment where it is possible to learn with and from the other.

To achieve this, it is very important that professors have the skills to model classroom safety standards through their own performance. It is simply a question of educating by example (Moreno, 2020).

In this scenario, the promotion of participatory evaluation modalities such as self-evaluation (Taras, 2003) and peer evaluation (Sridharan & Boud, 2019; To & Panadero, 2019) is essential. Thus, the focus is no longer placed on the professor, but on a professor who becomes a mediator, guide and facilitator of learning environments, and accompanies the students in their formative process to provide guidance and feedback (Boud & Molloy, 2015; Moreno, 2021). Thus, the following is proposed:

When evaluation is emphasized for learning, different competences are needed in professors, including the need to clearly understand the cognitive elements that are essential to student learning, such as being able to identify errors in cognitive processes that prevent students from advancing their learning process. (McMillan, 2013, p. 5)

Thus, the power of evaluation is no longer exclusively concentrated in the faculty, but is shared with the students, who also assume the responsibility of making value judgments about their own performance and their peers (Cáceres et al. 2019).

A third change points to the evaluation methodology. Previously, the exam was the instrument used to assess students' learning, or rather to verify their ability to memorize data and information. In recent decades, there has been a transition from monism to methodological pluralism. In addition, as the competences involve different contents (conceptual, procedural, attitudinal), in order to be able to account for student acquisition or mastery, the faculty requires the use of different strategies to collect evidence that allow them to describe, as faithfully as possible, the competences to be assessed. These are evaluation strategies that are more



open than conventional exams (Moreno, 2012; Monereo, 2009).

However, the possibility that this new discourse of evaluation can modify the concepts of professors, and thus transform their evaluation practices is disrupted by multiple factors, among which stand out contextual factors. The context in which the faculty does their work will undoubtedly affect their action, as well as their commitment and involvement with the process of change. School culture and professional teaching culture have long been known to be key elements in achieving a true transformation of the school (Hargreaves, 1999; Santos, 1995; Pérez, 1995; Bolívar, 1993).

This work is placed in the field of higher education, which introduces a dimension of the topic. The university is considered by many as a conservative institution; therefore, it seems more resistant to change than other institutions that make up the educational system. In addition, the academic staff is mostly composed of professional experts in a disciplinary field, but with little or precarious teaching training. Hence, their ability to evaluate student learning is often poor or limited. In this regard, it is stated that:

A finding was that professors lack mastery in the construction and interpretation of the assessments they design and use to evaluate students' learning, although this mainly concerned the construction, administration, and interpretation of summative evaluations. (McMillan, 2013, p. 5)

In general, professors' conceptions of learning evaluation seem far from theoretical advances, and their practices are commonly based on the experience, common sense, or emulation of other actors (colleagues, former professors, experts) who exert some influence on their performance (Moreno, 2009).

On the other hand, we are living a time of great transformation of life. This new scenario poses enormous challenges for the university, which requires it to take risks in the face of the

need for transformation of the teaching-learning process, with evaluation being a fundamental component. It is necessary to see evaluation from a new perspective (Stiggins, 2002). It is a must that professors get rid of concepts of teaching, learning and evaluation, because they represent a heavy burden on the progress of university teaching (Stiggins, 2004).

In today's era, marked by uncertainty and perplexity, it is imperative to break away certain knowledge, skills, habits and provisions that were perhaps valid at another time and place, but that are now unproductive and, instead, build other valuable learning for the formation of the present generations. It is a matter of unlearning old schemes and re-learning new ones, a double process that can be complex and sometimes painful, but certainly necessary. Of course, this does not mean that previously learned information has to be eliminated, in this case, with regard to evaluation, it will be necessary to retain those professional resources that remain valuable and relevant for an action that responds to the demands of contemporary society (Hargreaves & Shirley, 2012).

2. Methodology

Qualitative research is a contextualized process that places the observer in the world. It is an interpretative and naturalistic approach of reality, which studies events as they happen, trying to understand or interpret them from the meaning of individuals (Denzin & Lincoln, 2011). Qualitative researchers in carrying out their tasks deploy a wide range of interrelated interpretive practices that seek to gain a deeper understanding of the object of study. Hence, the use of several interpretative practices in the same research is common (Flick, 2004).

In the qualitative research process, academics use various strategies for collecting empirical data, including case studies, personal and introspection experiences, life stories, interviews, observations, cultural productions, and histo-



rical, interactive, and visual documents. These materials describe the everyday problems and meanings of people's lives.

The case study was used as a methodological design in this research. This entails an inquiry process characterized by detailed, comprehensive, systematic and in-depth analysis of the case studied (Rodríguez et al., 1999, p. 92). More than thirty semi-structured interviews were conducted with full-time faculty who taught some of the subjects of basic training (Sustainability and environmental culture, Introduction to Mathematical Thought and Academic Literacy). As part of the methodology, student interviews and classroom observations were also conducted. This article is limited only to the data analysis of semi-structured interviews conducted to six professors who teach the above subjects.

In this regard, it should be noted that the results presented in this article are "preliminary", as the research is broader and more plural. The criterion for choosing interviewees was to teach the subjects of basic training. Interviews were conducted in the offices of professors and lasted approximately one hour. Professors knew about the research project and agreed to participate voluntarily. At all times, the anonymity of the interviewed group was preserved.

The information presented in this article is contextual and idiosyncratic. The aim was to have a better understanding of the subject under research. However, although the data do not represent the entire faculty, it may indicate what might be happening with other professors in similar conditions and contexts.

3. Analysis and results

The analysis and interpretation of empirical data from field work shows the topics that concern professors about the evaluation of learning in the subjects investigated. In this section, the results were organized according to three categories mentioned in the theoretical framework:

(A) Concept of learning evaluation, (b) Actors of evaluation, and (c) Evaluation methodology.

3.1. Conception of learning evaluation

Based on the teaching methodologies used, as well as the nature and type of activities required, professors express their notions of what they consider important to the training of students and, therefore, what to value in the assessment: "I ask for analysis, a small paragraph to say what they think, essays, I insist that they tell me what they think, not to summarize (...) essays, many essays and many round tables."

There are professors who confuse the frequency of evaluations with an act of justice, "just as to be fair with evaluation, which is by the way a lot of work, but still, I assign different activities". An interviewed professor talks about evaluation in her students:

You mentioned something important to me because it is very demanding. If there is something I have worked on all my life is definitely evaluation, because I do not teach and someone else evaluates, that is what I would like most, you really do not know how much work it takes because I would like students to think and analyze, but many times I have works that are summaries of students who do not miss any class and who are in the front row asking because they never understand (...).

From the beginning of the course, the professor must communicate the rules of the evaluation to generate certainty and confidence in the student. But these conditions are not always met because sometimes the professor does not fully know what to evaluate, and although there is some flexibility to make adjustments based on the conditions of the group, it is preferable not to introduce drastic last-minute changes. "I give students a lot of cases that are in the annex, so they can choose, all cases are very related to the environmental problems, those four classes and



now this one, and I am not yet very sure what the final work will be."

The above testimony indicates that, even if there are institutional rules on how to perform evaluation, it is finally up to the professor and the group. The evaluation appears to be a discretionary act, which reveals the professor's conception — in this case — of evaluation as an idiosyncratic and contextualized practice, based on his/her good professional judgment as an evaluator.

Given the nature of the contents of the subject Sustainability and Environmental Culture, the teaching methodology that includes presentations (of the professor and students), interrogation and debate in class, among others, is suitable to generate a climate where students acquire theoretical concepts and develop socially desirable attitudes toward the preservation and care of the environment (Fresán et al., 2017). The moments when controversial topics are addressed and that generate opposing positions among the members of the group allow to promote critical thinking and the defense of universal values around a sustainable culture.

The following testimony reveals the mix of different criteria used to evaluate student's presentations; the professor presents the evaluation rubrics from an integrative perspective in which both forms and content matter.

(...) that they stand out properly, that they have organized their research, that it is coherent, that it has substance, everything that is considered in a presentation. If they start the presentation and finish it in three minutes, for example, that will reduce their grade compared to someone who did a deeper investigation, who reflects, who does not read the slides, but instead uses them as support. Everything counts, I make an integral evaluation.

3.2. Actors in the evaluation

Although there is still a great number of professors who are the protagonist of the evaluation, certain moments of active participation

of students in this process were documented. In this sense, Álvarez (2001) argues that if self-evaluation does not involve self-qualification, it is a fraud for students and it must be avoided, which means that if a professor decides to include self-evaluation, he/she must carry it to its final consequences, accepting that, at the beginning, students who lack experience in self-evaluation may incur biases, either by underestimating or overestimating their performance. The same can happen with peer evaluation. In this regard, a professor tells her experience:

I ask them to write a comment about participation, what kind of participation, what kind of activities they did, and based on the description or comment they need to grade themselves, which allows me to appreciate what kind of activities they are valuing, i.e., the student searched on the web, contributed on (...). In general, they normally grade themselves with a low grade, I grade them better.

I always give them methodologies of this type (...) they have difficulty correcting because they have emotional limitations with writing, i.e., they cannot write (...) Sometimes I ask them to read as a support for writing, but what works best is for them to look at what they wrote and share those texts.

The latter allows to assume that students may not have developed skills to co-evaluate or that this practice of peer evaluation with qualification is not something that students like by the consequences it may have on the relationships with their peers (Kaufman & Schunn 2011; Liu & Carless, 2006; Moreno, 2021).

The development of a regular class allows to understand the role of the professor as a guide or facilitator of the student's learning; a professor describes a class in which the student presents his/her work to the group, thus providing elements for the interaction in the classroom:

There are moments when I speak to clarify certain topics that I think are important and, in



the end, the students ask questions, sometimes they do not ask and sometimes, depending on the subject, they are very interested and create controversy.

The latter shows the importance of the professor as a mediator between the cultural content to be learned and the student; this function is essential especially in a curricular model centered on learning, such as that of the university investigated.

3.3. Evaluation Methodology

There are some professors who have practically ruled out exams, perhaps this is due to the disrepute of these instruments. In this case, it was observed that a lot of professors use other tools to assess learning. However, if their teaching, learning and evaluation concepts preserve a conservative character, i.e., if professors still see evaluation as a synonym of measurement or qualification, it is unlikely that a real change will be generated even if they incorporate "alternative" evaluation methodologies (Valencia, 1993), since these are assimilated to a traditional assessment scheme; in any case, it will only be artificial innovation that will not last in time.

Although some professors agree on eliminating exams, there is still some confusion at this point, since it is not a question of discarding these instruments, because as long as they are well designed, these can be (and in fact are) a valuable tool for valuing certain learning content, as facts and concepts. It is recommended that their use be combined with other assessment techniques and tools to achieve a more complete vision of learning achievements.

(...) I evaluated all participations that they had until the fourth week, I averaged them and I gave them the grade (...) in general there were no doubts. I'm going to do the exam next week. The students who remain are doing a good job, there are more than three quarters and now we are going to exam week, I said it

is going to be on this subject and other topic discussed, it is going to be a written exam.

In general, class participations are considered in the evaluation, although each professor, according to his or her judgment, can clarify what he or she considers to be a 'good' participation. For some, it is enough for students to speak, regardless of the quality of their participation, while for others, it is a matter of making a valuable contribution to the proposed topic or answering the questions correctly. "(...) when I ask them, when someone speaks, when I ask direct questions like 'what do you think', 'what was your work about'".

Sometimes the professor's criterion appears to be limited only to the fact that the student has fulfilled the task, without considering the quality of the product or the result obtained. "As long as they have included everything I asked for, it is fine for me".

Class participations and written works (essay type) are common components of the evaluation in the subjects of Sustainability and Environmental Culture and in Academic Literacy; in essays the subject can be free or can be selected by the professor. In Sustainability, posters are also part of the evaluation, which are presented to the university community. This type of training experience shows the skills and creativity of students when they are involved in pedagogical activities that they like.

I evaluated this subject with participation and at the end of the course I asked them to do a research project: Climate change, water in Mexico City, garbage or recycling, I told them to do a poster. The first year we made a poster trying to say 'Hey you, take care of water' (...), someone made a sustainable house, things that are very surprising. These guys have a lot of potential.

In response to a question made to the professor who teaches Introduction to Mathematical Thinking regarding what and how he evaluated the work of his students, the interviewee replied:



I evaluate both the process and the result, maybe some students follow other paths to get to the result, maybe they are applying the procedure but with miscopied data, but the procedure is correct, so I take that into account; they may use a similar method but not exactly the same, and it is important because it is something creative, even if it is not the method they try to remember, they have the idea and that means they are understanding, so(...) I take it into account, even if it is not completely correct.

This response shows that the professor values both the process/procedure to solve a mathematical problem as well as the result, which promotes the ability of the students to take risks, by adopting routes other than those indicated by the professor to solve a problem or exercise. This strategy can be a favorable path toward self-learning for the student. This professor considers the time, the writing and spelling of an exercise. It is striking that a math professor grades writing, but is good because it favors the integral formation of students.

I also consider the time in solving exercises and things as spelling. And in the tests, I focus first on the exercise that has to do with the process, with the result, then on time and a third element is if writing and spelling are appropriate; I have told them that I will take that into account, so far, I have only underlined the grammar mistakes, but next time these can influence on the evaluation.

In math, it is common for some students who start university to lack of prior skills and knowledge to address topics of the school program. Given this situation, the faculty introduces a remedial course to solve the math gaps in students.

(...) when we were teaching this course, I can tell you that there were deficiencies like: the rules of the exponents in algebra and the solution of fractions. I always applied a diagnostic exam and always obtained the same results; those were the most frequent problems [...].

In questioning the group interviewed about the origin and content of the remedial course, this was their answer:

The remedial originated because in reasoning a problem said: 'the fifth horizontal is this and the time used is proportional to something', so, it starts with a high school topic: reasons and proportions, and then [the students] were stuck and said 'I do not know what that is', and we found that if they did not know they would not be able to move forward, that if they do not have math tools they cannot shape the reasoning, so the remedial included topics of high school.

On the other hand, the academic literacy workshop has as its main objective that students learn to write academic texts, so students do different types of exercises to develop their writing skills. A professor discusses the types of work that students perform.

The first work was a critical review of a reading, another was an informative text and an argumentative text on the same subject, a third paper was an article and the fourth will be another platform-based article.

The professor was questioned about what and how she evaluates this type of work, and her answer is interesting because she knows where to focus her assessment.

I created a rubric that explained each aspect, for example in the introduction I grade the objectives, the context of the topic; in the theoretical framework I grade wordiness, that the paragraphs have consistency, that there is a logical development, a good use of the language, a language appropriate to the topic being addressed and the context in which we find ourselves; in the conclusion I check that there is a closure, that the important idea is taken up again; I also grade the management of references, that the students in the text quote their sources, we use APA because they know the European style and the idea is that they relate with others as well.



During the interview, the professor was asked if, in addition to the rubric described above, she used other instruments and whether she considered other criteria for evaluation. Her perspective agrees with that of another of her colleagues in considering in the evaluation both the mastery of the content and the ways to communicate it to others, i.e., the content and the style. "We do some oral exercises so they know how to stand in front of the public and how to present information or arguments, how to use visual aids, and for that I also created a more specific rubric for oral presentations."

4. Discussion and conclusions

This research showed that evaluation of learning is an important topic at the university (Reyes et al., 2020; Hernández et al., 2020). Answers of professors allowed to see predominance of evaluation of learning with no indication of the evaluation's perspectives for learning and as learning. Evaluation continues to be professor-centered (hetero-evaluation) with some attempts at a formative and shared evaluation through participatory modalities such as self-evaluation and co-evaluation.

From the analysis of the data, attempts were revealed by the faculty to expand and relax the tools of evaluation of learning, but there was no change in their concepts of evaluation. The prevailing idea of an evaluation at the service of certification and measurement remains in force, in the detriment of an evaluation for understanding and improving learning, which would allow to move toward an evaluation for learning.

The lack of teacher training for evaluation of learning is evident, and this is because the university faculty, in general, have little teaching training. Although it is fair to say that, in this specific case, evidence was collected on the teachers' efforts to innovate (Guzmán et al., 2015) and develop in their students —through teaching and evaluation practices— higher-order intellectual skills (critical thinking, divergent

thinking, self-learning, creativity...), which is consistent with the pedagogical principles of the educational model of the university under investigation.

The evaluation methodology includes mainly written exams, class participations, written texts, presentations and exercises or tasks. Evaluation practices include both formative and summative, with an emphasis on the latter. In other words, since at the end of the course the students' learning needs to be measured, it seems that grades really count for both teachers and students. This surely conditions the entire training process (González et al., 2012). In this sense we agree with Gallardo (2018):

In a metaphorical sense, the value of the grade obtained from an evaluation process could be compared to a thick mist that impedes clarity in trying to define the paths that will actually lead to making a difference, which precisely relies on achieving better decisions from the results of the evaluation, which will be obtained by a better preparation of the professor in this significant aspect of the learning process. (p. 8)

Another point that is noteworthy is the conflict of values that evaluation can generate in some professors. Finally, the problems related to gaps in the previous training of students have led professors to implement remedial measures in certain cases, so that students can achieve the intended learning objectives. This last issue, of course, also modifies evaluation. These findings reveal the need for a change in evaluation to obtain a better learning experience (Heritage, 2018), in a world steeped in permanent change and uncertainty.

The perspective on the subject aims at strengthening evaluation as a continuous, formative, participatory and shared process, which uses various evaluation devices to account for the different types of student learning. There is a need for professors to develop competencies for evaluation of learning, and for educational institutions to support this professional deve-



lopment, so that a balance can be gradually achieved between the evaluation of learning and for learning, because they are both important. All this considering that: "School learning is very complex and evaluation is imperfect."

References

- Álvarez, J.M. (2001). *Evaluar para conocer, examinar para excluir*. Morata.
- Bolívar, A. (1993). Culturas profesionales en la enseñanza. *Cuadernos de pedagogía*, 219, 68-72.
- Boud, D. y Molloy, E. (2015). ¿Cuál es el problema del feedback? En D. Boud y E. Molloy (Coord.), *El feedback en educación superior y profesional. Comprenderlo y hacerlo bien* (pp.13-24). Narcea.
- Brown, G.T.L. (2019). Is Assessment for Learning Really Assessment? *Frontiers in Education*, 4(64). <https://doi.org/10.3389/feduc.2019.00064>
- Cáceres, M.L., Pérez, C.J., & Callado, J. (2019). El papel de la evaluación del aprendizaje en la renovación de los procesos de enseñanza y aprendizaje, *Revista Conrado*, 15(66), 38-44. <https://bit.ly/3gDferV>
- Carless, D. (2015). Exploring learning-oriented assessment processes. *Higher Education*, 69(6), 963-976. <https://doi.org/10.1007/s10734-014-9816-z>.
- Dann, R. (2014). Assessment as learning: blurring the boundaries of assessment and learning for theory, policy and practice. *Assessment in Education: Principles, Policy & Practice*, 21(2), 149-166. <https://doi.org/10.1080/0969594X.2014.898128>
- Denyer, M., Furnémont, J., Poulain, R., & Vanloubbeeck, G. (2007). *Las competencias en la educación. Un balance*. Fondo de Cultura Económica.
- Denzin, N. K., & Lincoln, Y.S. (2011). *El campo de la investigación cualitativa. Manual de Investigación Cualitativa*, Vol.1. Gedisa.
- Earl, L.M. (2003). *Assessment as learning using classroom assessment to maximise student learning*. Corwin Press.
- Flick, U. (2004). *Introducción a la investigación cualitativa*. Morata.
- Fresán, M., Moreno, T., Hernández, G., Fabre, V., & García, A. (Ed.). (2017). *Modelos educativos para el siglo XXI. Aproximaciones sucesivas*. Universidad Autónoma Metropolitana. Cuajimalpa.
- Fuentes, V., & Salcines, I. (2018). Estudio sobre la Implementación de la Evaluación Formativa y Compartida en un Ciclo Formativo de Grado Superior. *Revista Iberoamericana de Evaluación Educativa*, 11(2), 91-112. <http://doi.org/10.15366/riee2018.11.2.005>
- Gallardo, K.E. (2018). *Evaluación del Aprendizaje: retos y mejores prácticas*. Editorial Digital, Tecnológico de Monterrey. <https://bit.ly/3iF1gsp>
- González, I., Ramírez, A., & Moral, A. (2013). La evaluación por competencias en educación primaria ¿arquitectura o albañilería? *Educere*, 17(56), 41-50. <https://bit.ly/3vlXhUk>
- Guzmán, M.A., Maureira, O., Sánchez, A., & Vergara, A. (2015). Innovación curricular en la educación superior ¿Cómo se gestionan las políticas de innovación en los (re)diseños de las carreras de pregrado en Chile? *Perfiles Educativos*, 37(149), 60-73. <https://bit.ly/2TZxtjK>
- Hargreaves, A. (1999). *Profesorado, cultura y postmodernidad: cambian los tiempos, cambia el profesorado*. Morata.
- Hargreaves, A., Earl, L., & Ryan, J. (1998). *Una educación para el cambio. Reinventar la educación de los adolescentes*. Octaedro.
- Hargreaves, A., & Shirley, D. (2012). *La cuarta vía. El prometedor futuro del cambio educativo*. Octaedro.
- Heritage, M. (2007). Formative assessment: What do teachers need to know and do? *Phi Delta Kappan*, 140-145. <https://doi.org/10.1177/003172170708900210>
- Heritage, M. (2018). Assessment for learning as support for student self-regulation. *Australian Educational Research*, 45, 51-63. <https://doi.org/10.1007/s13384-018-0261-3>
- Hernández, M., Villarroel, V., & Zambrano, J. (2020). Dimensiones e indicadores para la metavaluación de los aprendizajes: reflexión y propuesta del campo teórico de la evaluación en educación superior, *Revista Cubana de Educación Superior*, 2(39), mayo-septiembre. <https://bit.ly/35oarFM>
- Ibarra, M.S., Rodríguez, G., Boud, D., Rotsaert, T., Brown, S., Salinas, M.L., & Rodríguez, H.M.



- (2020). El futuro de la evaluación en la educación superior, *RELIEVE*, 26(1), art. M1. <http://doi.org/10.7203/relieve.26.1.17323>
- Jiménez, J.A. (2019). Aproximaciones epistemológicas de la evaluación educativa: entre el deber ser y lo relativo. *Foro de Educación*, 17(27), 185-202. <http://dx.doi.org/10.14516/fde.636>
- Kaufman, J. H., & Schunn, C.D. (2011). Students' Perceptions about Peer Assessment for Writing: Their Origin and Impact on Revision Work. *Instructional Science*, 39, 387-406. <https://bit.ly/3iF1XC1>
- Liu, N.F., & Carless, D. (2006). Peer feedback: the learning element of peer assessment. *Teaching in Higher Education*, 11(3), 279-290. <https://doi.org/10.1080/13562510600680582>
- McMillan, J.H. (2013). Why we need research on classroom assessment. In J.H. McMillan (Ed.), *Handbook of Research on Classroom Assessment* (pp. 3-16). Sage.
- Molina, M., Pascual, C., & López, V. (2020). El rendimiento académico y la evaluación formativa y compartida en formación del profesorado. *Alteridad*, 15(2), 204-215. <https://doi.org/10.17163/alt.v15n2.2020.05>
- Monereo, C. (Coord.) (2009). *Pisa como excusa. Repensar la evaluación para cambiar la enseñanza*. Graó.
- Moreno, T. (2009). La evaluación del aprendizaje en la universidad: tensiones, contradicciones y desafíos. *Revista Mexicana de Investigación Educativa*, 41(14), 563-591. <https://bit.ly/3xoEGs5>
- Moreno, T. (2012). La evaluación de competencias en educación. *Sinéctica*, 39, 1-20, julio-diciembre. <https://bit.ly/3iJmLZa>
- Moreno, T. (2020). *Evaluación del aprendizaje y para el aprendizaje. Reinventar la evaluación en el aula* (2 reimp.). Universidad Autónoma Metropolitana. Cuajimalpa. <https://bit.ly/2RZYAL2>
- Moreno, T. (2021). *La retroalimentación. Un proceso clave para la enseñanza y la evaluación forma-*
tiva. Universidad Autónoma Metropolitana. Cuajimalpa. <https://bit.ly/3wuCDCG>
- Pérez, A.I. (1995). La escuela, encrucijada de culturas. *Investigación en la escuela*, 26, 7-24. <https://bit.ly/35v2L4p>
- Reyes, C.I., Díaz, A., Pérez, R., Marchena, R., & Sosa, F. (2020). La evaluación del aprendizaje: percepciones y prácticas del profesorado universitario. *Profesorado. Revista de Currículum y Formación del Profesorado*, 24(1), 136-162. <https://doi.org/10.30827/profesorado.v24i1.8449>
- Rodríguez, G., Gil, J., & García, E. (1999). *Metodología de la investigación cualitativa*. Aljibe.
- Santos, M.A. (1995). Cultura profesional del docente. *Investigación en la escuela*, 26, 37-45. <https://bit.ly/3wwL6FI>
- Santos, M.A. (2003). *Una flecha en la diana. La evaluación como aprendizaje*. Narcea.
- Sridharan, B., & Boud, D. (2019). The effects of peer judgements on teamwork and self-assessment ability in collaborative group work. *Assessment & Evaluation in Higher Education* <https://doi.org/10.1080/02602938.2018.1545898>
- Stiggins, R. (2002). Assessment Crisis: The absence of assessment for Learning. *Phi Delta Kappan*, 83(10), 758-765. <https://bit.ly/3gyWb24>
- Stiggins, R. (2004). New assessment beliefs for a new school misión. *Phi Delta Kappan*, 86(1), 22-27. <https://bit.ly/3gEhpeU>
- Taras, M. (2003). To feedback or not to feedback in student self-assessment. *Assessment and Evaluation in Higher Education*, 28(5), 549-565. <https://doi.org/10.1080/02602930301678>
- To, J., & Panadero, E. (2019). Peer assessment effects on the self-assessment process of first-year undergraduates. *Assessment & Evaluation in Higher Education*, 44(6), 920-932. <https://doi.org/10.1080/02602938.2018.1548559>
- Valencia, S.W. (1993). Evaluación alternativa: Separar el grano de la paja. *Comunicación, Lenguaje y Educación*, 19-20, 63-66. <https://bit.ly/3gvKUQ6>



Miscellaneous Section

(Sección Miscelánea)



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Analysis of values of adolescents in Salesian educational schools in southern Spain

Análisis de los valores de adolescentes en centros educativos salesianos del sur de España

- ✉ **Dra. Andrea Cívico-Ariza** is a professor and researcher at Universidad Internacional de Valencia (España) (acivico@universidadviu.com) (<https://orcid.org/0000-0003-3094-5841>)
- ✉ **Dr. Ernesto Colomo-Magaña** is a professor and researcher at Universidad de Málaga (España) (ecolomo@uma.es) (<https://orcid.org/0000-0002-3527-7937>)
- ✉ **Dra. Erika González-García** is a professor at Universidad de Granada (España) (erikag@ugr.es) (<https://orcid.org/0000-0003-2465-7288>)

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Abstract

The hierarchy of values of each subject determines their actions and decisions, adolescence being a key stage for the construction of identity. Thus, the axiological choices of young people will define who they are and will influence their sociocultural coexistence. The present work focuses on analysing the hierarchy of values in adolescent Spanish students, as well as examining whether there are significant differences in their perceptions as a function of the gender variable. A descriptive transectional design is used to analyse the axiological hierarchy of a sample of 248 students from Salesian schools in southern Spain during the academic year 2018/2019. The axiological information was collected using a standardized instrument. The results indicate the participants' favourable assessment of the categories of affective, moral and individual values in the study, while the worst considered were those related with the values of political participation and intellectual. Moreover, significant differences were obtained in the gender variable, women being those who reflect a greater perception of satisfaction scoring higher in all categories. The study concludes that adolescents prioritise values that improve affective relationships, moral coexistence and their identity development. Furthermore, the difference by gender underlines that personal experiences and the characteristics of the context generate different perceptions of values, with axiology having to be worked on in all educational levels.

Keywords: Social values, moral values, education, adolescence, identity, educational models.

Resumen

La jerarquía de valores de cada sujeto determina sus acciones y decisiones. Siendo la adolescencia una etapa clave para la construcción identitaria, las elecciones axiológicas de los y las jóvenes definirán quiénes son e influirán en la convivencia sociocultural. Este trabajo se centra en analizar la jerarquía de valores en estudiantes españoles adolescentes, así como verificar si existen diferencias significativas en sus percepciones en función de la variable sexo. Se utiliza un diseño transeccional de tipo descriptivo para analizar la jerarquía axiológica de una muestra de 248 estudiantes de centros educativos salesianos del sur de España durante el curso académico 2018/2019. La información axiológica se recogió mediante un instrumento estandarizado. Los resultados indican una mejor valoración de las categorías de valores afectivos, morales e individuales por parte de los participantes en el estudio, mientras que las peor consideradas han sido las relacionadas con los valores de participación política e intelectuales. Asimismo, se obtienen diferencias significativas respecto a la variable sexo, siendo las mujeres quienes reflejan mayor percepción de agrado al puntar más alto en todas las categorías. Se concluye que la población adolescente prioriza los valores que mejoren las relaciones afectivas, la convivencia moral y su desarrollo identitario. Además, la diferencia por sexos subraya que las experiencias personales y las características del contexto generan diferentes percepciones respecto a los valores, siendo preciso trabajar la axiología en todos los niveles educativos.

Descriptores: Valores sociales, valores morales, adolescencia, identidad, educación, modelos educativos

1. Introduction

Adolescence is a key moment in people ranging from ten to nineteen years old (World Health Organization, 2018). This stage is characterized by a transition between childhood and adult life, in which there are countless changes affecting all spheres that make up the human being (physical, psychological, biological, intellectual and social), giving rise to a process of constant learning and adaptation where the adolescent population begins to use the personal and social resources at their disposal (Gaete, 2015; Nieto, 2013; Tesouro et al. 2013).

The transformations that occur during this stage are very important, since physical changes, such as the maturation of cognitive structures, and cognitive changes, such as the improvement of abstract thinking, favor in adolescents the development of own reflections. This fact makes it easier for the adolescent to be when there is an inner process in which the person understands who he/she is and who he/she wants to be (Salas, 2017).

On the other hand, it is also during adolescence that people construct the scale of values that will define their actions and behavior and, consequently, their future as adults (Marín-Díaz & Sánchez-Cuenca, 2018; Villegas, 2018). This scale is built on the experiences of the person and the context in which he/she is immersed, since the individual is constantly generating ideas that enable him/her to understand and give meaning to the reality (Genç, 2018). In this sense, we can define values as those ideas that guide the actions of people who form society (Martín-García et al., 2021; Moreno et al., 2020; Oña et al. 2013; Pérez, 2019; Schwartz, 2012; Spellini et al., 2010). Values allow people to interpret their reality (Gervilla, 1988; Valiente et al., 2020), being able to learn and give relevance to all the facts that make their lives more pleasant and positive (Dewey, 1952). Similarly, these allow individuals to reject decisions or actions that they consider may have negative consequences for their experiences or

people they care (Bolívar, 1995; Camps, 1990; Expósito, 2018).

These elections, which influence the construction of the scale of values that begins in adolescence and which agree with the process of identity formation (Ruiz & de Juanas, 2013), make the person unrepeatable and unique (Splitter, 2020), because he/she lives in a constant transformation that allows to evolve and adapt to the reality of the context in which the individual is (Claes, 2011; Ibáñez, 2013; Smith et al. 2012). For this reason, values in adolescence are very interesting for the scientific community. In this regard, several investigations have deepened the axiological component in this age group (Bueno et al., 2016; González-Gijón & Soriano, 2017; Ortega & Blanco, 2017; Pandya, 2017; Rodríguez et al., 2019; Van Krieken, 2019).

In this sense, we can affirm that people are in a permanent evolution-learning process, because we need to contribute meaning to the different events that occur in our everyday reality (Moreno, 2014; Rageliené, 2016). For this reason, identity of people is built on the decisions that they make based on the experiences lived, being necessary to consider the different environments in which individuals are immersed (Carrera et al., 2015). For this reason, the agents and contexts in which the person interacts in a meaningful way are especially relevant to the holistic development (Peppler et al., 2020). Key agents include family, school, peer group and media (Collet, 2020). Each of the possible scenarios, determined by the agent and context in which he/she interacts create situations in which the adolescent acquires essential learning for his/her identity development. It is therefore very important that there is a harmony between the messages transmitted from each of them, since the cooperative work between these actors will have an impact on the balanced and positive development of adolescents, as well as on their personal and social well-being (Garreta, 2015; Páez, 2015; Vázquez & López, 2014).



Making a brief analysis into the educational work of each agent, we emphasize family as the most suitable place for primary socialization (Kirby, 2020) by constituting an environment in which children are valued by how they are, without being judged (Van Petegem et al., 2013; Rodríguez et al., 2010). Second, the peer group is a key emotional support for adolescents by helping to promote their emotional and social development (Nesi et al., 2018; Smith, 2018), in addition to influencing the acquisition of new behaviors or reinforcing existing ones. Thirdly, the media are present in the daily reality of people, having a notable influence on the identity of adolescents by constituting ideal experiences and models to imitate (Córdova et al., 2019; Cabero et al., 2010). Finally, the role of the school, being the first formal agent through which children access to society, thus the school is the setting in which adolescents spend most of their time (García et al., 2018; Ponce & Sarmiento, 2017).

Focused on the school, by its special role as a socializing agent (Bobbert, 2017) and influential in the identity formation of adolescents, it is necessary to take into account that it is made up of multiple aspects that define and give meaning to it (Agudelo et al., 2019; Colomo, 2015; Colomo & Gabarda, 2019; Muñiz et al., 2020). In this research we will highlight the pedagogical center model, which collects the ideal of the institution where norms, values, attitudes and behaviors that guide the educational-axiological practice are presented, which are elements that will influence the identity of people.

Specifically, for our research, we have focused on the Salesian pedagogical-axiological model developed by Don Bosco. It presents a proposal based on promoting love, faith and peaceful coexistence among people (Carazzone, 2013), transmitting positive values that do not only contribute to improving the immediate reality of adolescents, but also to favoring the construction of a better society (Zaballos, 2003; Rodríguez & Iglesias, 2018). This model revolves around the education-religion bino-

mial (Escalante, 2014), promoting the integral formation of all from a Christian conception of life, the person and the world (Buccellato, 2008), reflecting on the pedagogical foundations of its proposal (Cian 2004; Delgado, 2005; Graciliano 2013; Salazar, 2013; Turriago, 2014): a) family educational environment, promoting love and trust through games, school and church; b) reason, religion and affection, understanding love as the element that sustains the educational relationship between the student and the teacher; c) joy, study and piety, considering hard work as an action that must be dealt with joy by the many positive aspects it brings; (D) Don Bosco's holiness, health and wisdom, which are elements that students must always keep in mind; e) premise of "good citizens and honest Christians", underlining the role of education as a key factor in working towards the defense of the fundamental rights of all people.

Therefore, we are faced with a pedagogical proposal in which students are the protagonist of their learning process, betting on values such as humanity, effort, justice or companionship, favoring the development of people and a more free, tolerant and fraternal sociocultural context. Considering all the above, this paper aims to know the hierarchy of values for a sample of students from Salesian educational institutions in southern Spain. In addition to this objective, it is also intended to verify whether there are significant differences in the categories of values according to the gender variables.

2. Methodology

2.1. Methodological approach

The research is quantitative and descriptive. The design is non-experimental, as no manipulations have been performed on the studied variables. The collection of the information was carried out using a standardized tool, with the aim of quantifying and analyzing statistically the



value perceptions of adolescents in the selected Salesian centers.

2.2. Sample

The sample under study consists of 248 students (N=248) from Salesian centers in southern Spain (Autonomous Community of Andalusia) at the end of the school year 2018/2019. This is a sample intentionally selected (not probabilistic). The distribution of students according to gender is 127 women and 121 men, which is equivalent to 51.21 % and 48.79 % of the sample, respectively. The students belong to the stage of Compulsory Secondary Education, specifically to the 3rd grades (48.79%) and 4th (51.21 %), with a mean age of 14.86 years.

2.3. Instrument

The adapted values test (Gervilla et al., 2018), developed by the Research Group (HUM-580) "Emerging Values, Social Education and Educational Policies" of the University of Granada, has been applied for collecting the information. Their choice is based on the possibility of recording the axiological assessments of adolescents with respect to terms and words linked to different categories of values, thus being able to know the relevance assigned to each category, which allows to establish hierarchies and comparisons between participants. It is based on the Axiological Model of Integral Education proposed by Professor Gervilla (2000), in which the global concept of the human being revolves around three main dimensions: A) as an animal with emotional intelligence; b) as a being who has freedom to decide; c) openness or relational nature of humans. These dimensions give rise to eleven categories that make up the test: body, intellectual, affective, individual, moral, esthetic, social, political participation, ecological, instrumental and religious participation. Each of these categories is made up of a total of 25 words on which the perception of pleasure or displeasure

is expressed through a Likert-like scale, in which the responses fluctuate between 2 and -2 points, with very pleasant (2 points), pleasant (1 point), none (0 points), unpleasant (-1 points) and very unpleasant (-2 points). For interpreting the data, the results of the categories of values will reflect the summation of the 25 terms that make up the data, establishing the score between 50 and -50 points.

With regard to the instrument quality criteria, the parameters of validity and reliability have been taken into account. The validity of the content is guaranteed by applying the instrument in several previous investigations (Álvarez & Rodríguez, 2008; Cámaras, 2010; Cívico et al. 2019; 2020; González-Gijón et al., 2019). In terms of reliability, it was obtained by means of Cronbach alpha coefficient, which reflects the internal consistency of the test, obtaining a result of 0.96, i.e., high reliable.

2.4. Data procedure and analysis

For collecting the data, the centers were contacted and a meeting was held. Once the characteristics of the investigation were explained, the information was collected by distributing the physical test among the sample of participants. After collecting the information, the analysis of the data was carried out with the SPSS program in its version 25. In this regard, the following tests were carried out in response to the objectives set out. On the one hand, descriptive statistics were obtained from the test response (mean, standard deviation and maximum/minimum values). On the other hand, Mann-Whitney U non-parametric test was used to check significant differences according to gender variables (to check heterogeneity in the assessments of two independent samples based on gender), because data in the normality and homocedasticity analysis (Table 1) did not conform to normality in both variables (Levene test, significance greater than 0.05 ($p \geq 0.05$) in 9 of the 11 categories, there were 2 that were not compatible with the application



of parametric tests; and Kolmogorov-Smirnov test, with Lilliefors significance correction, contemplating 11 categories for each gender, a sig-

nificance level lower than 0.05 was obtained ($p \leq 0.05$) in 14 of the 22 possible cases, eliminating parametric testing.

Table 1. Results of the parametric assumptions for the gender variable

Hierarchical value	Gender	Levene		Kolmogorov-Smirnov	
		Statistic	Sig.	Statistic	Sig.
Body	Man	0.454	0.501	0.112	0.001
	Woman			0.112	0.000
Intellectual	Man	0.062	0.803	0.093	0.012
	Woman			0.077	0.062*
Affective	Man	0.001	0.975	0.152	0.000
	Woman			0.137	0.000
Individual	Man	0.211	0.647	0.068	0.200*
	Woman			0.116	0.000
Moral	Man	3.914	0.049	0.115	0.000
	Woman			0.162	0.000
Esthetic	Man	10.727	0.001	0.065	0.200*
	Woman			0.055	0.200*
Social	Man	0.187	0.666	0.062	0.200*
	Woman			0.112	0.000
Political participation	Man	0.008	0.928	0.092	0.014
	Woman			0.076	0.071*
Ecological	Man	0.161	0.689	0.100	0.005
	Woman			0.102	0.003
Instrumental	Man	2.334	0.128	0.079	0.061*
	Woman			0.069	0.200*
Religious	Man	1.227	0.269	0.089	0.021
	Woman			0.149	0.000

*= $p \leq 0.05$

3. Results

Table 2 shows the hierarchy of student values in the Salesian centers selected for the research. To do this, the range of -50 and 50 points has been applied, as previously explained.

By analyzing the maximum and minimum scores presented by students for each category of values, we can emphasize that they all have reached a maximum score of 50 points, which means that at least for one student, all words in a category have been perceived as very pleasant. Regarding



the minimum scores, political participation, ecological and religious participation value categories have obtained -50 points, meaning that at least one student has considered all the values of those categories to be very unpleasant. Very close to this

perception is the category of intellectual values with -46 points. It should also be emphasized that the minimum score for all categories is in negative range, with none remaining in the lower score on the positive range.

Table 2. Descriptive statistics

Values	Abbreviation	N	Minimum value obtained	Maximum value obtained	Average	DT
Body	COR	248	-4	50	29.04	8.62
Intellectual	INT	248	-46	50	12.50	15.43
Affective	AFE	248	-4	50	38.56	9.51
Individuals	IND	248	-6	50	33.54	10.20
Moral	MOR	248	-1	50	35.17	10.90
Esthetic	EST	248	-30	50	19.37	13.64
Social	SOC	248	-30	50	27.01	13.49
Political participation	PP	248	-50	50	14.66	14.28
Ecological	ECO	248	-50	50	27.20	17.28
Instrumental	INST	248	-1	50	28.42	10.70
Religious	REL	248	-50	50	23.55	21.96

By focusing on the means obtained in each category, we can see that the affective values (38.56), followed by the moral values (35.17) and the individual values (33.54) are the ones that are best considered by students of the Salesian centers, placing them as very pleasant. On the contrary, those categories of values that have received a lower score are political participation (14.66) and intellectual participation (12.50), nevertheless being considered pleasant. These means show that there is a general positive perception of the different categories that make up the instrument. Although no category has been set as the subject of study for in-depth analysis, it stresses that the opinion on religious values is placed in the eighth position (23.55), closer to the categories of social values (27.01) and ecological values (27.20).

Regarding dispersion among the categories in which the responses are more heterogeneous,

there is greater variability between the perceptions and assessments of students, finding ecological values (17.28) and religious values (21.96). By contrast, the categories of body values (8.62) and affective values (9.51) are those that show the greatest homogeneity in the student's responses, reflecting the least variability among their opinions.

Once descriptive statistics have been analyzed, we will focus on checking whether there are significant differences in our sample based on the variables gender and school. In this sense, Mann-Whitney U test is used to compare means of independent samples, confirming that there are significant differences ($p \leq 0.05$) between the students according to the variables analyzed.

Table 3 below shows those categories in which significant differences have been found depending on the gender variable.



Table 3. Significant differences depending on gender

Values	Gender	N	Average	DT	Sig.
Body	Man	121	28.45	8.55	0.132
	Woman	127	29.60	8.68	
Intellectual	Man	121	11.31	15.64	0.247
	Woman	127	13.63	15.21	
Affective	Man	121	37.43	9.61	0.034*
	Woman	127	39.63	9.32	
Individuals	Man	121	32.70	10.49	0.121
	Woman	127	34.35	9.90	
Moral	Man	121	33.19	11.69	0.006*
	Woman	127	37.06	9.76	
Esthetic	Man	121	14.93	14.75	0.000*
	Woman	127	23.60	10.97	
Social	Man	121	24.13	13.76	0.001*
	Woman	127	29.76	12.67	
Political participation	Man	121	11.90	14.32	0.015*
	Woman	127	17.29	13.79	
Ecological	Man	121	26.88	18.00	0.853
	Woman	127	27.50	16.63	
Instrumental	Man	121	28.10	11.51	0.909
	Woman	127	28.73	9.91	
Religious	Man	121	16.82	22.67	0.000*
	Woman	127	29.97	19.23	

*=p≤0.05

As can be seen, categories like affective, moral, esthetic, social, political participation and religious values present significant differences in terms of gender. It should be noted that women score higher in all categories than men, thus reflecting a greater perception of pleasure. In this sense, it is particularly noteworthy the difference in religious values (16.82 points for men and 29.97 for women, which practically reach the perception of very pleasant versus a low pleasant score for men) and esthetic values (14.93 points for men per 23.60 women), obtaining differences of 13.15 points and 8.67, respectively.

4. Discussion and conclusions

Focusing on the results, a clear preference is observed for the categories of affective, moral and individual values. The position of affective values over the others agrees with Martí-Vilar and Palma (2010), Abella et al. (2017) and Benedicto (2017), being these values an essential element for the personal well-being of individuals (Sánchez-Álvarez et al., 2016). For its part, the relevance of moral values coincides with the studies of Gonzalez-Gijón and Soriano (2017) and González-Anleo (2017), both studies



underlining the importance that young people attach to leading a morally dignified life. As for the importance of individual values, we are faced with a category related to the development of identity building and personality, a reality also reflected in the study by Elexpuru et al. (2013).

Because of the characteristics of the sample, students of Salesian centers with religious ideals, it must be emphasized that the category of religious values is placed in eighth position, obtaining a pleasant perception by the students. This fact does not agree with the results of other investigations (Gobernado, 2003; Gervilla, 2002; Elzo, 2006) in which religious values are not well valued, or there is no difference between the responses of students from religious and non-religious centers. In this way, the influence of the Salesian model and the experience in religion is positively observed in the hierarchy of participating students, agreeing with Bowie and Revell (2018), who emphasize the importance of positive previous experiences in religion, and contradicting the thesis that religion is a mere cultural reference for young people (Benedicto, 2017; López-Ruiz, 2017).

Political and intellectual participation are the categories of values that are in the last positions in the axiological hierarchy.

With regard to the category of values of political participation, the research by López-Ruiz (2017) and González-Anleo (2017), shows that adolescents do not consider politics an interesting topic since it is not addressed to their near reality, thus their indifference towards this topic in their lives. If we look at the category of intellectual values, it is remarkable that although studies like that conducted by González-Anleo (2017), they show that for 92.1% of adolescents consider school as very important to their life, however our sample places it in the last position, agreeing with the study of Civico et al. (2019). One of the reasons that can lead to this less positive perception is a disappointment with the way teaching process is presented today, which is linked to academic qualifications and the lack of

commitment and responsibility toward school obligations (Krumrei-Mancuso, 2017; Baburkin et al., 2016).

In relation to the second objective of the research, significant differences have been found in relation to gender. These differences are in the categories of affective, moral, esthetic, social, political participation and religious values in which significant differences have been found, agreeing with different studies such as those of Angelucci et al. (2009), Bart and McQueen (2013) or Singh (2017). In this case, it should be noted that the scores of women have been higher than men with respect to the categories of values analyzed, as in the research by Abella et al. (2017) and González-Gijón et al. (2020). This fact confirms that, in spite of the same pedagogical-axiological model, the experiences lived by the participants (in their different dimensions and with the different agents) and the characteristics of the context (cultural, political participation, economic, religious, etc.), there are different interpretations and perceptions of the importance of values for each gender, coinciding with studies that underline the influence and determination of the context in the reality of people (Colomo & Aguilar, 2019; Colomo & Gabarda, 2019).

Regarding the limitations of the study, if we want to generalize about the results of the values of the Salesian students, we need to increase the sample of participants, avoiding at the same time restrictions such as the exclusive consideration of the 3rd and 4th secondary education courses and the incorporation of students from all over Spain. Another limitation lies in the instrument, since it would have been very interesting to combine the test with interviews that would allow to investigate more deeply the axiological concepts of the students, favoring the critical and reflective thought about their choices and the motivations, experiences or circumstances that lead to form their axiological hierarchy.

Therefore, in relation to future research, we emphasize the addition of interviews to students to reflect on the assessments made



and explain their responses. We also consider the possibility of increasing the study sample, including adolescents from Salesian centers in different countries. In addition, we consider the inclusion of other sociodemographic variables related to the family typology, the social class, the intention of taking higher studies, among others. In this sense, we consider it appropriate to know the axiological hierarchy of teachers, as key elements in the transmission of values to the students and examples and models of behavior, so it would be good to implement the test to them as well.

References

- Abella, V., Lezcano, F., & Casado, R. (2017). Evaluación de la jerarquía de los valores humanos de Schwartz en la adolescencia: diferencias de género e implicaciones educativas. *Revista Brasileira de Educação*, 22(68), 123-146. <https://doi.org/10.1590/s1413-24782017226807>
- Agudelo, J.F., Isaza, B.E., & Mercado, E.E. (2019). Maestros gestores de diálogo y pensamiento crítico: una oportunidad para construir paz en el aula. *Plumilla Educativa*, 23(1), 45-67. <https://doi.org/10.30554/plumillaedu.1.3344.2019>
- Álvarez, J., & Rodríguez, C. (2008). El valor de la institución familia en los jóvenes universitarios de Granada. *Bordón*, 60(1), 7-21. <https://bit.ly/3xOGFXK>
- Angelucci, L., Da Silvia, J., Juárez, J., Serrano, A., Lezama, J., & Moreno, A. (2009). Valores y factores sociodemográficos en estudiantes universitarios: un estudio comparativo. *Acta colombiana de psicología*, 12(1), 151-162. <https://bit.ly/3up87cp>
- Baburkin, S.A., Talanov, S.L., & Lymarev, A.V. (2016). Vision of the Future and Values of University students. *European Journal of Natural History*, (6), 125-127. <https://bit.ly/3eZdrwL>
- Bart, C., & McQueen, G. (2013). Why women make better directors. *International Journal of Business Governance and Ethics*, 8(1), 93-99. <https://doi.org/10.1504/IJBGE.2013.052743>
- Benedicto, J. (Dir.) (2017). *Informe Juventud en España 2016*. Instituto de la Juventud.
- Bobbert, M. (2017). Religious Education towards Justice: What Kind of Justice Is to Be Taught in a Christian Context? *Education Sciences*, 7(1), e30. <https://doi.org/10.3390/educsci7010030>
- Bolívar, A. (1995). *La evaluación de valores y actitudes*. Anaya.
- Bowie, R.A., & Revell, L. (2018). How Christian Universities Respond to Extremism. *Education Sciences*, 8(3), e140. <https://doi.org/10.3390/educsci8030140>
- Buccellato, G. (2008). *Appunti per una storia spirituale del sacerdote Giovanni Bosco*. Edelci.
- Bueno, L., Meneghelli, M., & de Mello, S. (2016). Saberes docentes e axiología: os valores no processo de formação inicial de professores. *Conjectura: Filosofia e Educação*, 21(3), 514-537. <https://doi.org/10.18226/21784612.v21.n3.04>
- Cabero, J., Llorente, M.C., & Marín, V. (2010). Hacia el diseño de un instrumento de diagnóstico de “competencias tecnológicas del profesorado” universitario. *Revista Iberoamericana de Educación*, 52(7) 1-12. <https://doi.org/10.35362/rie5271761>
- Cámara, A.M. (2003). *Los valores en la formación de maestros. Análisis de los programas de estudio de la Universidad de Jaén*. Universidad de Jaén.
- Camps, V. (1990). *Virtudes públicas*. Espasa-Calpe.
- Carrazzone, C. (2013). Don Bosco, el voluntariado internacional y la educación para el desarrollo. *Educación y Futuro*, (28), 183-200. <https://bit.ly/2PRPwH3>
- Carrera, M.V., Lameiras, M., Cid, X.M., Rodríguez, Y., & Alonso, P. (2015). De las tecnologías del género a las tecnologías de la subversión, un desafío pedagógico para la educación social. *Revista de Educación Social*, (21), 8-27. <https://bit.ly/3xXgM8n>
- Cian, L. (2004). *El sistema preventivo de Don Bosco. Líneas maestras de su estilo*. CCS.
- Cívico, A., González, E., & Colomo, E. (2019). Análisis de la percepción de valores relacionados con las TIC en adolescentes. *Revista Espacios*, 40(32), e18. <https://bit.ly/2RuZ2QB>
- Cívico, A., Colomo, E., & González, E. (2020). Religious values and Young people: analysis of the perception of students from secular



- and religious schools (salesian pedagogical model). *Religions*, 11(8), e415. <https://doi.org/10.3390/rel11080415>
- Claes, M. (2011). L'étude scientifique de l'adolescence: d'où venons-nous, où allons-nous? *Enfance*, 63(2), 213-223. <https://doi.org/10.4074/S0013754511002035>
- Collet, J. (2020). Las relaciones entre la escuela y las familias desde una perspectiva democrática: ejes de análisis y propuestas para la equidad. *Educar*, 56(1), 241-258. <https://doi.org/10.5565/rev/educar.1012>
- Colomo, E. (2015). ¿Cómo se educa para ser feliz? El papel del maestro en el desarrollo del alumno. *Cuestiones pedagógicas*, (24), 59-73. <https://bit.ly/3tsr8tm>
- Colomo, E., & Aguilar, Á.I. (2019). ¿Qué tipo de maestro valora la sociedad actual? Visión social de la figura docente a través de Twitter. *Bordón*, 71(4), 9-24. <https://doi.org/10.13042/Bordon.2019.70310>
- Colomo, E., & Gabarda, V. (2019). ¿Qué tipo de docentes tutorizan las prácticas de los futuros maestros de primaria? *REICE: Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación*, 17(3), 59-78. <http://dx.doi.org/10.15366/reice2019.17.3.004>
- Córdoba, D., Pérez, F.A., & Yero, M.L. (2019). The Relationship School-mass Media. An Approximation to their Categories. *Luz*, 18(1), 70-81. <https://bit.ly/3nRDWYM>
- Delgado, P. (2005). Las primeras experiencias de educación popular y regeneración social en jóvenes. XXI. *Revista de Educación*, (7), 73-79. <https://bit.ly/2QVQimS>
- Dewey, J. (1952). *En busca de la certeza*. Fondo de Cultura Económica.
- Elexpuru, I., Villardón, I., & Yániz, C. (2013). Identificación y desarrollo de valores en estudiantes universitarios. *Revista de Educación*, (362), 186-216. <https://bit.ly/3eXCnEU>
- Elzo, J. (2006). *Los jóvenes y la felicidad*. PPC.
- Escalante, M. (2014). Don Bosco y la actualidad de su carisma. *Reflexiones teológicas*, (12), 53-73. <https://bit.ly/3eUrN1t>
- Expósito, C. D. (2018). Valores básicos del profesorado: una aproximación desde el modelo axiológico de Shalom Schwartz. *Educación y educadores*, 21(2), 307-325. <https://doi.org/10.5294/edu.2018.21.2.7>
- Gaete, V. (2015). Desarrollo psicosocial del adolescente. *Revista Chilena de Pediatría*, 86(6), 436-443. <https://doi.org/10.1016/j.rchipe.2015.07.005>
- García, M., Ortega, M.C., & Sola, J.M. (2018). La importancia de los valores transmitidos por el profesorado de secundaria para una mejor convivencia escolar. *Teoría de la educación*, 30(2), 201-221. <http://dx.doi.org/10.14201/teoredu302201221>
- Garreta, J. (2015). La comunicación familia-escuela en educación infantil y primaria. *Revista de la Asociación de Sociología de la Educación*, 8(1), 71-85. <https://bit.ly/3b4ISVc>
- Genç, M.F. (2018). Values Education or Religious Education? An Alternative View of Religious Education in the Secular Age, the Case of Turkey. *Education Sciences*, 8(4), e220. <https://doi.org/10.3390/educsci8040220>
- Gervilla, E. (1988). *Axiología educativa*. Ediciones TAT.
- Gervilla, E. (2000). Un modelo axiológico de educación integral. *Revista Española de Pedagogía*, (215), 39-58. <https://bit.ly/3nQK4Rb>
- Gervilla, E. (2002). Educadores del futuro, valores de hoy. *Revista de Educación de la Universidad de Granada*, (15), 7-25.
- Gervilla, E., et al. (2018). *Test de Valores Adaptado (TVA_adaptado)*. Registro de la propiedad intelectual. No. 04/2017/1538.
- Gobernado, R. (2003) Consecuencias ideacionales del tipo de escuela (pública, privada religiosa y privada laica). *Revista Española de Pedagogía*, (226), 439-457. <https://bit.ly/3elru0z>
- González-Anleo, J.M. (2017). Valores morales, finales y confianza en las instituciones: un desgaste que se acelera. En J.M. González-Anleo, & J.A. López-Ruiz (Dir.). *Jóvenes españoles entre dos siglos 1984-2017* (pp. 13-52). Fundación SM.
- González-Gijón, G., Gervilla, E., & Martínez, N. (2019). El valor religioso hoy y su incidencia en la enseñanza religiosa escolar. *Publicaciones*, 49(2), 215-228. <https://doi.org/10.30827/publicaciones.v49i2.8565>



- González-Gijón, G., Martínez, N., Amaro, A., & Soriano, A. (2020). Estudio de los valores en el alumnado que cursa el grado de maestro en educación primaria en las universidades públicas de Andalucía. *Formación universitaria*, 13(2), 83-92.
<http://dx.doi.org/10.4067/S0718-5006202000200083>
- González-Gijón, G., & Soriano, A. (2017). A study of the individual values of Puerto Rican youth. *Revista de Paz y Conflictos*, 10(1), 231-257.
<https://doi.org/10.30827/revpaz.v10i1.6110>
- Graciliano, J. (2013). Don Bosco y los emigrantes. *Educación y Futuro*, (28), 151-181.
<https://bit.ly/33fzgCP>
- Ibáñez, J.A. (2013). Ética docente del siglo XXI: Nuevos desafíos. *Edetania*, (43), 17-31.
<https://bit.ly/3emeE21>
- Kirby, J.N. (2020). Nurturing Family Environments for Children: Compassion-Focused Parenting as a Form of Parenting Intervention. *Education Sciences*, 10(1) e3.
<https://doi.org/10.3390/educsci10010003>
- Krumrei-Mancuso, E.J. (2017). Intellectual humility and prosocial values: Direct and mediated effects. *The Journal of Positive Psychology*, 12(1), 13-28.
<https://doi.org/10.1080/17439760.2016.1167938>
- López-Ruiz, J.A. (2017). La centralidad de la familia para los jóvenes: convivencia, libertad y educación. En J.M. González-Anleo, & J.A. López-Ruiz (Dirs.). *Jóvenes españoles entre dos siglos 1984-2017* (pp. 105-164). Fundación SM.
- Marín-Díaz, V., & Sánchez-Cuenca, C. (2018). El aprendizaje de valores a través de los cuentos en educación infantil. *Enseñanza & Teaching*, 36(1), 179-197.
<https://doi.org/10.14201/et201831179197>
- Martí, M., & Palma, J. (2010). Jerarquización y preferencia de valores en los estudiantes de secundaria. *Revista Española de Orientación y Psicopedagogía*, 21(3), 603-616.
<https://bit.ly/3xOOE7i>
- Martín-García, X., Bär-Kwast, B., Puig-Rovira, J.M., & Rubio-Serrano, L. (2021). El mapa de los valores del aprendizaje-servicio. *Alteridad*, 16(1), 12-22.
<https://doi.org/10.17163/alt.v16n1.2021.01>
- Moreno, M.C (2014). La construcción del ser en educación: una mirada desde el constructivismo. *Sophia: colección de Filosofía de la Educación*, 17(2), 193-209.
<https://doi.org/10.17163/soph.n17.2014.23>
- Moreno, M.C., Ramírez, L.N., & Escobar, J.Z. (2020). Revisión de educación en valores para el nivel superior en Latinoamérica. *Revista Educación*, 44(1).
<https://doi.org/10.15517/REVEDU.V44I1.35636>
- Muñiz, C., Saldierna, A.R., Salazar, A., & Batres, A. (2020). Influencia de la escuela, familia y medios de comunicación en el proceso de socialización política de estudiantes de primaria: análisis en el contexto de Nuevo León, México. *E-Ciencias de la Información*, 10(1).
<https://doi.org/10.15517/ECI.V10I1.39776>
- Nesi, J., Choukas-Bradley, S., & Prinstein, M.J. (2018). Transformation of adolescent peer relations in the social media context: part 2 – application to peer group processes and future directions for research. *Clinical child and family psychology review*, 21(3), 295-319.
<https://doi.org/10.1007/s10567-018-0262-9>
- Nieto, F.J. (2013). *Acercamiento a una adolescencia mediatizada. adolescencia y posmodernidad: malestares, vacilaciones y objetivos*. Fontamara.
- Oña, J.M., Vera, J., & Colomo, E. (2013). Análisis pedagógico de los valores transmitidos en las letras de las canciones con más impacto en 2010. *Revista de ciencias de la educación: órgano del Instituto Calasanz de ciencias de la educación*, (233), 21-32. <https://bit.ly/33obFjt>
- Organización Mundial de la Salud (2018). *Desarrollo en la adolescencia*. <https://bit.ly/3toqQ6F>
- Ortega, D., & Blanco, P. (2017). Los valores sociales y cívicos en la Educación Primaria española: concepciones del profesorado en formación. *ENSAYOS, Revista de la Facultad de Educación de Albacete*, 32(1), 145-160.
<https://bit.ly/2RwhnNd>
- Páez, R.M. (2015). Familia y escuela: una alianza necesaria en la gestión escolar. *Revista Iberoamericana de Educación*, 67, 159-180.
<https://doi.org/10.35362/rie670228>
- Pandya, S.P. (2017). Spirituality and Values Education in Elementary School: Understanding Views



- of Teachers. *Children & Schools*, 39(1), 33-41. <https://doi.org/10.1093/cs/cdw042>
- Peppler, K., Sedas, R.M., & Dahn, M. (2020). Making at Home: Interest-Driven Practices and Supportive Relationships in Minoritized Homes. *Education Sciences*, 10(5), e143. <https://doi.org/10.3390/educsci10050143>
- Pérez, G.C. (2019). Aportes desde la psicología educativa para el desarrollo de los valores y ética profesional. *Revista de Investigación Psicológica*, (21), 11-37. <https://bit.ly/2PQBOEb>
- Ponce, R.S., & Sarmiento, Á.S. (2017). ¿La educación cambia? Repensando el sentido y finalidad de una escuela para todos. *Teoría de la Educación, Revista Interuniversitaria*, 29(2), 167-184. <https://doi.org/10.14201/teoredu292167184>
- Rageliéné, T. (2016). Links of Adolescents Identity Development and Relationship with Peers: A Systematic Literature Review. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 25(2), 97-105. <https://bit.ly/3b6ot1Z>
- Rodríguez, M., & Iglesias, J.J. (2018). Don Bosco: una propuesta educativa adecuada a los presos jóvenes. *Salesianum*, (1), 109-132.
- Rodríguez, C., Álvarez, J., López, J.A., & Campos, M.N. (2019). Análisis y establecimiento de una jerarquía de valores del alumnado de ciclos formativos de grado medio-superior de formación profesional mediante un proceso de triangulación analítica. *Revista Complutense de Educación*, 30(1), 109-129. <http://dx.doi.org/10.5209/RCED.55511>
- Rodríguez, M.C., Peña, J.V., & Torío, S. (2010). Correspondencia familiar: negociación e intercambio en la división del trabajo doméstico. *Papers*, 95(1), 95-117. <http://dx.doi.org/10.5565/rev/papers/v95n1.671>
- Ruiz, M., & De-Juanas, A. (2013). Redes sociales, identidad y adolescencia: nuevos retos educativos para la familia. *ESE. Estudios sobre Educación*, 25, 95-113. <https://bit.ly/3vFqZNr>
- Salas, J. (2017). Factores que influyen en la creación y utilización de la jerga adolescente en tres colegios de la zona de Puntarenas. *Káñina*, 41(2), 183-200. <https://doi.org/10.15517/rk.v41i2.30483>
- Salazar, F. (2013). El antiguo alumno en la pedagogía de don Bosco. *Educación y Futuro*, (28), 223-225. <https://bit.ly/3h58rJp>
- Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A metaanalytic investigation. *The Journal of Positive Psychology*, 11(3), 276-285. <https://doi.org/10.1080/17439760.2015.1058968>
- Schwartz, S. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, 2(1), 1-20. <https://doi.org/10.9707/2307-0919.1116>
- Singh, N. (2017). *A study of values among school teachers at secondary level in relation to their gender local and marital status* [Doctoral Thesis]. Mewar University, Chittorgarh, India.
- Smith, C. (2018). Family, academic and peer group predictors of adolescent pregnancy expectations and young adult childbearing. *Journal of family issues*, 39(4), 1008-1029. <https://doi.org/10.1177/0192513X16684894>
- Smith, D.G., Xiao, L., & Bechara, A. (2012). Decision making in children and adolescents: Impaired Iowa Gambling Task performance in early adolescence. *Developmental psychology*, 48(4), 1180-1187. <https://doi.org/10.1037/a0026342>
- Speltini, G., Passini, S., & Morselli, D. (2010). Questioni di pulizia: rappresentazioni e valori. *Giornale Italiano di Psicologia*, XXXVII(3), 623- 644. <https://bit.ly/3hh8thN>
- Splitter, L.J. (2020). Who Am I? Transforming Our Understanding of Identity and Moral Education. *Education Sciences*, 10(1), e9. <https://doi.org/10.3390/educsci10010009>
- Tesouro, M., Palomares, M.L., Bonachera, F., & Martínez, L. (2013). Estudio sobre el desarrollo de la identidad en la adolescencia. *Tendencias pedagógicas*, (21), 211-224. <https://bit.ly/3nOJRhk>
- Turriago, D. (2014). Aporte salesiano al proyecto educativo católico en Colombia (1886-1935). *Actualidades Pedagógicas*, (64), 109-129. <https://doi.org/10.19052/ap.3201>
- Valiente, C., Arguedas, M., Marcos, R., & Martínez, M. (2020). Fortaleza psicológica adolescente: relación con la inteligencia emocional y los valores. *Aula abierta*, 49(4), 385-394. <https://doi.org/10.17811/rifie.49.4.2020.385-394>



- Van Krieken, J. (2019). Participatory pedagogy for values education in early childhood education. *European Early Childhood Education Research Journal*, 27(3), 420-431.
<https://doi.org/10.1080/1350293X.2019.1600811>
- Van Petegem, S., Beyers, W., Brenning, K., & Vansteenkiste, M. (2013). Exploring the Association Between Insecure Attachment Styles and Adolescent Autonomy in Family Decision Making: A Differentiated Approach. *Journal of youth and adolescence*, 42(12), 1837-1846.
<https://doi.org/10.1007/s10964-012-9886-0>
- Vázquez, C., & López, S. (2014). Creencias sobre la relación familia-escuela. Cambios en el futuro profesorado tras recibir formación específica. *Revista de Estudios e Investigación en Psicología y Educación*, 1(2), 111-121.
<https://doi.org/10.17979/reipe.2014.1.1.35>
- Villegas, V.P. (2018). Concepciones de género y convivencia escolar. *Revista Científica Retos de la Ciencia*, 2(2), 139-154. <https://bit.ly/3ejoSQE>
- Zaballos, J. (2003). *Origen y evolución histórica de la escuela universitaria “Don Bosco”* [Tesis doctoral]. Universidad Complutense de Madrid.





Teenagers at school: reflection groups upon the practice of citizenship

Adolescentes en la escuela: grupos de reflexión para pensar en la práctica de la ciudadanía

- Dra. Sonia María Ferreira-Koehler** is clinical psychologist at Centro Terapéutico (Brazil) (soniakoehler@hotmail.com) (<https://orcid.org/0000-0002-5747-9580>)
- Georgiano Joaquim Pereira-Antonio dos Santos**, Universidad de Sao Paulo (Brazil) (georgiano@usp.br) (<https://orcid.org/0000-0002-7043-3624>)
- Caique Felipe de Souza-Correia**, Centro Universitario Salesiano de Sao Paulo (Brazil) (caiquef991@gmail.com) (<https://orcid.org/0000-0002-7087-5676>)

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Abstract

This experience report titled as "Teenagers at school: reflection groups upon the practice of citizenship" was characterized by a research-action and it seeks to demonstrate and to discuss the process of a think tank with adolescents as an interventionist alternative. This work is presented with the goal to encourage the exercise of an active citizenship at school and in other fields of the daily life. The study was carried out in 2019, with high school students of both sexes and with ages between 14 and 17 years, and took place in a public school in a city located in the interior of the State of São Paulo/Brazil. Five groups were structured and composed by a maximum of twenty students, who signed up voluntarily and were mediated by two facilitators that derived from the Psychology field. In this report we will describe the experience of a single group which topics about humanities and its challenges were discussed, such as self-knowledge, the role of school in society, family relations, health, gender relations, inequality, racism, injustice. The themes proposed by the students themselves provoked and favored the articulation of new knowledge about daily difficulties, enabling the application of learning at school and in another context.

Keywords: Empowerment, human development, citizenship education, student participation, youth participation, educational psychology.

Resumen

Este informe de experiencia titulado "Adolescentes en la escuela: grupos de reflexión para pensar en la práctica de la ciudadanía" se caracterizó como una investigación-acción y busca mostrar y discutir el proceso de un grupo de reflexión con adolescentes, como una alternativa de intervención, destinada a estimular el ejercicio de la ciudadanía activa en la escuela y en otros ámbitos de la vida cotidiana. El estudio se realizó en 2019, con alumnos y alumnas de secundaria cuyas edades oscilaban entre los 14 y 17 años, en una escuela pública de una ciudad situada en el interior del Estado de São Paulo/Brasil. Se estructuraron cinco grupos con un máximo de 20 alumnos/alumnas, que se inscribieron voluntariamente, y fueron dirigidos por dos facilitadores del área de la psicología. Los encuentros tuvieron lugar en el espacio y horario escolar; una vez a la semana, sumando un total de 14 encuentros a lo largo del segundo semestre. En este informe se describe la experiencia de un único grupo en el que se debatieron temas sobre las humanidades y sus retos como el autoconocimiento, el papel de la escuela en la sociedad, las relaciones familiares, la salud, las relaciones de género, la desigualdad, el racismo y la injusticia. Los temas, propuestos por el propio alumnado, provocaron y favorecieron la articulación de nuevos conocimientos sobre las dificultades diarias permitiendo la aplicación del aprendizaje en la escuela y en otros contextos.

Descriptores: Autonomía, desarrollo humano, educación cívica, participación del alumnado, participación juvenil, psicología de la educación.

1. Introduction

Because education in Brazil is compulsory, children and adolescents attend school institutions from the beginning of their life until they reach the majority age, i.e., 18. According to the Brazilian Education Guidelines and Bases Act of 1996, the basic education system is divided into: Child Education, includes the first years of life and begins in nursery and kindergarten (0 to 3 years) until the second phase (3 to 5 years);¹ Primary Education, which comprises the 1st to 9th grade phase and serves children from 6 to 14 years old and Secondary Education, which is the last stage of basic and compulsory education, with an average duration of three years, which provides access to higher education (Law No. 9394, 1996; Law No. 12796, 2013; Constitutional Amendment No. 59:2009).

Since education is deeply present in human life, school represents an important field of life experimentation in society (Meirelles & Sanches, 2005). According to Zimerman and Osório (1997), the teenager, looking for his/her identity, finds in the school the characteristics of the wide social environment that surrounds him/her. The school is an appropriate space for learning to live, compete, divide, press and be pressured, engage and be in numerous situations beyond the boundaries of the family group (Papalia & Feldman, 2013). In addition, access to education has the potential to influence the training of individuals in order to develop the ability to reflect on the practice of citizenship, the rights and duties of citizen training (Szabó & Rizzo, 2018).

In Brazil, children and adolescents began to "exist" as citizens of law on the basis of the Statute of Children and Adolescents (Law No. 8069, 1990); i.e., they were no longer conceived as objects of judicial proceedings and became subjects of law (Liberati, 2010; Saraiva, 2009). However, because of its unusual development condition, as set out in Law No. 8069 of 1990, as well as the existence of formal mechanisms

for citizen participation governed by the 1988 Constitution of the Federative Republic of Brazil, children and adolescents still do not find participation spaces in the field of representative and semi-direct citizenship on which democratic participation is based in our country (Benevides, 1996; Paganini & Sartor, 2018; Silva & Tavares, 2011). In that sense:

Thinking about the political participation of children and adolescents requires breaking with the strict concept of citizenship by considering its three aspects: civil citizenship, which consists of the rights of freedom and access to justice; political citizenship, characterized by the possibility of participating in discussions and decisions in power bodies; and social citizenship, which covers social rights such as education, health, work, culture, etc. (Moreira, 2010, p. 7109)

The discourse on the active citizenship of children and adolescents is based on two perspectives:

One that does not see them as active citizens, referring the exercise of their citizenship to the guardianship of adults; and another one that concerns the future, considering them as waiting citizens or as apprentices of citizens. (Trevan & Fernandes, 2018, p. 122).

Changing that scenario requires more than creating or changing existing legal frameworks, hence, a paradigm transformation is required; i.e., a change in the understanding, culture, and idea about children and adolescents, which recognizes these individuals as essential to the creation of public policy (Freire, 2005; Zaro & Custódio, 2019).

Thus, to recognize children and adolescents as citizens, it is necessary, first and foremost, to give them a voice and listen to their needs. Therefore, it is essential to build participation spaces with different methodologies that allow children and adolescents to recognize their role as citizens in practicing active citizenship in



coexistence with society (Moreira, 2010; Treven & Fernandes, 2018).

In this same sense, Silva and Araújo (2019) point out that in order to educate individuals involved with the emergencies and demands of the world, it is necessary to implement and adhere to a participatory learning methodology, which provides students conditions to assume their active role in the process of knowledge building. The same authors mention that citizenship education must take place in practice, through the commitment of students to solving problems and conflicts that permeate their daily lives; i.e., it must be directed to social purposes, articulating learning with social participation (Silva & Araújo, 2019).

Active citizenship can be understood as "one that establishes the citizen as the holder of rights and duties, but essentially as the creator of rights to open new spaces for political participation" (Benevides, 1996, p. 9), which should be organized "individually in practice and collectively in its affirmation" (Silva & Tavares, 2011, p. 15), prioritizing "changes in values, attitudes, positions, behaviors and beliefs to foster tolerance, peace and respect for the human being" (p. 15).

In this regard, UNESCO (2016) demonstrates the importance of this education by using the term "global citizen". Citizenship education should encourage students to critically analyze the main problems they experience in everyday life, as well as the reality of other human beings living in other countries of the world, to re-examine the relations of power and the manipulations and to commit themselves to individual and collective actions to promote the desired changes in the society they live.

Under these parameters, service-learning (SL) emerges as a methodological alternative for solving problems relevant to the surrounding reality, where students can investigate, question, reflect, plan and propose interventions together (Beresford, 2019; Silva & Araújo, 2019; Zarpelon et al. 2018).

According to Trilla (2009 cited by Silva & Araújo, 2019), the goal of SL is to allow students to engage in specific situations of social utility beyond the school, developing reflection and critical thinking on topics that address social phenomena experienced in the daily basis. SL can generate feelings of indignation, sense of justice and solidarity, which are considered essential for the construction of active citizenship (Beresford, 2019; Silva & Araújo, 2019; Zarpelon et al. 2018).

Some projects conducted in schools and that have been reported as a field study in Mexico (Pérez-Galván & Ochoa-Cervantes, 2017) and in Brazil (Koehler & Pinheiro, 2020), demonstrate pedagogical mechanisms to promote adolescent participation and group learning, as well as participation in social and political life in education, for the practice of citizenship or democratic education or even education for the global citizen, as announced by Unesco. Some fundamental factors must be learned: A) learning to communicate and to participate in the group, b) perceiving others with their differences, and c) listening to others and then expressing with respect. This is actually the beginning of a school that teaches democracy.

In general, the bureaucratic dynamics of the school do not provide or offer time to organize and promote spaces for children and young people to learn to think and reflect on the social and political issues that involve their daily lives. Evidently, learning activities are filled with formal content that is presented, taught and qualified by teachers.

This study sought to demonstrate an experience with reflection groups with adolescents, carried out in 2019 in a public school run by the government of the State of São Paulo/Brazil, located in a city in the interior of the State. The experience was part of an extension project called Human Development and Citizenship: how youth are living today?² Thus, the aim of this report is to discuss the implementation and



use of a reflection group³ with adolescents in a school as an alternative intervention tool that can help in the practice of service-learning (SL), in order to provide conditions for the stimulation of active citizenship in school and other areas of daily life.

2. Methodology

The project emerged due to the identification by school principals of the problems present in the day-to-day life of school: school dropout, violence, drug trafficking, emotional distress, among other issues, and the request to the Observatory of Violence in Schools to carry out preventive and intervention actions at school.

During the first half of 2019, the exploratory phase was developed, which according to Thiollent (1996, p. 14) "consists of discovering the field of research, actors and their expectations, and establishing a first study (or diagnosis) of the situation, priority problems and possible actions". In order to do this, it was necessary

to observe the classes and recesses, the physical structure and the institutional dynamics, as well as to participate in the meetings of the course and grade⁴ with teachers, managers and students from student's association.⁵ Interviews were also conducted with teachers and students on the daily life of the school.

Thus, the study was characterized as an action-research, which, according to Thiollent (1996, p. 16) these are studies in which "(...) people involved have something to 'say' and 'do'". In this type of research, in addition to the interaction between the research group and the participating group, a social and liberating character is established, because the participants collectively seek to understand and improve their social, educational and citizen practices critically and self-reflexive, with the aim of acting and transforming.

During 2019 school year, the school where the project was developed had four hundred and one (401) students enrolled in regular high school, distributed according to the following table.

Table 1. Student ratio in 2019

Period	Number of classes	Number of students
Morning	9	309
Afternoon	4	92
Total	13	401

Source: Own elaboration, data provided by the school.

In the second semester of the school year, applications were submitted to participate in the project. It should be noted that the participation of adolescents was voluntary.

Five heterogeneous groups were structured⁶ with a maximum of twenty (20) students, whose ages ranged from 14 to 17 years. Each group was composed of a couple of facilitators, responsible for mediating discussions with adolescents. Meetings lasted approximately forty minutes and took place once a week, during

school hours, in a space provided by the institution. However, this analysis will describe the experience of a single group of 15 participating students, with the mediation of two facilitators weekly, totaling 14 meetings during four months of the school semester.

All the activities carried out in the reflection group focused on the needs (explicit or implicit) of the participating group, who were invited weekly to suggest topics for discussion, and facilitators lead the dialog to raise questions and collective reflections in the group.



This procedure in the research-action methodology aims to strengthen the meaning of autonomy of adolescents and promote their role as active agents in the daily life of their social and political context. At the first meeting of the group, a survey was carried out on the topics that the participants wanted to address: interpersonal relations (friends, family, love), gender and sexuality (machismo, feminism and sexual orientation), prejudice and violence (racism, homophobia and femicide). Each group was developed according to its own potential. According to Trevisol (2003), this possibility originates if each person and each group experiences its own way of knowing, feeling and positioning in life and its recurrent needs of meaning.

A clear example concerns meetings in which gender and sexuality issues were addressed directly. At the beginning of the activities, sexist speeches by boys prevailed, while girls showed the impacts of these speeches on their lives, in routine situations, such as going out on the street with certain clothes and being harassed. During this time, it was clear that both girls and boys were able to mention or affirm their positions as men and women. In this way, girls were able to speak and legitimize their speeches. For boys, it was possible to demonstrate the importance of the space for talking about their testimony and deconstructing some stereotypes about the feminine and masculine,

such as the demonstration of affection, feelings and sensitivity. We try to use semi-structured activities (dynamics, psychodrama techniques, graphic productions, etc.) as promoters of conversation, questioning and reflection, always seeking freedom of expression over every day experiences.

In this way, it is believed that participants will be able to develop the practice of critical reflection on the problems, phenomena and experiences lived; in other words, to look at their lives in a more involved and attentive way and thus contribute to the strengthening of autonomy and the widening of the horizons for action.

At the end of each meeting, the whole process was recorded in specific sheets: description of observations and activities, date and period of application, number of participants, objective of the meeting, topic of discussion, development, suggestions for improvement, analysis and considerations.

3. Results

In total, 15 adolescents remained in the reflection group. According to Table 2, referring to the 14 meetings held in August and November 2019 and themes worked, an average of nine participants were obtained per meeting.

Table 2. Meetings and themes worked from August to November/2019

Meeting No.	Topic	Date	Participants
1	Presentation/Self-knowledge	15/08/2019	9
2	Interpersonal relationships	22/08/2019	11
3	Student/school relationship	29/08/2019	12
4	Group integration	05/09/2019	13
5	Interpersonal relationships	12/09/2019	9
6	Group integration	19/09/2019	11
7	Expression of feelings	24/09/2019	8
8	Adolescence	03/10/2019	7



9	Gender roles	10/10/2019	10
10	Gender roles	16/10/2019	8
11	Gender roles	24/10/2019	6
12	Racism	31/10/2019	5
13	Racism	07/11/2019	9
14	Closing	11/11/2019	10
Average number of participants	9		

Source: Own elaboration, data recorded by the facilitators.

At the first meeting, a dynamic presentation was made and a coexistence agreement was established between the participants of the group. Some "agreements" were set out for the meetings, such as: commitment to the proposed schedules and activities, respect for peers and facilitators, confidentiality of discussions, and freedom of expression. The topics discussed and chosen by adolescents throughout the semester were: interpersonal relationships (family, friends, love, care); gender and sexuality (attraction, machismo, feminism, sexual orientation, respect for diversity) and prejudice and violence (racism, gender violence, homophobia, social inequalities of rights and opportunities) through group dynamics, graphic materials, psychodrama techniques, debates, case studies and stories.

Due to the heterogeneity of the group (gender, class, color, sexual orientation, etc.), the reported experiences found different forms of experiences on the same topic. The family and the school, when taken to the scene, caused different emotions in the participants. On the one hand, some participants reported dysfunctional families, steeped in distance, abandonment and violence, while others provided experiences full of affection and attention. The school was lived by some as a burden and by others as beneficial to their development as subjects; however, everyone complained that the school, most of the time, did not listen to them. They also reported love relationships, attraction, hobbies, the difficulty of relating to peers, sports practices and artistic productions.

It was observed that the time of the group turned out to be a place of evasion for certain students, where they could "skip class" and escape the school routine, because they preferred to participate in the reflection group rather than stay in class. There was a need for discussion and reflection to raise awareness of the role of the school in society, the meaning of attendance and commitment in class, and the implications for future life.

They stressed that the reflection group offered a space in which they could have an active voice and, above all, the guarantee that that voice would be heard, without judgment and attentively. This milestone is considered crucial to the development of meetings, since the members of the group began to participate significantly, and started to rely on that space as a possible place to express their insecurities, doubts and fears.

Therefore, it was decided to present one of the topics that was present implicitly and explicitly throughout the meetings: to be a man and to be a woman in our society.

3.1. (DE) construction and resignation of roles and attitudes: being a man and being a woman in debate

Gender issues were always present, directly or indirectly in meetings, whether in the conversations between adolescents, or in the confrontations between girls and boys during the discussions, or even in explicit requests for the topic to be addressed, as the request that the topic of feminism be worked on in the reflection group.



Gender and sexuality issues aroused a great interest in adolescents. There was a very strong feminist activism in the group, as well as boys' movements to understand women, understand gender roles, and review their behaviors as men in today's society. Discussions ranged from inequalities between men and women in the professional and domestic spheres (when it comes to violence, women are seen as the caregivers of the home), even the difficulty of men to listen to and perceive women as protagonists in society.

At the first time this topic was addressed, it was decided to conduct a survey on what participants usually hear in their social circles (family, circle of friends, peers) about being a woman and being a man (UNESCO, 2012, p. 17), in order to reflect on how these representations are built and reproduced in everyday life.

With regard to being a woman, the participating girls mentioned attitudes and behaviors experienced on a daily basis:

Women have to take care of the house; they have to be female; they cannot work outside; they must be at the disposal of men; they must be submissive to men; they must accept machismo; they must be emotional; they must not be interested in the themes of the opposite sex (career, fights); women must stay at home; must have restrictions on dress; they are the fragile sex; women do not know how to drive; depend on men; sexualization of the female body; unfair distribution of household chores; wage differential in relation to men.

As for being a man, boys presented arguments defending attitudes and behaviors:

Man cannot be emotional; he cannot do household chores, only the woman can; he has to have "physical bearing" (sic); only maintains male friendships; dominates the woman; the man supports the house economically, the man is more aggressive than the woman; the man has the instinct of protection; the man does not cry; the man has to be a hard and dominant person (sic); man must always be

strong; has difficulty expressing his feelings; cannot express physical affection like kissing his friend's cheek, hugging, etc.

The stories revealed countless stereotypes and prejudices about gender roles. Although the adolescents placed these sentences on the agenda of discussion, little by little, the deconstruction of stereotypes became noticeable in the group.

A strong women's movement emerged in defense of women's rights and the duties of men and women. As an example, one participant noted the learning of boys by imitating the behavior of their parents, uncles, and their own group of friends. Boys agreed that they were raised like that. One of them mentioned that when he was a child, his uncle used to point women who walked the street and told them things like "hot," "sexy," "horny" so for him, acting like this was considered natural, representing the type of man that he has learned to be throughout his life.

This introduced into the debate the issue of harassment, which, in the words of the girls involved, was one of the male attitudes that displeased them most. They reported that they suffered street harassment daily, and that they often changed their routes for fear.

From the meetings, it was proved that adolescents showed a great interest in reviewing their behavior and evaluating the one of other men. As for boys, the importance of these discussions for self-evaluation of their own "being a man" status could be seen. Thus, it was possible to reflect with the group on the discourse⁷ of each, arguing and discussing together gender roles and equality.

Thus, by positioning and discussing a common theme, the group began to exercise their autonomy to talk about topics relevant to their daily life, which allowed the construction of new knowledge, the resignation of others, as well as the possibility of articulating learning with social participation.



3.2. Impacts of the reflection group: The N case and its conflicts with the paternal image

A teenager, N., who was 17, a second-school student, began to participate in the reflection group from the second meeting. However, it was clear that he did not like being in that environment. He was always quiet and had trouble interacting with the class and teachers. It was noted that he used the group as justification for not attending classes. His way of being in the group changed after a psychodrama activity (Carvalho, 2011, p. 101) in which all participants played the role of a close person (mother, father, friend, boyfriend, uncle, grandfather, etc.). N assumed the role of the father and, at the end of this meeting, he looked for the facilitators and mentioned that he and his father did not speak, did not do any "father and son activities, seemed like two strangers and were always fighting." However, with the experience in the reflection group, he concluded that the bad relationship with his father was a communication problem. Upon reaching this conclusion, he called the father to comment on his feeling about the distance that separated them. From the moment N testified of his experience to the group, he became more participatory and involved in school and classroom activities.

This case can be pointed out as an example of the deployment of the work carried out in the reflection group for active and autonomous participation in the face of the daily challenges of the participants.

4. Discussions and conclusions

In the month before vacations, the absence of a large number of students in school was noted, however, the students who were part of the reflection group continued and stated that they liked to go to school because of the encounters.

It is noted that the reflection groups have indirectly become an attractive and perma-

nent element of the student in school, which highlights the need for adolescents to participate in democratic spaces which are open to dialogue and exchange of experiences, where students can speak and be heard without pressure or judgment. By speaking, the person thinks, perceives and categorizes the information, recognizes contradictions and takes responsibility for the experiences and feelings, and acquires autonomy when "I" replaces "this" (Campos, 2015).

On several moments, the participating group noted that many of the issues discussed in the reflection group had never been addressed by anyone else, not even by them, "We don't (sic) think about these things." In this sense, "listening to them and letting the participants speak of school life," and "enabling the involvement between them can be a first step both for the emergence of differences among their members (...) as for a better contact with the dimension of the being of each one" (Maciel, 2016, p. 116) and the consequent recognition of themselves as subjects of law, i.e., citizens.

The school, as a transitional environment between the family and society, reproduces in its daily basis characteristics relevant to the social system and, thus, the student who is in the limits of the educational institution, has the opportunity to experience a simulation of the social life, in which, through the actions carried out, he/she gradually develops independence and individuality (Zimerman & Osório, 1997). In this way, involving young people with reality and their problems can help them develop a sense of justice and the common good, as well as solidarity, which are fundamental to the training of active citizens who, in addition to being bearers of rights and duties, are also participants and transformation agents of the social and political life of their environment (Benevides, 1996).

One of the greatest challenges in conducting the reflection groups was to encourage the active participation of adolescents in the debates and to promote reflection for action. The objec-



tive was not to work on the protagonist of the isolated actor, but to build a collective for participation and action in order to achieve active citizenship (Alberto et al., 2018).

To achieve this goal, it was decided to assign responsibilities to adolescents as meetings were held. They were the responsible for determining what was going to be discussed in the reflection group. What started with general suggestions later became suggestions for discussing topics based on the needs they identified in their daily lives, such as gender, sexuality and racism. As Freire points out (2005, p. 119), "only by deciding you learn to decide and only by deciding you achieve autonomy".

In the global perspective of human development, it is essential to consider the affective dimension in education (Galvão, 2003). By being able to speak and reflect on what they feel, the adolescent will have more social repertoire to deal with frustrations and will be able to participate more responsibly in academic life. As referred by (Lopes & Oliveira, 2010):

(...) for human development, it is essential to make an inner journey, i.e., to know ones well for a good relationship with the other in a responsible and fair way, especially respecting the person who is "different" and even life itself. And this must be an ongoing process that contributes to a pleasant life in community and also to a successful professional life (p. 109)

Reflection groups, as an intervention tool (Zimerman & Osório, 1997), are considered to have provided adolescents with a space to discuss issues that pervaded their daily lives, both inside and outside school. According to the report of participants, the configuration of the reflection group and the dialogue led to the creation of new knowledge on the topics they addressed as they were able to develop learning and apply it in other contexts. The process made it possible

to reaffirm, revise or even resignify some social roles, positions, stereotypes and ideologies.

Thus, the contributions of the reflection group can be evidenced as an intervention tool to support the practice of service-learning (SL). As shown, the main role of service-learning (SL) is to strengthen the autonomy of students through the conduction of projects that link learning with social participation, especially involving education in the resolution of specific issues of social use of daily life, in order to develop critical thinking and reflection about experiences (Beresford, 2019; Silva & Tavares, 2011; Zarpelon et al. 2018).

Despite the positive balance of this experience, some limitations were also found, and although they did not influence the development of meetings, they did interfere. Examples include changes in the institution's calendar (exam dates and other events), some interruptions in the meeting room (by employees of the institution and non-participating students), the short duration of meetings (only 40 minutes), the lack of commitment or abandonment of some students.

It is important to emphasize that much of the success achieved with the reflection groups is due to the opening and perspective of the school in the modification of the student's learning dynamics for life and consequently for active citizenship. The work conducted showed significant results in the daily life of the school and ensured that other projects could continue being carried out.⁸

Finally, it is hoped that the proposal presented in this paper will be able to encourage other studies that seek to provide a democratic space for speaking, listening and actioning, so that new discourses and attitudes can be articulated beyond the school, as well as in everyday life, in the defense of rights and the fulfillment of duties.



Notes

- 1 From this moment, all children must be enrolled by law in a state-regulated educational institution.
- 2 The project, which results from a partnership between the School and the Observatory of Violence in Schools at the Salesian University in São Paulo/Brazil, U.E de Lorena, was coordinated by Prof. Dr. Sonia Maria Ferreira Koehler, also author of this article, and currently retired. The Observatory Network is made up of national and international university institutions and is part of the UNESCO study in Youth, Education and Society, created by the Catholic University of Brasília. Participants in this project were students of the Psychology career and former students, volunteers, who were part of the team.
- 3 It is a resource that aims to provide the conditions for participants to reflect and research on everyday situations in order to develop solutions for joint actions (Zimerman & Osório, 1997).
- 4 According to the Ministry of Education of the State of São Paulo, the Course and Grade Council is a body “chaired by the principal and composed of teachers of the same class and grade level, with the authorized participation of the students on behalf of their peers” (Governo do Estado de São Paulo, 2003).
- 5 According to the Ministry of Education of the State of São Paulo and Law 7398, a student association is an “organization representing the interests of students in school”. It allows students to discuss and strengthen the possibilities of action, becoming an important space for learning, citizenship, coexistence, responsibility and the struggle for rights” (Governo do Estado de São Paulo, 2002, p. 5).
- 6 A group is called heterogeneous when members are of different ages and classes, and it is an open group when new participants are allowed to enter if there are vacancies (Zimerman & Osório, 1997).
- 7 According to Ribeiro (2017), the place to speak represents the place of minority groups (ethnic, political, religious, gender) to discuss the social, institutional and cultural phenomena that concern their daily lives.
- 8 In 2020, the educational institution hosts two (2) extension projects with the same study proposal: A) “Thematic workshops with operational groups: How are young people living the phenomenon of adolescence?” And (b) “The impact of domestic violence on adolescent development: Prevention and intervention on the phenomenon”.

References

- Alberto, M.F.P., Medeiros, F.C., & Paiva, I.L. (2018). Participação e protagonismo da juventude: experiências em socioeducação e direitos humanos. En M.F.P. Alberto & A.P. Lucas (Eds.), *Experiencias mundiales de ciudadanía de la infancia y adolescencia* (pp. 56-76). Editora UFPB. <https://bit.ly/2YDKHTb>.
- Benevides, M.V.M. (1996). Educação para a democracia. *Lua Nova: Revista de cultura e política*, (38), 223-237.
<http://doi.org/10.1590/S0102-64451996000200011>
- Beresford, T.L. (2019). *Service-learning: uma aposta para o futuro* [Dissertação de Doutorado, Universidade do Minho: Escola de Economia e Gestão]. Repositório Universidade do Minho. <https://bit.ly/2BI3Lqp>.
- Campos, V.F.A. (2015). *Linguagem e psicoterapia gestáltica*. Ideias & Letras.
- Carvalho, C. (2011). *Psicodrama e dinâmica de grupo*. Iglu.
- Constituição da República Federativa do Brasil de 1988. <https://bit.ly/3hNRocO>.
- Emenda constitucional, nº 59, de 11 de novembro de 2009. Acrescenta § 3º ao art. 76 do Ato das Disposições Constitucionais Transitórias para reduzir, anualmente, a partir do exercício de 2009, o percentual da Desvinculação das Receitas da União incidente sobre os recursos destinados à manutenção e desenvolvimento do ensino de que trata o art. 212 da Constituição Federal, dá nova redação aos incisos I e VII do art. 208, de forma a prever a obrigatoriedade do ensino de quatro a dezessete anos e ampliar a abrangência dos programas suplementares para todas as etapas da educação básica, e dá nova redação ao § 4º do art. 211 e ao § 3º do art. 212 e ao caput do art. 214, com a inserção neste dispositivo de inciso VI. <https://bit.ly/2Z0oI7P>.
- Freire, P. (2005). *Pedagogia da autonomia: saberes necessários à prática educativa*. Paz e Terra.
- Galvão, I. (2003). Expressividade e emoções segundo a perspectiva de Wallon. En V.A. Arantes (Ed.), *Ajetividade na escola: alternativas teóricas e práticas* (pp. 71-88). Summus.
- Governo do Estado de São Paulo (2003, 2 fevereiro). *A importância dos Conselhos de Escola e Classe para o desenvolvimento do aluno*. <https://bit.ly/3epJX9D>.
- Governo do Estado de São Paulo (2002). *Caderno Grêmio em Forma*. Secretaria da Educação do Estado de São Paulo. <https://bit.ly/2YH1PrI>.
- Koehler, S.M.F. & Pinheiro, S.I. (2020). Juventudes em busca de sentido: alunos universitários salesianos e jovens da escola pública des-



- envolvem oficinas na vertente pedagógica e psicológica para pensar a vida. En M. S. R., Villagómez, R.R. Soffner & L. Marques (Coords.), *Desafios de la educación salesiana: experiencias y reflexiones desde las IUS* (pp.167-197). Editorial Universitária Abya-Yala. <https://bit.ly/3gABqRF>
- Lei nº 7.398, de 4 de novembro de 1985 (1985). Dispõe sobre o Grêmio Estudantil: organização de entidades representativas de estudantes de 1º e 2º graus e dá outras providências. <https://bit.ly/3eFsAC4>.
- Lei nº 8.069, de 13 de julho de 1990 (1990). Dispõe sobre o Estatuto da Criança e do Adolescente e dá outras providências. <https://bit.ly/2YlocLR>
- Lei nº 9.394, de 20 de dezembro de 1996 (1996). *Lei de Diretrizes e Bases da Educação Brasileira. (LDB)* <https://bit.ly/316jvy2>
- Lei nº 12.796, de 4 de abril de 2013 (2013). Altera a Lei nº 9.394, de 20 de dezembro de 1996, que estabelece as diretrizes e bases da educação nacional, para dispor sobre a formação dos profissionais da educação e dar outras provisões. <https://bit.ly/2NiTi01>.
- Liberati, W.D. (2010). *Comentários ao Estatuto da Criança e do Adolescente*. Malheiros Editores.
- Lopes, M.E.B., & Oliveira, S. d. F. (2010). Aprender a ser. *Pedagogia em Ação*, 2(2), 109. <https://bit.ly/3gCNWA5>
- Maciel, M.R. (2016). *Psicanálise e Educação*. Person.
- Meirelles, F., & Sanches, R.M. (2005). Um olhar psicanalítico na instituição educacional: o psicodiagnóstico institucional. En R.M. Sanches (Ed.), *Winnicott na clínica e na instituição* (pp. 159-172). Escuta.
- Moreira, M.A.M. (2010). A democracia radicalizada: crianças e adolescentes como agentes de participação política. En Conselho Nacional de Pesquisa e Pós-graduação em Direito - CONPEDI (Ed.), *Anais do XIX Encontro Nacional do CONPEDI* (pp. 7105-7126). CONPEDI. <https://bit.ly/2NF9dx3>.
- Paganini, J., & Sartor, P.J. (2018). A cidadania participativa exercida pela criança e pelo adolescentes no Brasil: breves reflexões teóricas. En Universidade de Santa Cruz do Sul-UNISC (Ed.), *Anais do XIV Seminário Nacional*
- Demandas Sociais e Políticas Públicas na Sociedade Contemporânea*. UNISC. <https://bit.ly/2D6itIX>
- Papalia, E.D. & Feldman, R.D. (2013). *Desenvolvimento humano* (13a ed.). Artmed.
- Ribeiro, D. (2017). *O que é lugar de fala?* Editora Letramento.
- Perez-Galvan, L.M. & Ochoa-Cervantes, A. d. l. C. (2017). La participación de los estudiantes en uma escuela secundaria. *Revista Mexicana de Investigación Educativa*, 22(72), 179-207. <https://bit.ly/2BiDm2C>.
- Saraiva, J.B.C. (2009). *Adolescente em conflito com a lei da indiferença à proteção integral: uma abordagem sobre a responsabilidade penal juvenil*. Livraria do Advogado Editora.
- Silva, A.M.M., & Tavares, C. (2011). A cidadania ativa e sua relação com a educação em direitos humanos. *Revista Brasileira de Política e Administração da Educação*, 27(1), 13-24. <https://bit.ly/2YIa0mH>
- Silva, M.A.M., & Araújo, U.F. (2019). Aprendizagem-seviço e Fóruns Comunitários: articulações para a construção da cidadania na educação ambiental. *Ambiente & Educação*, 24(1), 257-273. <https://doi.org/10.14295/ambeduc.v24i1.8157>.
- Szabó, I., & Risso, M. (2018). *Segurança pública para virar o jogo*. Companhia das Letras.
- Thiollent, M. (1996). *Metodologia da pesquisa-ação* (7a ed.). Cortez.
- Trevisan, G., & Fernandes, N. (2018). Cidadania ativa na infância: roteiros metodológicos. En M. F. P. Alberto & A. P. Lucas (Eds.), *Experiencias mundiales de ciudadanía de la infancia y adolescencia* (pp. 121-139). Editora UFPB. <https://bit.ly/2YDKHTb>.
- Trevisol, J. (2003). *O reencantamento do humano: processos de ampliação da consciência na educação*. Paulinas.
- UNESCO (2012). *Cá entre nós: guia de educação integral em sexualidade entre jovens*. Governo do Estado de São Paulo/UNESCO. <https://bit.ly/2NEWBG1>.
- UNESCO (2016). *Educação para a cidadania global: tópicos e objetivos de aprendizagem*. UNESCO. <https://bit.ly/2CKlg9X>.



- Zaro, J., & Custódio, A.V. (2019). Agir participativo e comunicativo: fundamentos filosóficos e legais da participação da criança e do adolescente nas políticas públicas. *Revista Brasileira de Sociologia do Direito*, 6(3), 223-245. <https://bit.ly/3gC89G4>
- Zarppelin, L.F.B., Terencio, M.L., & Batista, N.A. (2018). Integração ensino-serviço no con- texto das escolas médicas brasileira: revisão integrativa. *Ciência e Saúde Coletiva*, 23(12), 4241-4248. <https://doi.org/10.1590/1413-812320182312.32132016>
- Zimerman, D. E., & Osorio, L.C. (1997). *Como trabalhamos com grupos*. Artes Médicas.





Lexical repertoire of teachers on democracy, citizenship and human rights

*Disponibilidad léxica de profesores sobre democracia,
ciudadanía y derechos humanos*

Víctor Montre-Águila is a professor and researcher at Universidad Católica de la Santísima Concepción (Chile) (victor.montre@ucsc.cl) (<https://orcid.org/0000-0002-7391-1054>)

Javiera Araneda-Machmar is a professor and researcher at Universidad de Concepción (Chile) (jaraneda@udec.cl) (<https://orcid.org/0000-0003-4770-5959>)

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Abstract

The citizenship education has become a key axis of the Chilean Ministry of Education through Law 20,911, which can be understood from three dimensions: citizenship, democracy and human rights. The object of study is to analyze the lexical availability of teachers in relation to the concepts of Democracy, Citizenship and Human Rights. The research methodology is qualitative with a descriptive and interpretive design. The participants are thirty-six teachers of History, Geography and Social Sciences from the province of Arauco. The information was collected through semi-structured interviews, being processed in the Gephi program with the aim of studying semantic networks. The research results exhibit that the main vocabulary of teachers around citizenship is respect, right, duties and people, evidencing substantial differences in the vocabulary indicated in plans and programs about this particular center of interest. In relation to the comparison between human rights centers of interest of the citizenship plan and the teachers' conceptualizations, it is evident that the most representative words are respect, rights and equality, but to a lesser range the represented concepts are vindication, violation, constitution and grouping. Finally, Democracy presents such concepts as law, representation and respect and to a lesser range constitution, transition and responsibility.

Keywords: Citizen education, lexical availability, democracy, citizenship, human rights, teachers.

Resumen

La formación ciudadana se ha transformado en un eje clave del Ministerio de Educación de Chile a través de la ley 20.911, que se puede entender desde tres dimensiones: ciudadanía, democracia y derechos humanos. El objeto de estudio es analizar la disponibilidad léxica del profesorado en relación con los conceptos de democracia, ciudadanía y derechos humanos. La metodología de la investigación es cualitativa con un diseño descriptivo e interpretativo. Los participantes son 36 profesores de Historia, Geografía y Ciencias Sociales de la provincia de Arauco. La información fue recolectada a través de entrevistas semiestructuradas, siendo procesada en el programa Gephi con el objetivo de estudiar las redes semánticas. Los resultados de la investigación demuestran que los vocablos principales del profesorado en torno a ciudadanía son respeto, derecho, deberes y personas, existiendo diferencias sustanciales en los vocablos señalados por los planes y programas en este centro de interés en particular. En relación con la comparación entre los centros de interés de derechos humanos del plan de formación ciudadana y las conceptualizaciones del profesorado, se evidencia que los vocablos más representativos son respeto, derechos e igualdad, pero en menor medida son representados los conceptos de reivindicación, violación, constitución y agrupación. Por último, la democracia presenta como conceptos principales derecho, representación y respeto y en menor medida constitución, transición y responsabilidad.

Descriptores: Formación ciudadana, disponibilidad léxica, democracia, ciudadanía, derechos humanos, profesorado.

1. Introduction and state-of-the-art

The teaching staff of pedagogy in history, geography and social sciences (PHGYCS) have extensive training in the disciplines related to their profession, developing lexical availability and building teaching-learning processes which are appropriate to the educational contexts in which they work, and are also constantly involved in processes of curricular modifications that require an improvement in initial and continuing education, the most recent is the plan of citizen training and human rights of Law 20.911 (Ministry of Education, 2016).

Citizens' training plan refers that all institutes recognized by the State must promote the development of citizenship, ethics and a democratic culture at different educational levels to integrate and complement national curricular definitions, and specifically in 2020 it required the implementation of a citizen training course for 3° and 4° by the professors of History, Geography and Social Sciences.

Teachers must construct a lexical repertoire that can be understood in a communicative situation by teachers and students (López, 1996) and that links the interest or thematic information centers to be understood by all individuals belonging a specific social group (Gougenheim et al., 1956; Jiménez, 2017).

The national educational curriculum has promoted minimal citizen training in relation to key themes of citizenship such as democracy and human rights (Gerber, 2007; Muñoz et al., 2010; Reyes et al. 2013; Muñoz & Torres, 2014). This curriculum gap was evidenced by an International Citizen Education Measurement (ICCS) in 1999, where one-third of the test questions submitted by Chilean students concerned topics not covered by any academic program. Following this logic in the 2009 study, the results were similarly recorded in the previous study, showing serious shortcomings in the student body's citizenship training (IEA, 1999; 2009) and, therefore, in the training of the teaching

staff about citizenship, democracy and human rights.

The main modifications of the educational curriculum in the area of human rights and democracy have been in the subjects of history, geography and social sciences, thus it is necessary to re-state and strengthen the bounds between citizenship and the jurisdictional and national framework (Tobío, 2012). In this way, the objective is to promote in the student the recognition and application of citizenship status as an entity with a series of rights and duties that can be exercised in a daily basis (Sacristán, 2003), through which the student will develop a lexical repertoire, which, if not promoted properly, the student will not learn lexical terms such as citizenship, human rights and democracy (Michea in Lopez, 1996).

This research aims to describe the lexical repertoire of history, geography and social sciences teachers in relation to the concepts of democracy, citizenship and human rights, through the following question: Do teachers have lexical repertoire for the development of the concepts of democracy, citizenship and human rights? The latter are the conceptual and theoretical foundations from where citizen formation is based and built.

In this sense, citizen training will depend mainly on the preparation of professors who apply the program in the classroom (Lundgren cited in Muñoz & Garrido, 2014; Magendzo, 2004). Studies such as the one conducted by Bolívar (2007) have shown that citizen training is one of the less understood subjects, therefore it is necessary to investigate the educational process with the intention of overcoming the minimalist approach in the subject of civic education, since although the school is not the only institution that promotes citizenship, its role is crucial in this formative process.

Citizen education, as part of teaching, presents two approaches, a minimalist and a maximalist (Kerr, 2002). The first is related to civic education and is considered to be decontextua-



lized and restricted to superficial content, skills and attitudes as they develop as a disciplinary subject. The second perspective seeks to develop more extensive and rich knowledge, but with more complexity at the time of being evaluated or measured by encouraging the development of values, relationship with their experiences and active behavior around axes such as citizenship and human rights.

The second approach to citizen training:

(...) demands that the school system be addressed and experienced by students not only as part of their work in the different subjects, but it must also be present and encouraged in other spaces of participation and decisions present in school life, which allow the student to exercise practices related to the strengthening of citizenship and democratic coexistence. (MINEDUC, 2004, p. 3)

This now means not only fostering an idea of content, but developing skills, values and attitudes around cross-sectional learning objectives (OAT). This approach seeks to solve the logic of a mere transmission of memoristic knowledge (minimalist optics) to develop skills and attitudes that promote active democratic citizen behavior by students (maximalist optics).

In another theoretical axis, there is a discussion between the individual and collective sense of citizenship. On the one hand, the construction of values, ideas and behaviors comes mainly toward the individual entity, building an identity and behavior different from the collective. The latter involves a construction from the general to the particular, or individual, being the first entity the one that guides the citizen process in a community and democratic sense (Horrach, 2009). It is certainly not possible to present training as a duality, but it is needed to understand the epistemic extremes from which we can obtain an interpretation of educational practices by developing content related to citizen training.

1.1. Democracy, citizenship and human rights

According to Silva (1997) the concept of democracy can be understood as the choice to participate in a process, which is motivated by its own interests. In this way, citizen participation cannot be obliged to participate in other stimuli that are not specific to each individual.

Giraldo (2013) argues that the concept of participation emerged strongly during the decade of the 60-70 in the United States and later in Europe, under the logic of the Welfare State. Following this line, Pennock (2015) contextualizes and defines participatory democracy during the decade of the 60-70 in the USA and Europe, which led to direct democracy in various forms and levels at both national and international levels.

Therefore, we can say that "participatory democracy consists in the fact that citizens are the ones who make the decisions, without necessarily covering the whole of the decision-making processes, but in any case, a significant proportion of them" (Silva, 1997, p. 1), where the following democratic features are promoted: effective participation, equal voting, informed electorate, citizen control of the program and an open democratic process (Dhal, 2004). The difference between citizenship and citizen is noteworthy. The first refers to the legal status of an individual and the second refers to the basic unity of political-social status.

The main studies on citizenship are attributed to Marshall (1950). In his work *Citizen and social class*, Marshall establishes a division of time into three phases: civil, political, and social. The civil part originated in the eighteenth century with the arrival of civil rights; the political is reaffirmed in the nineteenth century with the arrival of political rights; and the social emerged in the twentieth century with public education, health care, unemployment insurance and pension-plan.



When these rights that are inherent in citizenship became more widespread, the class of citizens was also commoditized. Civil and political rights restricted to white men, owners and protestants were extended to women, workers, Jews, Catholics, black and excluded groups.

Kymlicka and Norman (1994) say that interest in citizenship is fueled by political events and trends throughout the world: apathy of voters, resurfaced nationalist movements, tensions over the growth of a multicultural and multiracial population, dismantling of welfare states, etc.

Any definition of human rights is subject to the United Nations Universal Declaration of Human Rights. The first article of this record summarizes the basic argumentative axis of the remaining 29 articles. "Article 1: All human beings are born free in dignity and rights and, endowed as they are of reason and conscience, and must behave fraternally with each other" (1948, p. 1).

According to Zorrilla (2008), we must make a distinction between the foundations and the implementation of these rights. The difference is that its implementation lies in the creation of the Universal Declaration of Human Rights, but when referring to foundation, we refer to moral and political philosophical theories that are applied to society in general and its legal institutions, which seek to recognize and protect human rights (Martínez, 2008).

1.2. Empirical studies

In North America, Skinner and Bromley (2019) conducted research on school texts from more than 80 countries around the world, published between 1950 and 2011, to compare the progression of the study of human rights and citizenship. The result indicated that these concepts tend to be studied more in the area of history than in the area of citizen formation.

Moreover, it is evident that America's liberal and conservative ideologies base its citi-

zenship teaching on civic institutions, but those guided by critical ideology prefer to rely on social institutions, demonstrating that the ideology of the teacher has a strong influence on what he/she teaches and how he/she teaches it (Knowles, 2019).

Despite the ideological influence, a study of 148 higher education students in the southern United States indicated that both teachers and students are concerned about prioritizing global citizenship and developing cultural empathy, revealing their absence in the school curriculum (Andrew et al. 2019)

In the case of Australia, education is geared toward active citizenship, however, the curriculum limits teachers to teaching what it is to be a citizen, rather than how to be a citizen; it also ensures a unique and idealized way of being a citizen, evidencing a lack of connection between context/reality and student's learning (Ferguson-Patrick et al., 2019; McLeod, 2019). The teaching staff considers that discussing controversial and sensitive issues, such as terrorism, is a way of teaching students about citizen training and democratic practices, in order to prepare them to participate in an active and informed citizenship in society. However, most of the time it is not included in classes to avoid negative professional consequences or harm the sensitivity of their students (Bright & Weeden, 2019).

New Zealand seeks citizenship similar to that of Australia, however, one study indicated that, in both countries, there is a lack of emphasis on the considerations needed to be global citizens, noting that only those students who had school exchange experiences are better prepared (Borkovic et al., 2020).

A case contrary to the previous countries is the one experienced at the meeting between North America and Iberian America, i.e., on the borders between Mexico and the United States. In this area, teachers motivate their students to understand citizen training through their context, thanks to the social and transformative connectivity that it implies, since those who have



the power to define citizenship are the ones who have the control to demand (Montoya, 2020).

Other Ibero-American research shows that teachers conceive democracy as associated with participating in common projects, and teach it without relying on pedagogical theories, rather on its own experience, despite planning based on theories and school curricula (Plá, 2017), which results in little participation in projects, because schools are enabled with spaces for participation. But they do not teach democracy, causing little participation by students, teachers and representatives in democratic functions (Bambozzi et al., 2020). Thus, the need to develop new ways to promote learning and research on different educational topics is evident (Aldanada-Zavala et al., 2020).

A research carried out on 680 PHGYCS teachers and students from Argentina and Spain points to the existing educational interest in concretizing the concepts to properly develop a democratic school, through demands to the State or the Educational Community (Grau et al., 2019). In addition, institutions and teachers are highly politicized in their educational work when teaching citizenship and democracy (Aguilar & Velásquez, 2018).

Internationally, both teachers from North America and Iberian American countries demonstrate an interest in globalizing student citizenship and show a need to connect knowledge about democracy and citizenship with daily and contextualized practice.

At the national level, a study indicated that the faculty shows disagreements when recognizing the citizens' competences of its students, evidencing a lack of common judgment (Carrillo & Jurado, 2017). Gazmuri (2017) have obtained similar findings, evidencing that the line of the curriculum of History, Geography and Social Sciences is not yet clear, as it is defined by five ideologies that influence assumptions and interpretations that are performed by teachers, leading to obscure nuances, particularities and exceptions in the classroom.

Castillo et al. (2018), studied the citizen training of 216 158 students and obtained that the institutions where they studied influenced their participation and citizen training, despite all being ruled by the same curriculum. This is contradicted in an investigation carried out to future teachers at the time of entering the university, mentioning that there are no significant differences in their citizenship formation, but the students show no interest or understanding of politics, but they value democracy (Alegría et al., 2004).

In short, there is international and national evidence that indicates the existence of a curriculum managed at the central level, but at the classroom level it does not develop the guidelines emanating from government education institutes due to different variables, such as type of establishment, ideology, student interest and teacher training.

2. Methodology

This research is qualitative through a network analysis, developing a hermeneutical design (Flick, 2015) with a cross-sectional scope of the lexical repertoire of History, Geography and Social Sciences teachers.

The sample of the study was intentionally selected and is not representative (Bisquerra, 2009), and it is composed of 36 professors of Arauco, two men and 34 women coming from six different universities, and with two to 33 years of experience in Chile's public, subsidized and paid private education systems.

The collection of information was done through semi-structured interviews (Ortiz, 2007), in which reagents were presented around three conceptual dimensions: democracy, human rights and citizenship. Questions were created from previous theoretical categories. During the interview, the technique of counter-question is applied once the interviewee has answered (Valles, 1999). These interviews were conducted in an office provided by the authorities of each



of the institutions. They were recorded in audio and then transcribed in Microsoft Word and Microsoft Excel.

The analysis plan refers to the use of the Gephi version 0.9.1 free-code program, first describing the overall repertoire lexicon index by topic of interest, and providing the relative and cumulative frequency of each lexical word. In addition, the GEPHI program was used to describe the frequencies of lexical repertoire of teachers around the dimensions presented above.

The concepts associated with the topics of interest studied were extracted in three steps.

First, the units related to our topics of interest were analyzed in relation to the plans and programs of study (see Table 1); then the concepts identified within the study sample were extracted, and finally, topics of interest and programs were related to the topic of interest of teachers.

3. Results

Topics of interest regarding plans and programs can be presented through the following 24 concepts distributed as follows:

Table 1. Topics of Interest on Democracy, Citizenship and Human Rights of the plans and programs of the Ministry of Education

Democracy	Citizenship	Human rights
Participation State Representation Constitution Rights City Dictatorship Transition Respect	Participation Rights Duties Respect Constitution Representation Responsibility	Rights Respect Alike Violation Group Defense Constitution Revindication

Source: Own elaboration based on MINEDUC Plans and Programs.

In conducting the study, the study participants presented a variety of concepts related to

each topic of interest, which can be observed in Table 2 and which are described as follows:

Table 2. Description of words of the topic of interest of citizenship, democracy and human rights

Citizenship			Democracy			Human rights	
Group 1	Group 2	Group 3	Group 1	Group 2	Group 3	Group 1	Group 2
Respect Right Duty People Society Community Country Right Nationality Laws	Opinion Family Cooperation Education Organisation City Spaces People Norms Identity Democracy Obligations	Republic Elections City Voting Behavior Tolerance Values Responsibility	Respect Equality Freedom People Tolerance	Health Identity Diversity Education Work Empathy Life Democracy Rights	Expression Justice Nationality Prisoners Missed Violation Dignity Universal Protection Family Duty Love	Freedom Tolerance Rights Respect Right Expression Opinion Equality Voting	Education Justice Participation Duties Government Citizenship

Source: Own elaboration based on MINEDUC Plans and Programs.



In the topic citizenship, it is possible to identify a distribution of important and concentrated concepts in group 1, demonstrating certain homogeneity in the conceptual perception of teachers when discussing the concept of citizenship, and a great number of concepts with a high frequency between group 1 and 2, which have more representation toward an individual and collective vision of citizenship, but leaving aside the political representation present in civic responsibility.

The topic democracy presents the highest repetition degree of words, which can be easily interpreted by teachers when speaking about the concept of democracy, but there is an individual-time tendency role of democracy regarding a state-institutional vision of democracy and its historical vision (transition-dictatorship).

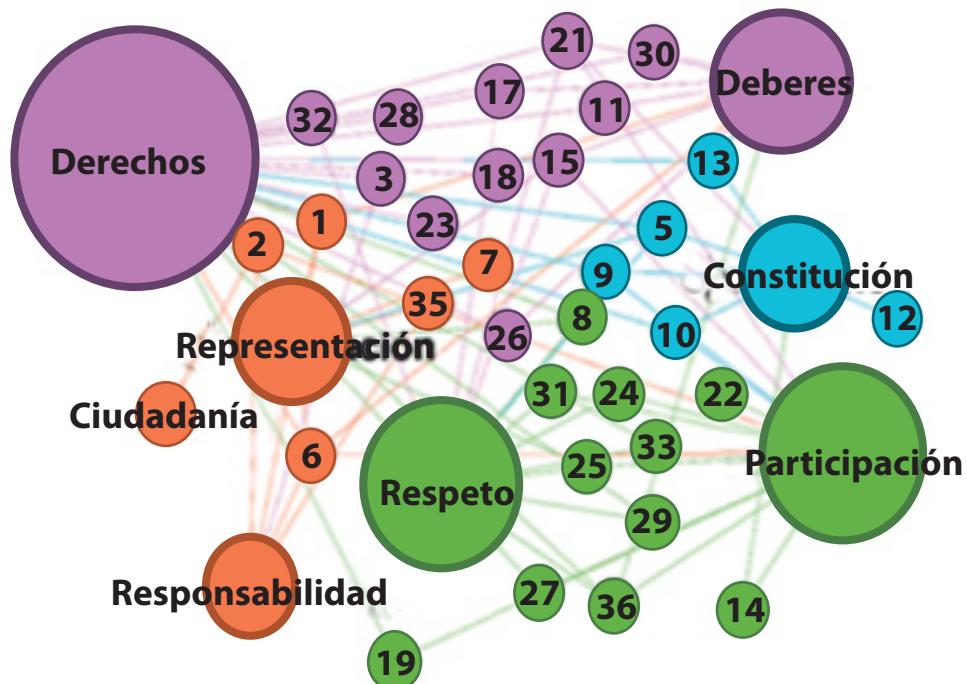
Regarding human rights, three large groups of lexical repertoires can be observed, presenting more heterogeneity in the presentation of words, with no agreement, in most of the

cases, on the concepts that can represent human rights, i.e., the topic is still not clear, being described through multiple words representing an individual and collective vision passively, and by not presenting words related to collective action movements or civil groups around human rights.

Depending on the formation of topics of interest of people interviewed, it can be described that the concept of democracy presents more repetition of key words, unlike the concepts of citizenship and human rights, which present more diversity and less understanding around the main concepts associated with each topic of interest in the study.

After identifying the topics of interest of plans and programs associated with the Citizen Training Plan (Table 1) and the interviews of the participants (Table 2) a comparison was made between the topics of interest of plans and programs of MINEDUC with the conceptualizations described by the faculty.

Figure 1. Relationship between human rights and the plans and programs of citizen training



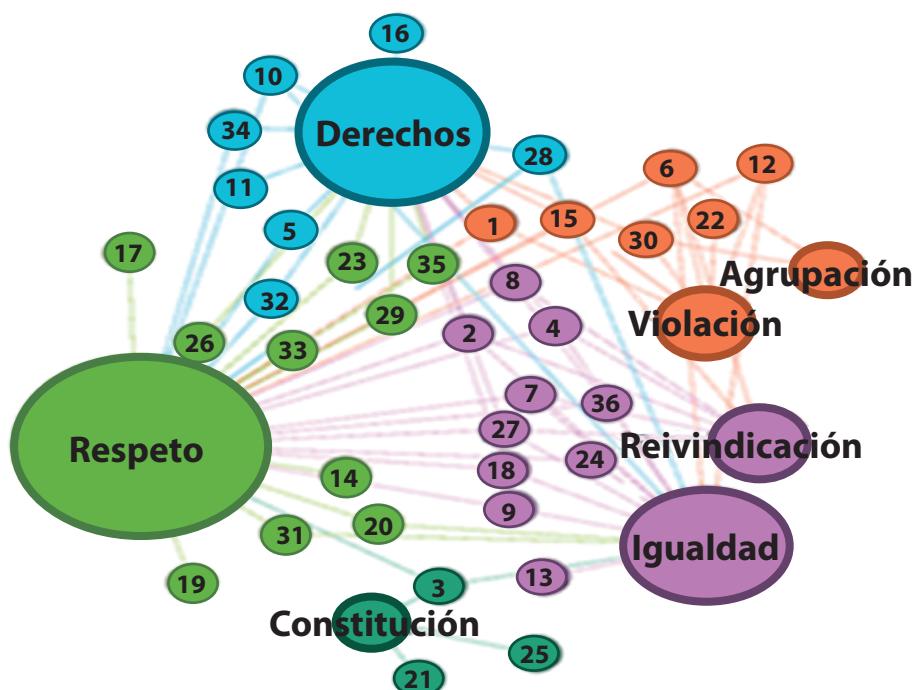
Source: Own elaboration.



Depending on Figure 1, it is possible to point out that the main words of teachers around citizenship are right, respect, duties and people, with important differences in the words indicated by the plans and programs in this topic (see Table 1 and Figure 1, respectively). In addition, if we relate the lexical repertoire of teachers to the concepts presented by the plans and programs, we observe that rights, participation and respect are the most named, and there is a clear decrease in the term citizenship, responsibility, constitu-

tion and representation. Thus, the faculty represents citizenship primarily as an act of individual action, where the basis of the individual's rights prevails, while respecting the possible actions of other citizens, but the importance of the citizen's duties and the responsibilities associated with it decrease. It is also possible to point out certain prejudices present in relation to the constitution and representativeness, which have been constantly criticized in the last two decades by civil society.

Figure 2. Relationship between human rights and the plans and programs of citizen training



Source: Own elaboration.

In relation to the comparison between the topics of human rights of the citizen training plan with the conceptualizations of the participants (see Figure 2), it is evident that the most representative words are respect, rights and equality, but the concepts of claim, violation, constitution and grouping are represented to a lesser extent. This may be because practices in the classroom are not aimed to work on the contents related to the

military dictatorship and its effects on the construction of Chile's democratic process, promoting the construction of a concept of universal human right but without being applied to the Chilean context. Grouping, as representation of active collective entities, is an important element which is not greatly represented in any topic of interest, being interpreted a characteristic of Chilean society of presenting a low relation among its citizens.



Figure 3. Relationship between democracy and the plans and programs of citizen training



Source: Own elaboration.

Finally, democracy (see Figure 3) presents concepts such as law, representation and respect, and to a lesser extent constitution, transition and responsibility. This logic present in the distribution of teachers' words can be understood as a negative perception of the democratic process, which has failed to meet the democratic needs of the population and especially of the study participants who do not directly link democracy to a transition process in our country, being devoid of responsibility on the part of representatives, and of a constitution that guarantees civil society.

In this way, we can say that lexical repertoire on the different topics does not present a strong connection and does not represent the concepts presented by the plans and programs of the Ministry of Education of Chile; this means that the teaching of the citizenship training of the educational institutions under study is based on the experience and prejudices of the teachers in the field of democracy, human rights

and citizenship. The only concept that has more relationship is democracy, showing more relation between what is proposed by the Citizen Formation Plan and what is conceptualized by the study participants.

4. Discussion and conclusions

The school has transformed into an institution that demands "equality production," whether from an opportunity perspective or recognition of diversity (Garrido, 2011). In this way, teachers are seen as promoters of behaviors and attitudes in the school setting, which will be used by the students in their present and future.

The research process shows that there is a tendency in the frequency of the topics of interest to conceive these topics from a personal experience rather than an academic experience. These results are related to the research carried out (Alegria et al., 2004; Bolívar, 2007; Muñoz &



Garrido, 2014) which indicate that citizen training is one of the subjects with a lesser degree of understanding and conceptual management. In addition to promoting a curriculum interpreted from their experiential experience, and an academic experience to a lesser extent.

These evidences show that there is primarily a minimalist approach to teaching citizenship education (Kerr, 2002) which aims at a conceptual review of the contents, without deepening on citizen behavior or practices from the classroom. This reality contradicts the points made by MINEDUC (2004) which demands that the school system encourages citizen participation in its educational practices through fundamental transversal objectives (OFT) and fundamental vertical objectives (OFV).

In this way, based on the results of the topics of interest, especially the human rights and the points made by Muñoz and Garrido (2014), a great diversity can be highlighted in the type of training received and in the understanding of the ideas that teachers have about what it is to form citizens in the school due to different educational training programs and the educational period in which pedagogy studies are framed.

This will affect the degrees of citizenship development (Bolívar, 2007; Kerr, 2002), where the topics focused on curriculum and schools with minimal development are prioritized, both in content and in a community sense of citizen training, leaving aside development degrees such as progressive centers and community centers that promote citizenship in terms of school and community development, and centers little related to the subject, but “(...) with opportunities for civic responsibility” (Bolívar, 2007, p. 161).

Therefore, according to the axes presented by Horrach (2009), it can be affirmed that teachers do not promote an individual axis nor a collective axis of citizenship, but this axis is developed by other structural aspects of society by fostering an experiential logic of the interpretation of the curriculum with strong rote

elements in the teaching and learning process of citizen formation.

Another element to consider is the historical-political trajectory of Chile, which has had consequences in historiography and in the process of teaching history (Henríquez, 2014), being directly responsible for the curricular reduction of citizen training and the experiential interpretation of the school curriculum by teachers, which is observed in the differences between the frequencies in the networks of topics of interest of the PHYGS and the topics of interest of plans and programs of the Ministry of Education of Chile.

Citizen training mainly depends on the preparation of their teachers, since teachers are the ones who ultimately understand and apply the curriculum (Muñoz & Garrido, 2014), promoting the development of attitudes, content and skills around the civic responsibility from a local scale (Oyarzún-Maldonado & Soto-González, 2020).

In conclusion, citizen training has become a key element in the updating of Chile's educational curriculum in relation to the area of History, Geography and Social Sciences, not only because of an educational need but also because of historical and political issues.

The local results of the study point out that the teaching of citizenship formation is based on the experiences of the teacher who interprets the curriculum from his/her experiential knowledge, and not from a disciplinary knowledge. The results of the research are related to the empiric knowledge around the subject, where topics of interest and their respective linguistic repertoire of teachers are not fully related according to the topics of interest of plans and programs, in which the most related topics are citizenship and democracy, but the one with the greatest difference is human rights, where there is no clear relationship between what was expressed by the study participants and the plans and programs of MINEDUC.



Hence, the need to modify the academic program of initial formation of PHYGS at the national level, where the development of content, skills and attitudes in a vertical and transversal sense is encouraged by future teachers.

There are, of course, unresolved questions such as: Does PHYGS know its disciplinary knowledge of citizen training? And will there be a process of curriculum reform by MINEDUC to modify this teaching reality around citizen training? Education will not answer our doubts; thus, it is necessary to deepen other disciplines such as economics and politics in order to be able to respond to our concerns.

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References

- Aguilar, N., & Velásquez, A. (2018). Educación para la ciudadanía mundial en Colombia: Oportunidades y desafíos. *Revista mexicana de investigación educativa*, 23(78), 937-961. <https://bit.ly/3x0BDGq>
- Aldana-Zavala, J., Vallejo-Valdivieso, P., & Iseá Arguelles, J. (2020). Investigación y aprendizaje: retos en Latinoamérica hacia el 2030. *Revista Alteridad*, 16(1), 78-91. <https://doi.org/10.17163/alt.v16n1.2021.06>
- Alegría, J., Muñoz, C., & Wilheim, R. (2004). *La enseñanza y el aprendizaje de las Ciencias Sociales*. Universidad de Concepción.
- Andrew, K., Aydin, H., Dorozhkin, E., Malygin, A., Masalimova, A., & Ogurlu, U. (2019). High school students' Perceptions of Global Citizenship in Central Public High Schools: Implications for Teacher Educators. *Revista de Cercetare Si Interventie Sociala*, 65, 187-205. <https://doi.org/10.33788/rcis.65.12>
- Bambozzi, E., Pineda, E., & López, G. (2020). Teorías de la educación en prácticas de ciudadanía democrática en instituciones educativas: funciones democráticas y actores desde la perspectiva de directivos y docentes. *Praxis Educativa*, 24(1), 1-12. <https://doi.org/10.19137/https://dx.doi.org/10.19137/praxiseducativa-2020-240112>
- Bisquerra, R. (2009). *Metodología de la investigación educativa*. La Muralla.
- Bolívar, A. (2007). *Educación para la ciudadanía, Algo más que una asignatura*. Graó.
- Borkovic, S., Fortune, T., Horey, D., & Nicolacopoulos, T. (2020). Students positioned as global citizens in Australian and New Zealand universities: A discourse analysis. *Higher Education Research & Development*. <https://doi.org/10.1080/07294360.2020.1712677>
- Bright, D., & Weeden, K. (2019). Pre-service teacher attitudes towards discussing terrorism in English as an Additional Language (EAL) classrooms: citizenship, democratic practices, and the discussion of controversial issues. *The Australian Educational Researcher*, 47, 149-166. <https://doi.org/10.1007/s13384-019-00333-3>
- Carrillo, O., & Jurado, P. (2017). La educación técnico profesional y las competencias para la ciudadanía. El caso de las comunas de la Provincia de Concepción, Chile. *Calidad en la Educación*, (46), 133-164. <https://doi.org/10.4067/S0718-45652017000100133>
- Castillo, V., Rodríguez, C. y Escalona, J. (2018). Participación, vida democrática y sentido de pertenencia según tipo de establecimiento educativo en Chile. *Páginas de Educación*, 11(2), 108-129. <https://doi.org/10.22235/pe.v11i2.1630>
- Ferguson-Patrick, K., Macqueen, S., & Reynolds, R. (2019). Active citizenship in a global world: opportunities in the Australian Curriculum. *Curriculum Perspectives*, 40, 63-73. <https://doi.org/10.1007/s41297-019-00084-2>
- Flick, U. (2015). *Los diseños de investigación cualitativa*. Ediciones Morata.
- Gazmuri, R. (2017). Ideologías curriculares en el debate y negociación del currículum chileno de Historia, Geografía y Ciencias Sociales. *Estudios pedagógicos*, 43(1), 157-169. <http://dx.doi.org/10.4067/S0718-07052017000100010>



- Garrido, M. (2011). Los procesos de construcción del espacio escolar: una mirada desde la justicia social. En H. Copetti, *Educaçao Geográfica* (pp. 143-166). Unijui.
- Gerber, M. (2007). *Estudio sobre el estado del arte de la investigación en participación ciudadana en Chile. Informe de resultados. Innovación y Ciudadanía*. Corporación Participa.
- Gougenheim, G., Michéa, R., Rivenc, P., & Sauvageot, A. (1956). *L'élaboration du français élémentaire (I Degré). Étude sur l'établissement d'un vocabulaire et d'une grammaire de base*. Didier.
- Grau, R., García, L., & López, R. (2019). Percepciones sobre la escuela democrática en Argentina y España. *Educação e Pesquisa*, 45. <https://doi.org/10.1590/s1678-4634201945188681>
- Henríquez, R. (2014). La investigación sobre la enseñanza y aprendizaje de la historia: Chile 1990-2012. En Pagés y Plá, *La investigación en la enseñanza de la historia en América Latina* (pp. 87-108). Bonilla Artigas.
- IEA (1999). *Estudio Internacional de Educación Cívica*. Ministerio de Educación.
- IEA (2009). *Estudio Internacional de Educación Cívica*. Ministerio de Educación.
- Jiménez, R. (2017). Estudios de disponibilidad léxica en español y en inglés: revisión de fundamentos empíricos y metodológicos. *Revista Nebrija de Lingüística Aplicada a la Enseñanza de las Lenguas*, (22), 16-31. <https://doi.org/10.26378/rnlael0222>
- Kerr, D. (2002). An international review of citizenship in the currículum. En G. Steiner-Khamsi, *New paradigms and recurring paradoxes in Education for citizenship: an international comparison*. Elsevier Science Ltda.
- Knowles, R. (2019). Ideology in the schools: Developing the teacher's Civic Education Ideology Scale within the United States. *Education, Citizenship and Social Justice*, 14, 260-278. <https://doi.org/10.1177/1746197918800664>
- López, H. (1996). Los estudios de la disponibilidad léxica: pasado y presente. *Boletín filosófico de la Universidad de Chile*, 245-259. <https://bit.ly/3croX3C>
- Magendzo, A. (2004). *Educación y ciudadanía: Construyendo ciudadanía desde el currículum oficial y la cotidianeidad de la escuela. Una lectura desde la investigación*. PIIIE.
- McLeod, J. (2019). Everyday Internationalism as an Educational Project: School Curriculum and Pedagogies for World-Mindedness. *Journal of Australian Studies*, 43(4), 447-463. <https://doi.org/10.1080/14443058.2019.1679856>
- MINEDUC (2004). *Formación ciudadana en el currículum de la reforma*. Santiago de Chile.
- Ministerio de Educación (2016). <http://www.mineduc.cl>. <https://bit.ly/3hinEnM>
- Montoya, M. (2020). Unlearning racism: the classroom as a space for social transformation through borderlands pedagogy. *Contemporary Justice Review*, 1-10. <https://doi.org/10.1080/10282580.2020.1755844>
- Muñoz, C., Casanova, M., Bustos, C., Heríquez, A., Gauché, X., & Alvez, A. (2018). Percepción de los estudiantes que ingresan a estudiar pedagogía de lo que es un buen ciudadano, las instituciones públicas y la efectividad de la acción política. *Educación*, 27(52). <https://doi.org/10.18800/educacion.201801.004>
- Muñoz, C., Vásquez, N., & Sánchez, M. (2013). Percepciones del estudiantado sobre la democracia y los derechos humanos al finalizar la educación general básica: un estudio desde las aulas de Historia. *Revista Psicoperspectivas*, 12(1), 97-117. <http://dx.doi.org/10.5027/psicoperspectivas-Vol12-Issue1-fulltext-230>
- Muñoz, C., & Torres, B. (2014). La formación ciudadana en la escuela: problemas y desafíos. *Revista Electrónica Educare*, 18(2), 233-245. <https://bit.ly/3zc9HRL>
- Oyarzún-Maldonado, C., & Soto-González, R. (2020). La improcedencia de estandarizar el trabajo docente: un análisis desde Chile. *Revista Alteridad*, 16(1), 105-116. <https://doi.org/10.17163/alt.v16n1.2021.08>
- Ortiz, F. (2007). *La entrevista de investigación en las ciencias sociales*. Limusa.
- Plá, S. (2017). Historia y ciudadanía en el bachillerato mexicano. una mirada desde la pedagogía



- por la justicia social. *Diálogo Andino* (53), 33-43.
<https://doi.org/10.4067/S0719-26812017000200033>
- Reyes, L., Campos, J. Osandón, L., & Muñoz, C. (2013). El profesorado y su rol en la formación de los nuevos ciudadanos: desfases entre las comprensiones, las actuaciones y las expectativas. *Estudios pedagógicos*, 39(1), 217-237.
<http://dx.doi.org/10.4067/S0718-07052013000100013>
- Sacristán, J.G. (2003). Volver a leer la educación desde la ciudadanía. En J.M. (Comp.), *Ciudadanía, poder y educación* (pp. 11-50). Grao.
- Skinner, N., & Bromley, P. (2019). Individual and Collective Social Justice Education: Comparing Emphases on Human Rights and Social Movements in Textbooks Worldwide. *Comparative Education Review*, 63(4), 502-528. <https://doi.org/10.1086/705428>
- Tobío, O. (2012). Enseñanza de la geografía: una agenda posible en la intervención del territorio. *Espacios*, 2, 73-90. <https://bit.ly/3wcaUH0>
- Valles, M. (1999). *Técnicas cualitativas de investigación social. Reflexión metodológica e investigación social*. Síntesis.





Value of Respect for Quichua Language and Culture: concept of *Sumak Kawsay*

*Valor del respeto por la lengua y cultura quichua:
concepto del Sumak Kawsay*

ID **Dra. Silvia-Maria Chireac** is a professor and researcher at Universidad de Valencia, Facultad de Magisterio (Spain) (silvia.chireac@uv.es) (<https://orcid.org/0000-0002-6639-698X>)

ID **Dr. Galo Rodrigo Guerrero-Jiménez** is a professor at Universidad Técnica Particular de Loja (Ecuador) (ggruerrero@utpl.edu.ec) (<https://orcid.org/0000-0001-9187-6275>)

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Abstract

The moral values of good living *Sumak Kawsay* related to the respect for the Quichua language and culture represent a fundamental tool in Ecuadorian society and in school context. Therefore, the main objective of this study seeks to learn more about common and differentiating elements from the opinions of teachers and from the contents of textbooks in Ecuador. The research project was carried out in an indigenous community with 60 indigenous teachers of the rural school Mushauk Rimak located in San Lucas. A qualitative method was applied to the analysis of semi-open interviews in Spanish with the participating teachers. The results indicate that San Lucas teachers impart to students the values of respect for language and culture associated with the moral values of *Sumak Kawsay*. This aspect of the program is also reflected in the teaching materials in Quichua, component of the implementation of bilingual-intercultural education in the indigenous communities at the national level. The conclusion of the study points to the value of *Sumak Kawsay* as reflected in the content of textbooks and the efforts of teachers to revitalize the Quichua language and transmit the language to students despite the possibility that the bilingual program does not enjoy acceptance by all parents in this locality.

Keywords: Moral values, rural education, bilingual education, teachers, Quichua, Ecuador.

Resumen

Los valores morales de buen vivir *Sumak Kawsay* relacionado con el respeto por la lengua y cultura quichua representan una herramienta fundamental en la sociedad ecuatoriana y en el contexto escolar. Consecuentemente con esta idea, el objetivo principal de este trabajo es averiguar los elementos comunes y diferenciadores entre las opiniones del profesorado indígena y los contenidos de los libros de texto de diferentes materias escolares de Ecuador. La investigación se desarrolló en un contexto indígena ecuatoriano con 60 docentes indígenas de la escuela rural Mushuk Rimak ubicada en la parroquia de San Lucas. Se utilizó la investigación cualitativa mediante las entrevistas semiabiertas en lengua castellana, que se realizaron a todos los docentes participantes. Los resultados indican que, en la comunidad indígena de San Lucas, los docentes transmiten al alumnado el valor del respeto por la lengua y cultura quichua vinculado con los valores morales del *Sumak Kawsay*. Este aspecto está reflejado también en los materiales educativos en quichua gracias a la política de implementación de educación bilingüe intercultural en los pueblos indígenas a nivel nacional en Ecuador. Las conclusiones destacan el valor del *Sumak Kawsay* en los libros de textos y la labor de los docentes de rescatar el idioma quichua y transmitirlo al alumnado a pesar que la aceptación del programa bilingüe no es unánime entre los padres y las madres de familia de esta localidad.

Descriptores: Valores morales, educación rural, educación bilingüe, docentes, quichua, Ecuador.

1. Introduction

Character education and its development involves an effort to help people, especially young people, to acquire some fundamental behavioral values such as commitment, honesty, tolerance and justice. In this way, it is one of the most pressing social needs that the community has to monitor and act.

On the one hand, the school has a fundamental role in developing character education through a curriculum that promotes students' ethical values such as respect and close union towards society and oneself (Colby & Kohlberg, 1987; Cortés, 2003). Above all, the school is the place where moral culture is developed, based on a set of educational practices designed to teach knowledge and coexistence (Dewey, 1971), as well as a world of values (Puig et al., 2012).

On the other hand, both families and indigenous communities, in a coordinated and responsible way, have a didactic objective that is mainly based on forming customs and developing positive behaviors that lead to the learning and practice of values of their sons and daughters. Thus, the foundations are laid in the family for the formation of the values of children, and later to transmit them and work them systematically in rural school (Herrera & Herrera, 2009).

This paper provides the results of the opinions of 60 teachers from the bilingual intercultural school *Mushuk Rimak* in San Lucas (Ecuador) regarding the values of *Sumak Kawsay* (Good Living), which are transmitted to students in the rural indigenous school, highlighting the value of respect for quichua language and culture.

We have analyzed these beliefs of indigenous teachers about moral education, because there is little research on this topic in indigenous populations and we think that the contributions of a rural school context with these characteristics can be relevant and may have a certain impact on different actors involved in education: teachers, students and researchers.

1.1. The indigenous rural school in Ecuador

According to the Constitution of the Republic of Ecuador, Art. 1/2008, the State of Ecuador is recognized as a multi-national, multi-ethnic, multicultural and multilingual country that accepts, admits and defends cultural diversity. In Ecuador, as a multicultural state that promotes interculturality, we are concerned about how indigenous students in rural schools can attend basic education without leaving school, despite living in a complex and diverse society characterized by social inequalities and racism.

There is an imbalance between urban and rural school in Ecuador, being rural school characterized by social differences, mainly by the increase in poverty and the reduction of the budget granted by the central government to rural education. This inequality lies in historical injustices as a result of the processes of colonization, expropriation of land of indigenous people, "ethnic and linguistic shame" (Villagómez, 2018, p. 46), constant discrimination and oppression over the centuries.

In order to preserve their ancestral languages, defend and consolidate their territories, indigenous population has proposed the establishment of rural bilingual intercultural education schools and the State has adopted educational programs that revolve around the right to learn in their own languages. It should be noted that the Ecuadorian educational system currently respects the collective rights of indigenous nations and their communities, since students can access intercultural school and be trained in the official languages of the State (Ministry of Education, 2013). Consequently, the Ecuadorian Ministry of Education recognized and established a Model of the Bilingual Intercultural Education System (MOSEIB) since the indigenous population needs to receive teaching in their own native languages alongside Spanish, because it is important for them and for the Ecuadorian State that the original languages survive in the time.



As can be seen, MOISEB is an important part of Ecuadorian education and teachers have the opportunity to teach in indigenous languages at different stages of compulsory education. The main objective of the program is to eliminate high percentages of illiteracy, since 42% of students do not complete their studies, especially in Elementary school, and to strengthen education as a whole (Chireac et al., 2017). Despite the implementation of bilingual education programs throughout the state, illiteracy is high mainly due to inequality and poverty, two factors that limit access of indigenous children to education. According to Torres (2005), other factors to be taken into account in relation to school dropout are domestic work incompatible with school life and the use of language that indigenous people do not understand.

It is known that the Spanish language remains being a symbol of access to a better social life and political power, and it has gradually displaced the original languages, and consequently, promoted an abandonment of the mother languages by the indigenous people. This phenomenon has arisen as a result of the social marginalization and discrimination suffered by indigenous people in different Latin American countries. Acculturation, in the framework of asymmetric bilingualism, has resulted in the abandonment of one's own languages and the acceptance and use of Spanish in all spheres of social life, especially for communicating.

One of the key objectives of intercultural bilingual education in Ecuador underlines the right of indigenous group to be taught in their mother tongues in order to preserve the survival of these languages and to recognize them officially alongside Spanish. In intercultural bilingual education, it is extremely important to highlight the teaching of the two languages in contact and the elaboration of adequate didactic resources focused on the Ecuadorian indigenous student, a methodology that is represented in the recognition and maintenance of Quichua, one of the most important indigenous languages of the

American continent, as an essential component of an ancestral culture.

Because of the importance of preserving and rescuing the values of the Quichua language as a minority language, our study considers to analyze the extent to which it is possible to relate teachers' beliefs about the moral values exposed in the culture of *Sumak Kawsay* (Good Living), especially focused on the respect of the Quichua language with the moral values presented in the school curriculum. The contrast between the reality presented in teachers and the moral values described in the textbooks has led us draw conclusions and different interpretations that will provide us with guidelines for reflecting on the necessary needs of teaching strategies and school program, but also on the teaching and learning of character education in relation to respect and attitudes toward the Quichua language.

1.2. Character education and its relationship with the culture of *Sumak Kawsay*

We based the analysis on the theoretical foundations of Lickona (1983) and the research team at Cortland, according to which the moral culture of a school is understood as the behavior and practices of agents of a school.

Lickona's character education proposal is set up in two types of strategies: classroom and school. On the one hand, in relation to class strategies, the author raises nine dimensions, of which, for our analysis, we will highlight the following: A) the teacher as an ethical model and mentor; b) the class as a community that cares for its members; c) values through the curriculum; d) awareness and responsibility at work.

On the other hand, as regards school strategies, we have chosen the three dimensions that the school needs to develop in character education: A) working beyond the classroom; (b) collaboration between families and the educational community in the task of character



education; (c) creation of a positive moral culture in school.

Overall, Lickona's proposal points out that it is necessary in educational communities to develop various types of learning: *learning to think, learning to do, learning to learn, learning to be, and learning to live together and to live with others*. In the educational context, a committed pedagogy is necessary, which is sensitive to interpersonal relationships, aimed at recognizing, accepting and motivating the student (Duch, 1997). In this sense, the teacher is not only a holder of knowledge, but is also a person committed to his/her educational role, offering the students education and training, and for this reason he/she must exercise as a model. Its role as a moral agent is based on encouraging the motivation and self-esteem of students in the involvement of processes of moral education and values, on fostering a climate of tolerance in class, on resolving conflicts, on continuing the development process of students, instilling in them values of community, civic and dialogic sensitivity.

Character education in indigenous schools in Loja (Ecuador) is based on sharing personal and socio-moral values such as solidarity, cooperative work, respect and tolerance.

From sociocultural theory, Vygotsky (1964, 1988) affirms that the process of human development is mediated by social interaction and it emphasizes the idea that the origin of thought is based on the realization of collaborative tasks. According to Rogoff (1993), children in several communities acquire skills and knowledge through mediation processes guided by other expert members when conducting joint activities. This is also the case for students of the rural indigenous school *Mushuk Rimak*, who develop their learning through interactive routines with their families (Rosemberg & Amado, 2007). These routines are composed of community-specific knowledge that is effectively developed in the school setting with the values taught by the family and those of the school (Bronfenbrenner, 1987).

Likewise, according to Alvarez and Del Rio (2001), the task system in each culture offers awareness models that express ways of thinking linked to the tasks carried out. The school and the community are training agents with their own values. In the indigenous school and through the culture of *Sumak Kawsay*, the direct collaboration of people who make up a community is seen in the decision-making on issues affecting the group in a global way. In this way, the school and its organizational structure are privileged places to live and appreciate the life of the group.

But what does *Sumak Kawsay* culture mean and what are the moral values indigenous people of Ecuador and the students of the rural community of San Lucas need? To answer this question, we mention Martín Ibáñez (1976, p. 34), who asks, "What is the meaning of life? The answer is simple: The completion of values. A man who does not do something valuable is useless, is lost." From the indigenist philosophy, *Sumak Kawsay* is a concept that has emerged from the ancestral thought of the Andean population, and that represents a way of living along with nature. "It is the ideal sense of life. It is a concept made up of two words: *Sumak* [meaning] the good, the beautiful, the harmonic, the perfect, the ideal and *káusai* [meaning] life, existence" (Viteri, 2003, pp. 46-48). From the etymological point of view, *Sumak Kawsay* could be translated through the expression "full life or existence".

The values according to which the Ecuadorian people are guided are based on the well-known Andean trilogy "Do not be lazy, do not be a liar, do not be a thief" (*ama killa, ama llulla, ama shua*) (Kowii, 2011). They also include values such as solidarity, generosity and reciprocity, as well as advice and the act of listening. In indigenous communities, the elderly are the people who guide and correct the behavior of other members in order to achieve and preserve *Sumak Kawsay*. Respecting the advice guarantees to obtain the wisdom of the elders and, at the same time, to lead to *Sumak Kawsay* through respect for social norms.



According to Ortiz (2009), this concept is based on the links between people based on the principles of reciprocity, solidarity and equality.

The indigenous family, as a family unit, occupies a central place and family is in charge of forming and teaching the value of solidarity and sharing with the other what is offered by *Pachamama* (Nature), considered a living being that encompasses the vegetal and the whole humanity. Generosity (*kuna*) and reciprocity (*kunakuna*) derive from solidarity, and these are values learned by children at home from childhood. From this conception for the Ecuadorian indigenous people, there is the value of equity and social balance, abandoning the thought of the personal enrichment of some family, aspect considered negative and differentiating in the social ties within communities. Mutual help is “wash your face with both hands. It is also breaking imposition, selfishness and individuality. It is the contribution of what the other lacks and needs” (Chancoso, 2010, p. 224).

Thanks to the dream of all indigenous people to reach *Sumak Kawsay* (Radcliffe, 2012), and thanks to solidarity and reciprocity, they have been able to survive throughout history periods of discrimination, inequality, racism and marginalization. Additionally, it should be noted that the indigenous people have claimed its linguistic rights by participating strongly in the defense for the maintenance of the Quichua language, as an ancestral minority language of great importance in the Ecuadorian linguistic landscape and the humanity as well. The attempt to preserve its language roots has caused the establishment of bilingual intercultural education schools, especially in the rural area. Accepting another language and culture means recognizing our own language and culture and actively respecting others in their own language (Sánchez, 1998). Bilingual intercultural education involves valuing the Quichua language and culture present in a school and organizing the curriculum according to the linguistic needs of the students.

In this way, *Sumak Kawsay* is a deeper concept that not only refers to moral values that are reflected in acquiring material benefits, but also it represents the inner wealth and the dialogue that requires respect for the minority languages of indigenous people, because knowledge is embedded in them.

2. Methodology

2.1. Participants

In this research participated 60 indigenous teachers who teach in Spanish and Quichua, belonging to the rural school *Mushuk Rimak* located in the parish of San Lucas in the Ecuadorian highlands, 55 km from the city of Loja. The village of San Lucas belongs to the Quichua Saraguro people formed by descendants of the Incas.

The school has 388 students and offers three levels of education: Initial, basic and high school. The school is located in an area with 95% of indigenous students. Although people of San Lucas are Quichua, most of the population does not use the native language since it was replaced by the Spanish language. The only recent socio-linguistic study available of the region, carried out by King (2001) notes that all students of San Lucas are native speakers of Spanish. As for its traditions, it is a village that has preserved traditional Quichua clothing, so it is no surprising that the whole community has a different appearance than other Ecuadoreans.

With regard to the values of this people, we emphasize community solidarity, reciprocity, the search for their own identity, the effort to preserve their own language and Quichua culture.

2.2. Procedure

For this study, semi-open interviews were conducted at *Mushuk Rimak* School with questions about the assessment of the Quichua language, the attitudes of the Quichua language, the teach-



ing materials in Quichua, and the bilingual and intercultural education. By using qualitative research through interviews, the initial script designed in with all project members were modified based on the responses received in order to raise other questions relevant to the study.

Interviews lasted from 20 to 25 minutes and were conducted in June 2018 by several Ecuadorian and Spaniards teachers. The semi-open interviews had the advantage of drawing on a model of questions or topics prepared by taking into account the objectives of the research. The interviewers were free to introduce additional questions and guide the conversation according to the importance of the speech given by the participants (Hernández et al., 2014). In some cases, in-depth interviews proposed by Flick (2012) have been chosen, through flexible and free conversations to clarify some topic of interest to our research. Familiarity with the situation of a foreign culture, with indigenous people, with their own language, with the daily routines of teachers and the whole community, and thus with the content of our research, has been key to conducting interviews (Kvale, 2011).

Interviews were subsequently recorded and transcribed. Before beginning the interviews, we visited the school several times to gain the trust of teachers and the management team. The social interaction created with the indigenous community interviewed has been a key element for the willingness of the interviewees and for the quality of the responses. At all times, interviewers have paid special attention to the environment for interviews using an informative introduction with the subjects interviewed and a subsequent reaction collection.

3. Results

This section presents the results on respect for the Quichua language and culture in a synthesized way, according to the opinions of indigenous teachers participating in the interviews. We will also contrast some elements that infor-

mants highlight as important with the values that appear in the textbooks of the students of Basic Education, always taking into account the culture of *Sumak Kawsay*.

One of the main problems in globalized societies concerns the loss and death of minority languages, as the general risk of replacing some languages increases (Martí et al., 2006). Languages, heritage of humanity, are monuments of every culture (Nettle & Romaine, 2000) and living organisms that participate in the identity of each group, in the transmission of values, feelings, knowledge, emotions and ideas, hence they are very important because they contribute to the cultural heritage of any country (Rippberger, 1992). In the face of such linguistic diversity, we must be cautious of the economic, political and cultural factors that have weakened the indigenous languages not only of Latin America, but also of many parts of the world.

With regard to the respect given to the Quichua language in the interviews, we have found that the indigenous teachers believe that the Quichua language is valued at school as a language of their ancestors:

Yes, it is highly valued as it is an ancestral language of our people of America, and it must be preserved in our daily cultures and we must learn it. (M9)

We try to rescue language and instill in our students the respect for Quichua because current youth do not know language. We try to partly recover the language and convey its values. (M55)

Quichua is part of our living, it is part of our ancestors, our language, our everything. It is the most important thing and we must continue to value it. We are rescuing what our ancestors have left us. We are rescuing the measures of bilingual intercultural education. (M27)

What we want in our rural school is to give value to our language, to convey respect for



the language, but it is difficult because it is not practiced in families. With this bilingual education we are revaluing language. There are enthusiastic teachers who practice language. All teachers at this school know Quichua. One of the requirements for working in bilingual education is to be bilingual. (M34)

From the previous opinions we conclude that teachers appreciate and convey the values and respect for the Quichua language to their students through the rescue of the language that they consider their typical way of living, thinking and acting, which is very different from the Hispanic culture.

On the one hand, following Lickona's theoretical foundation on class strategies, we consider the role of the indigenous school teacher as an ethical model and mentor, who helps students build knowledge in the ancestral language in classroom situations that facilitate learning curricular concepts and procedures. On the other hand, the teacher transmits through the dialogue values and principles of moral culture that are reflected in respect for the Quichua language and culture, for traditions and for the entire community.

In this sense, recognizing and granting the value that the minority language deserves, each student is seen as a subject with an identity of his or her own. Generating in indigenous students, who are sometimes discriminated against by mestizos, recognition and assessment, allows to create an environment of respect and tolerance in the classroom and in the same institution. Likewise, the class becomes a community that cares for its members, which is another dimension proposed by Lickona. The opening and understanding of the other occurs in the classroom according to the needs and specifications of each student.

Another factor lies in the values through the curriculum that involves introducing ethical content into school content, transforming the curriculum into values. Interviewees claim that the content of the Quichua language is used in

class when translating any word from Spanish to Quichua. Teachers claim that the representatives of the Ministry of Education created the materials in the Quichua language and that they, as teachers, try to work closely with these authorities. However, indigenous teachers of San Lucas consider that they are sometimes the ones who produce their own teaching materials so that these are coherent with the reality of the socio-cultural context of the population of San Lucas. We highlight the words of a teacher who says:

We transmit moral and ethical values to our students at the oral level. The education we had was an imposed education where everything was elaborated, where the teacher only created content that was in the texts according to the curriculum and did not adapt it to the reality of the environment. Our ancestors have told us that they have introduced Spanish to us by force and the Quichua language has also been forgotten by force. (M12)

As can be seen, in the past, the contents of school texts in Quichua were not coherent with the context of indigenous communities. Recently, work has been done in this regard, and teaching materials and textbooks have changed.

Values of the Quichua language and culture in the school curriculum through the culture of *Sumak Kawsay* can be taught from all subjects in textbooks prepared by the Ministry of Education. As an example, we mention the textbooks of the subject Arts, in which topics are raised on myths, stories and legends of Ecuadorian indigenous societies. In addition, detailed explanations are presented on ancestral cultures, original people, cultural and artistic works and manifestations of different historical periods and different Ecuadorian indigenous cultures. Students have the possibility to use the materials in the textbooks and to carry out different creative activities through drawing, formal and informal conversations with other students and with the teacher, and to develop textual, visual, or auditory documents that reflect their ideas, feelings, and emotions.



Textbooks present the indigenous cultural component as well as the values of the Quichua language and culture through an active methodology with activities involving the building of knowledge of students, as well as reflection, inquiry and experience. We must also highlight the textbooks of Spanish Language and Literature, in which the values of respect for the Quichua language appear through dialogues, activities and explanation of the most important words that shape the culture of *Sumak Kawsay*:

Minga: Quichua word used to name the collective work that benefits the inhabitants of Andean communities. It is also used to refer to the work friends do to help each other. For example, *mingas* are conducted to build houses, clean land, clean schools, install fences, build roads, or party. During *minga* a person receives food and drink in exchange for the work (Spanish Language and Literature, 3rd Grade, Basic General Education)

Pachamama: In Quichua it means Mother Earth, but it goes beyond its physical appearance. It expresses a relationship of respect and care that Quichua people have on it. In the Quichua worldview, Earth is like the generous mother who gives them all they need to live; therefore, as a gift and to compensate, Quichua people must respect and care it. (Spanish Language and Literature, 7th Grade, Basic General Education)

For indigenous people, good living is related to *Minga* and *Pachamama*, which are moral principles that are transmitted in families and in school, since the first year of schooling. Solidarity and reciprocity are values that are embodied in relations of equality and mutual respect within a community. The education for solidarity that is taught in the Ecuadorian school has a strong moral content because it has its roots in the formation of attitudes and habits and in the consolidation of values. This type of development education is a significant model through which we want to encourage the parti-

cipation of the whole community in joint work, and to favor the responsibility of each member (Sánchez, 1998). It is precisely the dimension raised by Lickona that refers to awareness and responsibility at work.

Lickona's last contribution is the center's three-dimensional strategies that are also contemplated in our study. First, working beyond the classroom is based on the importance of presenting opportunities for students in school and community service through altruistic behaviors (Rubio, 2012). A clear example of work beyond the classroom was the joint participation of students and their families in the construction of the Quichua-Spanish language laboratory. Active participation in community work was an initiative of children based on the model of the other family members who are immersed in their daily tasks. Although few indigenous families transmit the Quichua language to their sons and daughters at homes (Paronyan & Cuenca, 2018), children value language and respect the values conveyed to them in the formal setting. However, teachers state that, given the little interest of families on the Quichua language, the work developed by teachers with the students is not significant and the language is in reverse:

Organizing Quichua language workshops with parents is worthless if they do not value the language. I speak Quichua, but I did not learn it at school. I learned it from my parents. My parents spoke everything and all the time in Quichua. (M37)

There seems to be a problem. Globalization may have a lot of influence, as they do not care about language, then it is a problem for teachers. (M46)

Some families do not care about the language, they do not care if Quichua is rescued or not, they are already used to speaking Spanish. (M4)

This lack of interest to the Quichua language is the result of years of oppression, discrimination and marginalization of indigenous people.



According to families, Quichua is a language with little or no value, considered inferior to the Spanish language, which does not present for their sons/daughters a way to ascend and obtain a certain prestige in society. For the most part, families value the language only from the heritage of their ancestors, but refuse to perpetuate and pass on the language to their descendants.

4. Discussion and conclusions

Following Lickona's proposal of character education, we have observed that teachers in the indigenous community of San Lucas convey to students the value of respect for Quichua language and culture linked to the moral values of *Sumak Kawsay*.

In recent years, values of respect for Quichua have also been transmitted through Quichua language textbooks and the implementation policy of intercultural bilingual education in indigenous people at the national level in Ecuador. It is a reality that teachers also develop their own materials so that their students understand the linguistic and cultural situation of each territory where rural indigenous communities are located. This aspect is an element of support and reinforcement for continuing the work of the educational authorities of Ecuador in charge of elaborating textbooks.

The low assessment of minority languages and the fact that their speakers are in a situation of social inequality with respect to the majority group is well known (Canuto, 2017; Vernimmen, 2019), for this reason, emphasis should be made on the interest of preserving the Quichua language through the publication of educational materials that inform the foundations of wisdom and knowledge of indigenous values, culture and traditions (UNICEF, 2014).

At present, the textbooks highlight content on the value and respect for the Quichua language and for the culture of good living through texts, with activities that students can do in the classroom with their teachers. We emphasize the

work that is carried out in this sense through other curricular contents. We agree with Varela et al. (2018) in that the teacher must be morally, ethically and pedagogically committed to the sociocultural environment around him/her so that he/she can develop and transmit the values to the students and produce a positive impact on them. In the indigenous context, we believe that the teacher should strive to establish close ties with families in order to make them aware that the Quichua language deserves to be positively valued, respected and transmitted to their sons and daughters. Working from home and not just from school, the Quichua language could change its status and become a prestigious language.

Reducing the gaps in inequity between the two languages in contact in the shortest period of time does not only require an increase in effort on the part of indigenous teachers who have a positive attitude and transmit values of respect for the minority language, but also a better collaboration of families and the support of governments that must fight for the protection of linguistic rights and the search for measures and strategies that effectively address the objective.

References

- Álvarez, A., & del Río, P. (2001). Introducción: Culturas, desarrollo humano y escuelas. Hacia el diseño cultural de la educación. [Introduction: Cultures, Human development and schooling. Towards a cultural design for education]. *Cultura y Educación*, 13, 9-20.
<https://doi.org/10.1174/113564001316901739>
- Chireac, S.M., Francis, N., Guerrero Jiménez, G.R., González Tamayo, N.A., de los Ángeles-Guamán, M., Martínez de Lara, A., Vacacela Medina, C.M., & Villalta-Córdova, B.M. (2017). Interculturalidad y educación bilingüe en la provincia de Loja. En A. Verdú-Delgado & N.A. González-Tamayo (Eds.), *Conocimientos ancestrales y procesos de desarrollo. Nacionalidades indígenas del Ecuador*



- (pp. 83-105). Universidad Técnica Particular de Loja. <https://bit.ly/2XTH5va>
- Bronfenbrenner, U. (1987). *La ecología del desarrollo humano*. Paidós.
- Canuto, F. (2017). Mantenimiento de una lengua minorizada: el caso del purépecha en Ichán y en Tacuro, Michoacán (Méjico) [Maintenance of a minoritized language: the case of P'urhepecha in Ichán and Tacuro, Michoacán (Méjico)]. *Onomázein*, 77-96. <https://doi.org/10.7764/onomazein.amerindias.05>
- Chancoso, B. (2014). El *Sumak Kawsay* desde la visión de la mujer. En A.L. Hidalgo-Capitán, A. Guillén-García & N. Deleg-Guazha (Eds.), *Antología del Pensamiento Indigenista Ecuatoriano sobre Sumak Kawsay* (pp. 223-227). Centro de Investigación en Migraciones. <https://bit.ly/2Nlm0b4>
- Colby, A. & Kohlberg, L. (1987). *The measurement of moral judgement*. Cambridge University Press.
- Cortés, A. (2003). Implicaciones psicopedagógicas de un desarrollo moral íntegro. La educación holística. *Revista Iberoamericana de Educación*, 33(2), 1-13. <https://doi.org/10.35362/rie3323011>
- Dewey, J. (1971). *Democracia y educación*. Losada.
- Duch, Ll. (1997). *La educación y la crisis de la modernidad*. Paidós.
- Flick, U. (2012). *Introducción a la investigación cualitativa*. Ediciones Morata.
- Hernández-Sampieri, R., Fernández-Collado, C., & Baptista, M.P. (2014). *Metodología de la investigación*. McGraw-Hill.
- Herrera I., & Herrera, F. (2009). Los valores y la educación. En J.L. Guerrero (Ed.), *Educación y sociedad. Homenaje al profesor Juan Lara Guerrero* (pp. 147-161). Facultad de Educación y Humanidades de Ceuta.
- King, K. (2001). *Language revitalization processes and prospects: Quichua in the Ecuadorian Andes*. Multilingual Matters.
- Kowii, A. (2011). El Sumak Kawsay. *Revista Electrónica Aportes Andinos*, 28, 1-4. <https://bit.ly/3iysNJR>
- Kvale, S. (2011). *Las entrevistas en investigación cualitativa*. Ediciones Morata.
- Lickona, T. (1983). *Educating for character: how our schools can teach respect and responsibility*. Bantam.
- Marín-Ibáñez, R. (1976). *Valores, objetivos y actitudes en educación*. Miñón.
- Martí, F., Ortega, P., Idiazabal, I., Barreña, A., Juaristi, P., Junyent, C., Uranga, B., & Amorrortu, E. (2006). *Palabras y mundos. Informe sobre las lenguas del mundo*. Icaria.
- Ministerio de Educación (2013). *Modelo de sistema de educación inter-cultural bilingüe*. Quito: Sistema de Educación Intercultural Bilingüe.
- Nettle, D., & Romaine, S. (2000). *Vanishing Voices. The extinction of the world's languages*. Oxford University Press.
- Ortiz, P. (2009). *Sumak kawsay* en la Constitución ecuatoriana de 2008. *Alteridad*, 4(1), 76-87. <https://doi.org/10.17163/alt.v4n1.2009.06>
- Paronyan, H., & Cuenca Díaz, M. (2018). Educación intercultural bilingüe en Ecuador: retos principales para su perfeccionamiento y sostenibilidad. [Intercultural bilingual education in Ecuador: challenges, development and sustainability]. *Transformación*, 14(3), 310-326. <https://bit.ly/3p0wt9D>
- Puig, J. M., Doménech, I., Gijón, M., Martín, X., Rubio, L. & Trilla, J. (2012). *Cultura moral y educación*. Graó.
- Radcliffe, S. (2012). Development for a postneoliberal era? Sumak kawsay, living well and the limits to decolonisation in Ecuador. *Geoforum*, 43(2), 240-249. <https://doi.org/10.1016/j.geoforum.2011.09.003>
- Rippberger, S. (1992). *Indian teachers and bilingual education in the highlands of Chiapas* (tesis de doctorado no publicada). Universidad de Pittsburgh.
- Rogoff, B. (1993). *Aprendices del pensamiento. El desarrollo cognitivo en el contexto social*. Paidós.
- Rosemberg, C., & Amado, B. (2007). Aprender haciendo con otros. Un estudio del aprendizaje infantil en el marco de los sistemas de actividad de comunidades rurales. *Revista de Psicología de la Universidad de San Marcos*, 10(2), 9-27. <https://bit.ly/3p50xRu>
- Rubio, L. (2012). Teorías sobre la cultura moral. En J.M. Puig (Ed.), *Cultura moral y educación* (pp. 65-85). Graó.



- Sánchez-Torrado, S. (1998). *Ciudadanía sin fronteras. Cómo pensar y aplicar una educación en valores*. Desclée de Brouwer, S.A.
- Torres, R.M. (2005). *Analfabetismo y alfabetización en el Ecuador. Opciones para la política y la práctica*. Fundación Frónesis.
- UNICEF (2014). Panorama de la situación de la niñez y adolescencia indígena en América Latina: El derecho a la educación y a la protección en Ecuador. <https://uni.cf/3p1eGPz>
- Varela, A., Naval, C., Bernal, A., & Sobrino, Á. (2018). Explorando virtudes en un instituto público mexicano de educación secundaria. [Exploring virtues in a Mexican public secondary school]. *Revista Panamericana de Pedagogía*, 26, 167-187. <https://bit.ly/3c8xNUD>
- Vernimmen-Aguirre, G. (2019). Educación Intercultural Bilingüe en Ecuador: Una revisión conceptual. *Alteridad*, 14(2), 162-171. <https://doi.org/10.17163/alt.v14n2.2019.01>
- Villagómez-Rodríguez, M.S. (2018). “Otras Pedagogías”: La experiencia de la Carrera de Educación Intercultural Bilingüe-UPS. *Alteridad*, 13(1), 30-41. <https://doi.org/10.17163/alt.v13n1.2018.02>
- Viteri, C. (2003). *Súmak Káusai. Una respuesta viable al desarrollo* [Tesis de Licenciatura en Antropología Aplicada]. Universidad Politécnica Salesiana del Ecuador.
- Vygotsky, L. S. (1964). *Pensamiento y lenguaje*. Lautaro.
- Vygotsky, L. S. (1988). *El desarrollo de los procesos psicológicos superiores*. Grijalbo.





Environmental education as a strategy to face climate change

*La Educación Ambiental como estrategia para enfrentar
el cambio climático*

Raisa Michelle Gavilanes Capelo, Universidad del Azuay (Ecuador)

(raisagavilanesmes@es.uzuay.edu.ec) (<https://orcid.org/0000-0001-7839-6234>)

Boris Genaro Tipán Barros, Universidad de Cuenca (Ecuador)

(boris.tipanb@ucuenca.edu.ec) (<https://orcid.org/0000-0002-3805-1642>)

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Abstract

The global environmental crisis that humanity is facing involves the creation of efforts that contribute towards greater socio-ecological resilience, which can face the consequences of these changes that are affecting the planet at a local, regional and global level. These mechanisms seek for society to acquire greater knowledge and skills, to achieve an ecological culture that leads to a sustainable relationship with nature. In this context, this research paper aims to determine the effect that environmental education has had as a strategy that contributes to mitigation and adaptation to climate change. This investigation was carried out through working with students, teachers, and authorities from three educational institutions in the city of Cuenca. It was necessary to apply a study from two approaches, quantitative with the application of surveys to students and their teachers, and qualitative with an in-depth interview to the headmasters and coordinators of each high school. The results were statistically examined in the case of the surveys, and the interviews' contents were properly analyzed. The obtained information was used to establish guidelines that can help to change the traditional way in which environmental education is being undertaken nowadays, this part defines strategies, approaches, and methodologies to be worked in a transversal and holistic way within the curriculum program of the educational centers of this research.

Keywords: Resilience, environmental education, sustainability, climate change, socio-ecology.

Resumen

La crisis ambiental global que enfrenta la humanidad supone la creación de esfuerzos que aporten hacia una mayor resiliencia socioecológica frente a las consecuencias de estos cambios a nivel local, regional y global. Estos mecanismos buscan que la sociedad adquiera mayores conocimientos y habilidades, en miras de una cultura ecológica que logre una relación sustentable con el medio natural. Bajo este contexto, este trabajo tiene como objetivo determinar la validez de la educación ambiental como una estrategia que aporte para la mitigación y adaptación al cambio climático. Para su desarrollo, se trabajó con estudiantes de bachillerato, docentes y autoridades de tres instituciones educativas de la ciudad de Cuenca. Se aplicó un estudio desde dos enfoques, cuantitativo a través de la aplicación de formularios con docentes y estudiantes, y cualitativo con entrevistas a profundidad realizadas con las autoridades de cada institución. Los resultados fueron examinados estadísticamente, en el caso de las encuestas y el análisis de contenido de la totalidad de entrevistas. A partir de este punto, se establecieron lineamientos que aporten para un cambio en las estrategias, enfoques y metodologías con las cuales se trabaja la educación ambiental en la actualidad, con la finalidad de que esta sea trabajada de forma transversal y holística dentro del programa curricular de los centros educativos dentro del estudio.

Descriptores: Resiliencia, educación ambiental, sustentabilidad, cambio climático, currículo, socio-ecología.

1. Introduction

Since its origin, humanity has managed to survive thanks to the use of the resources provided by nature, however, its consumption and predation have been changing and accentuating since the Industrial Revolution, when the use of fossil fuels enabled improved production processes, without considering the high environmental costs they cause (Kothari et al., 2014), generating a developmental wave based on capital accumulation. From the second half of the twentieth century, humanity began to witness the alterations derived from the current development model, thus initiating a trend toward political, technological and scientific efforts to mitigate and adapt to the coming environmental crisis (Castro & Gallego, 2015; United Nations, 1989). The new strategies start from their transversality, without just focusing on the economic, social and/or political aspects, but on establishing tools for society to acquire knowledge and skills in order to create greater environmental awareness toward resource conservation and protection of the natural environment (Severiche et al., 2016), in addition to making population as key actors for greater socio-ecological resilience to the effects of climate change (González et al., 2019). In this context, education is seen as the basis for the fulfillment of the goals set forth at the local, regional and global levels, and it is necessary to include it with an environmental focus in the academic curriculum of all educational levels, as well as the dynamics and performances that are carried out in the classrooms (Dieste et al., 2019).

Environmental Education (EE) emerged under the premise that the population is aware of the impact it has in the ecosystem in order to achieve a better relationship with the natural environment. Environmental education comprises a cross-cutting content, which is based on a multidimensional dialogue that includes scientific and common knowledge (Benítez et al., 2019); thus, the transdisciplinary approach of EE involves the inclusion of indigenous ancestral

knowledge with natural sciences, social sciences, mathematics, arts, humanities, geosciences and telecommunications (Garcés, 2012). When the basic elements of environmental education are applied, the teaching-learning process is easily improved, leading to new ways of interrelating with nature, leaving behind traditional pedagogical approaches (Collado, 2019; Sandoval-Díaz et al., 2020), and generating greater social and ecological resilience to global dynamics (Hardy et al., 2019).

At the global level, environmental education has evolved as a key element in achieving the goals set out in the Sustainable Development Agenda 2030 (Timm & Barth, 2020), especially because the overall goal is to keep global warming at 1.5 °C until the next decade (IPCC, 2018), and to do it, it is necessary to establish a workable proposal with all disciplines to achieve a commitment of citizenship (Rodrigo-Cano et al., 2019). In addition, EE is an effective mechanism for teaching the problem of climate change because of its innovative educational approach and its constant search to help the population understand this phenomenon in order to generate attitudinal changes in favor of the environment (González, 2016). Especially because the greatest constraint is intimately linked to ignorance of society. From this, formal and non-formal educational programs have been created to achieve this objective, albeit partially (Jackson, 2016).

National reality is not alien to this trend; in recent years Ecuador has developed various projects such as TiNi (Land of all) (Minduc, 2019) or the National Strategy for Environmental Education (Bravo, 2017) as “Design and promotion of training, education, awareness raising and awareness-raising programs on climate change management” (Ministry of Environment and Water, 2017, p. 27). These programs are carried out by two national ministries, the Ministry of Education and Environment, respectively, applied in different areas, in addition to being directed for the whole population,



from the initial level of compulsory education to the high school. One important aspect is that these environmental education programs have been highly linked to the area of Natural Sciences in the content of the school curriculum, without being cross-cut in all curricular subjects (Falconí, 2018). Knowledge of climate change has focused on working on areas linked to solid waste management and biodiversity care, which are obviously important but do not address basic issues such as energy consumption and natural resource management, which are critical to raising awareness of this highly relevant global, regional and local issue (Cadilhac et al., 2017).

This topic has several axes for its development, especially because of the number of actors involved, the students as critical bodies, content receivers and replicators, who normally do not know and/or have not paid attention to the topic; in addition, they have not been able to reflect adequately on the implications of climate change in society and the world (González et al., 2018). Another important element is the faculty, especially because of their role as agents of change, by inciting changes at the institutional level through interaction with their students. In addition, they motivate students to influence attitudinal changes in their families and in the society (Timm & Barth, 2020). The aim is how to direct attention to the problem, especially because it constitutes the greatest challenge facing humanity today, and the basis for this change is education (Mejía-Cáceres et al., 2020; Ortega and Muñiz, 2019).

Based on the background and problems raised, it is necessary that the formal and non-formal content presented in all educational institutions contribute to generate critical thinking in the population, in order to orient it to an attitudinal change that can contribute toward greater resilience to climate change (Falconí & Hidalgo, 2019; Merino et al., 2017). It is necessary to mention that this study focused on an objective population made up of high school students, thus the importance of establishing guidelines that promote awareness, working from the

method of each educational institution in which climate change is addressed in each subject in a cross-sectional and holistic manner, so students replicate this knowledge in their daily life (Leguía, 2018).

The aim of this research is to determine the validity of environmental education as an effective tool for socio-ecological resilience to climate change in high school institutions in the city of Cuenca, to propose strategies based on the guidelines of Environmental Education with a climate change approach, which can be effectively applied in the centers involved in the study.

2. Methodology

For this research, a non-experimental study was developed, based on a mixed methodological, qualitative and quantitative approach. The type of research was cross-sectional and descriptive, and was based on methodologies applied by authors such as Benítez et al., 2019; Dieste et al., 2019; Gädicke et al. 2017; González et al., 2019; López, 2016; Mwendwa, 2018. Likewise, according to the reality that is being experienced, each instrument included the aspect of virtual education, with the purpose of determining which educational institutions are working with EE.

2.1. Sample selection and área under study

There are three institutions in which the project was conducted, all located in the city of Cuenca: Unidad Educativa Luisa de Jesús Cordero (UELJC), Unidad Educativa Kennedy (UEK) and Unidad Educativa Las Pencas (UELPA), all offering High School. The three schools have a total of 412 students enrolled in the academic year 2020-2021, in addition to 31 teachers. A thematic expert, a teacher from the German Sthiele School in Cuenca, was also included in order to learn about the experiences that this institution has had in all ten years during the development of its Environmental Education Program "Small



Scientists in School”, in order to have a practical and local basis for the development of the proposal.

2.2. Data collection

Based on a broad literature review, in addition to a previous selection of the sample and areas under study, it has been determined to collect the relevant data for the study, using the following modalities:

- Student perception survey.
- Teacher perception survey.
- Structured-based interviews with key players within the problem.

Two questionnaires were designed for the surveys, one for the students and one for the faculty, all including Likert scale questions; a pilot test was applied with staff from other institutions to determine the reliability. With these responses, Cronbach Alpha Coefficient was determined through the RStudio software, which was calculated with values of 0.84 and 0.93, respectively, an aspect that indicates the feasibility (Estrada, 2012; Soler-Cárdenas & Soler-Pons, 2012).

Due to the amount of information to be collected, and applying the segments carried out by Estrada (2012) and Borroto et al. (2011), in addition to taking into account the current reality of virtual education, each instrument was divided into six categories, which were the following:

2.2.1. Student Survey

- General information.
- Vision of the environment and environmental problems.
- EE training.
- EE Importance.
- Environmental attitude and willingness to join the change.
- EE in times of pandemic and virtual education.

2.2.2. Teacher survey

- General information.
- Vision of the environment and environmental problems.
- EE training.
- Teaching methodologies and decision to incorporate change.
- Personal and professional motivation.
- EE during pandemic and virtual education.

From this point, forms for its application were defined, which were made using Google Forms platform, with the links: <https://forms.gle/1Fb84ua98idwFL7Q7y> <https://forms.gle/Epjjqrac2TUDQuM7A>. Once answered, statistical tools were applied for their representation through frequency tables, Chi Square test for the student survey by the size of the sample, and Fisher test by the low number of participants. All these calculations were performed using the Stata version 16.1 software.

As for the interviews, principal, vice-principal and the academic coordination of each institution were included, incorporating as well a thematic expert from another educational institute. The content analysis was systematized within a methodology called 4L matrix (Ferrer et al., 2019), which determines the limitations, achievements, lines to follow, and lessons learned by each institution during the implementation of EE strategies. Questions were created in such a way that they correspond to the objectives of the research, generating interaction with each participant.

3. Results

3.1. Content analysis of the interviews

At this point, the aim was to determine the status of the situation of each institution in terms of the approaches, methodologies and content applied in Environmental Education, in addition to knowing whether EE was a priority aspect within schools and in the management of curri-



culum subjects. In order to achieve this, authorities from two institutions and a thematic expert were interviewed. The following information was obtained through the systematization of the information and applying the methodology of the 4L matrix:

3.1.1. Achievements

The institutions see as great achievements the wide variety of EE projects that have been implemented during face-to-face classes, and which were focused on better management of resources such as water and energy, in addition to nature-care behaviors and awareness of students and teachers on the subject. They believe that students have improved their behavior and in fact reduced the amount of plastic waste by separating the residues and reducing the high percentage of water waste. This last aspect is corroborated by a decrease in the items corresponding to the water sheets.

3.1.2. Limitations

The main limitations are focused on the reduced training provided to teachers in the institutions, thus feeling demotivated to applying EE strategies with their students. Resistance to new methodologies established by Mineduc or MAE has often been observed, or the fact that activities in this area have not had a focus beyond working with recycled materials manually. Another limitation is linked to the virtual modality, which limited and paralyzed certain activities that were being carried out by these institutions, in order to take their students to other locations to share with nature.

3.1.3. Lessons learned

It is important to mention the following points: work has been done through agreements with institutions such as ETAPA and EMAC, as they are always willing to collaborate on these initiatives. Schools like Kennedy and the German College, within the Student Participation Program, have proposed an interesting initiative for students

to become educators, whether through videos or classes. At UELJC and Kennedy a lot of work is done on the subject of student participation, specially because faculty members with more knowledge in the area belong to this sub-level.

3.1.4. Lines to follow

The three institutions agree on the following: when returning to face-to-face classes, environmental projects must be continuous, even working on how to improve them. New lines of work, beyond waste and water management, should also be incorporated, as well as other topics in which the students are interested to be actively involved. The objective of these projects should not only be to work with the student, but also to involve teachers who also generate environmental awareness, because they are the ones responsible for building this knowledge. Projects must be generated as an initiative of the faculty, using innovative digital tools and motivation, which is the most important thing. Another important aspect is that connectivity is quite large now, thus agreements can be generated not only with state-owned enterprises but with the private sector, working between the same educational institutions to compensate the constraints that each has. The aim is to work in a collaborative environment with the academia and public and private enterprise.

These educational institutions know about how to work on Environmental Education, yet they are aware that there are still several aspects in which they must continue to work to achieve the proposed objectives, starting from a greater inclusion of these topics within curricular planning, but it would require greater control of the authorities to verify that teachers are actually complying with what is proposed, without becoming a limiting agent with excessive control. Everyone wants to continue with the projects already proposed once they are back to face-to-face classes, and so they are also willing to collaborate actively in those that allow them to continue improving



without meaning investment of resources due to the economic situation of each institution.

3.2. Analysis of surveys: Students

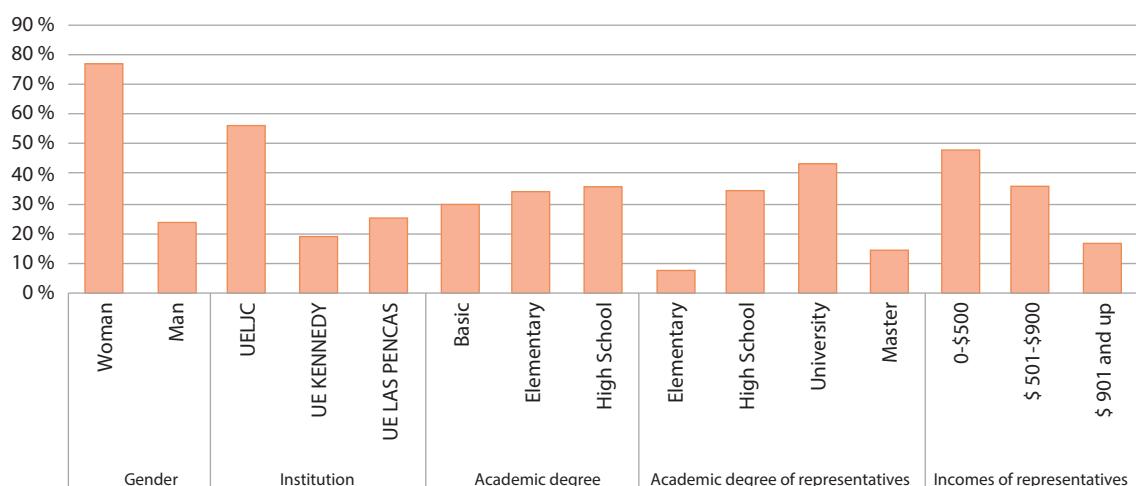
The questionnaire was applied to 412 students in the three educational institutions. To start with the analysis, the correlation between the responses of all the variables was determined to know the influence one answer has on the other, and the possibility that the students, due to laziness or lack of time, have answered the whole questionnaire with the same number on the scale is rejected. These correlations, within the same category, are

slightly higher than 0.5, indicating that, as the questions are similar to each other, they are related. However, when compared to questions in different categories, values are less than 0.5, showing that respondents were dedicated to answering carefully and in line with their reality. Below is an analysis of each category within the form.

3.2.1. Category 1: Overview

Figure 1 shows the values determined for this section. It is noteworthy a greater participation of female students, since UELJC is an institution with 100% female students.

Figure 1. Summary of Answers – Category 1 Students



Source: Own elaboration.

Analyzing the interdependence of variables in this category with others using Chi Square test, it is determined that when having a mostly female sample, this aspect does influence the responses obtained. There are many studies that have shown that women are more environmentally friendly than men (Olsson & Gericke, 2017; Vicente et al., 2018). It is important to note that the degree of schooling achieved by parents of students has a large percentage influence on their perception of all the topics addressed in the survey. 43% of parents have

university degrees, so it is inferred that they have greater knowledge of the current reality and may be positively influencing the behavior of the students. Finally, most families have a monthly salary that is equivalent to that of the Ecuadorian basic basket, so they are middle to low economic class, representing 48.1% of the sample analyzed. This aspect may be influencing the behavior of the student, especially the fact that by not having all the necessary resources, there is no culture of waste and/or consumerism as in other social strata.



3.2.2. Category 2: Environmental vision and environmental problems

It is quite clear that students are aware of the importance of the current environmental problems mentioned, especially those related to air and water pollution. These responses may be related to the fact that there are a large number of environmental campaigns in social networks, focused on mentioning the emission of polluting gases by vehicular traffic and industrial activity, as well as those that mention the enormous amount of plastic existing in the bodies of water and that are affecting aquatic biodiversity.

3.2.3. Category 3: EE Training

The student understands that human beings have a fundamental role in socio-ecological resilience to climate change, placing them as beings aware that they are the main actors in the environmental action. It is shown that the perception of contents and the approach worked during classes do not have a strong impact on the group.

3.2.4. Category 4: Importance of Environmental Education

Student emphasize that they understand the importance of EE and how it contributes to a better adaptation and mitigation to climate change. Similarly, as a generation born after the new millennium, the access to the technology has allowed that they see technological innovation as the best way to solve this climate crisis by placing it above EE.

3.2.5. Category 5: Environmental attitude and willingness to join change

It is remarkable that students are willing to make positive changes in favor of the environment from their homes, applying various simple strategies that would easily achieve an attitudinal change in each of them.

3.2.6. Category 6: Environmental education in times of pandemic and virtual education

In this last category, by prioritizing contents due to ministry provisions, the approach, content and methodology regarding EE had to change, without having a significant impact on students, making them to continue being motivated to find new and better alternatives to the problem posed, with the necessary support of their teachers.

3.3. Survey analysis: Teachers

A correlation analysis between variables was done. In applying this test, only the values within Category 2, which is quite similar to that of the study survey, have values greater than 0.5, due to the similarity between the variables; values are lower in the other categories, indicating that the faculty responded in a way that reflects their reality. In the following points, a description of the responses obtained is detailed.

3.3.1. Category 1: General information.

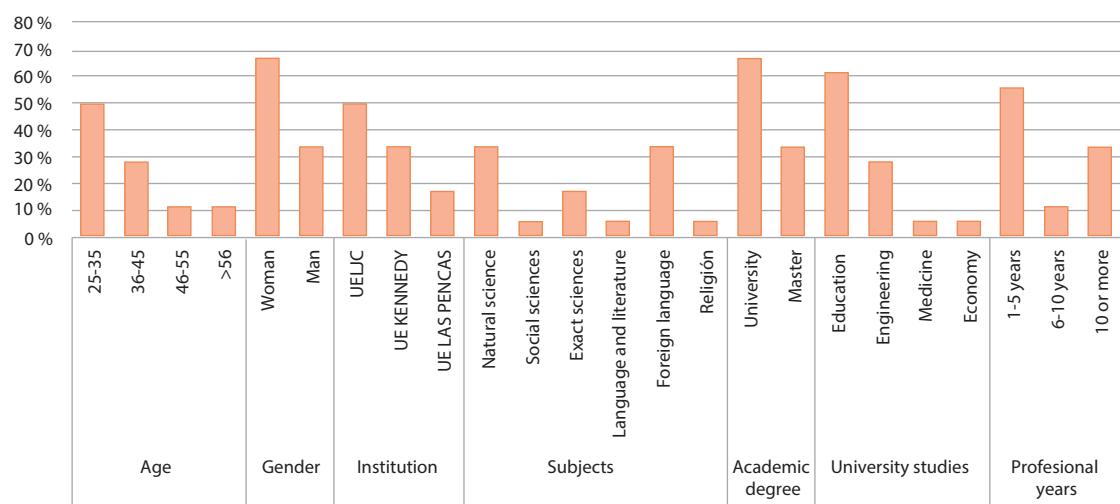
The frequencies according to the required variables are presented in Figure 2 as general information. Within this scope, it is emphasized that the majority of the sample was made up of young teachers with few years of experience, which, at the time of applying the Fisher Exact Test, it was observed that the age variable has a high degree of dependence on the responses obtained. This is due to the fact that the methodology used by each teacher will mostly depend on the experience and training he/she has. From the perspective of young teachers, older teachers tend to stay under traditional approaches and resist to change in some way; they find it more complex to adapt to new trends and feel that the methods they use are effective for fulfilling their objectives. On the contrary, younger teachers are highly sensitive to change, as they always find ways to continue learning new strategies, and as the new generations they grew up with greater ecological



awareness, allowing them to be involved in these topics from the subject they teach. In general, aspects such as the area of study in which they work or the career they studied influence the answers obtained, especially because the non-

science teacher has difficulty finding ways to relate the subject to EE. Most of them have information from different branches of knowledge, so the perspectives on the subject are different.

Figure 2. Summary of responses – Category 1 Teachers



Source: Own elaboration.

3.3.2. Category 2: Vision of the environment and environmental problems

Out of the answers obtained, most of the faculty members surveyed have a clear notion about the impact, the problems mentioned, and the environment; and none selects the 'completely disagree' option in the whole category. Similarly, most recognize that human beings are very important for the environmental crisis.

3.3.3. Category 3: EE Training

The results show that teachers agree and disagree with the variables regarding whether they have studied environmental content, the training received, the knowledge of other projects besides TiNi and the application of this methodology. It corresponds to what was mentioned by the

authorities during the interviews, when saying that many teachers are unaware of how to relate their subjects to EE and that there is a need of trained personnel who can present this information and improve this area. It also shows that respondents understand that the EE must address the relationships between all components of the environment and that the EE must be a common project for the entire educational community.

3.3.4. Category 4: Teaching methodologies and willingness to incorporate change

Within this category, it is quite noticeable that the faculty mostly agree with the points explained, which shows that they are motivated to actively involve students in the teaching-learning process when working with environmental content. However, they do not seem to feel that the



methodologies they are currently working with are effective for students to achieve meaningful learning in this area.

3.3.5. Category 5: Personal and professional motivation

The answers obtained in this category are quite varied and two main aspects are highlighted. There is a clear lack of agreement that only the Natural Sciences area should include EE topics, or that they are reviewing these issues only when curriculum planning requires them, which is favorable since it shows that most teachers feel that this subject should be addressed from all subjects. It is also clearly stated that the EE must be taught from all areas.

3.3.6. Category 6: Pandemic Environmental Education and Virtual Education

Teachers states that EE must be a priority and be included in all subjects, even during virtual classes. Another important aspect is that most have decided to continue reviewing environmental topic during pandemic.

4. Discussion and conclusions

EE for climate change has become a focal point for society's socio-ecological resilience to this global phenomenon (Busch et al., 2019). It is important that educational institutions become the main transmitters, not only of information, but of good habits for their replication by the student, without forgetting that human values are taught at home, and that the role of the faculty is based on serving as a guide for students to form their own understanding of each subject taught in and out of classes (Fazey et al., 2007). Actors are countless since it is a major problem, but the three actors with more direct interaction were selected: students, teachers and authorities.

It is clear that teachers, students and authorities of the three institutions studied emphasize the importance of EE as an axis that contributes

toward the creation of environmental awareness, therefore, a behavioral change in favor of the environment in which they live. However, there are great limitations, at the general level these are related to priority content, and at the institutional level these are more derived from economic and infrastructure aspects, which cause the work in this area to be little developed and without clear or measurable results, beyond mentioning that the student is better classifying wastes or having more responsible water management.

The perception of the student in relation to EE is varied, and apparently, it has not had the desired impact. These subjects have not been properly discussed in class, and the projects and research that must be carried out for the subjects, especially in the Area of Natural Sciences, have been projects only done once, causing that only certain students be interested in continue researching and working on their own. According to the answers obtained and certain conversations with students during classes, they feel that the teacher must deepen more on these contents, that the activities done should be more than "using recycled material to assemble a model", they need to be allowed to express themselves and start combining the teacher's expertise with the student's motivation, so that these EE programs are effective.

Based on the results presented, it is necessary to establish clear guidelines that allow educational institutions to address EE from a holistic and cross-sectional perspective, changing the focus of its contents, modifying the traditional methodology and including innovative strategies, without representing an extra effort or investment, but instead constituting a main axis in the teaching-learning process. Organizations such as UNICEF and UNESCO have established guidelines focused on education for sustainable development from eco-pedagogy, which seeks to make the population more resilient toward change, working under the four basic educational foundations which are "learning to know, learning to do, learning to live together, and learning to be" (Fernández, 2003, p. 329). This is



the way the proposed objectives will be achieved, integrating several important aspects to generate an environmental culture that motivates behavioral changes at the individual and collective level (Sarmiento, 2013), becoming the focal point toward greater socio-ecological resilience to climate change.

Regardless the institution studied, the gender or socio-economic situation of these students, the level or specialization of the faculty and/or authorities, it is necessary to work on the motivation and commitment for an ecologically, sustainable and resilient environment. At this point, teachers have a big responsibility at the educational level, thus, the training they possess must be clear and allow them to transmit their knowledge in an innovative way, so that it involves the student in all processes: to learn the theory, apply it and transform it for its replication, and to carry out an active and inclusive education. Authorities should motivate teachers in knowing a lot more about the subject, providing them training for the development of the proposed projects, as well as for the evaluation of results and their continuous improvement.

References

- Benítez, F.F., Paredes, M.E.R., Collado-Ruano, J., Terán, E.F.H., & Ibarra, G.D.L. (2019). Environmental education program in Ecuador: Theory, practice, and public policies to face global change in the Anthropocene. *Ensaio: Avaliação e Políticas Públicas Em Educação*, 27(105), 859-880. <https://doi.org/10.1590/s0104-40362019002701950>
- Borroto, M., Rodríguez, L., Reyes, A., & López, B. A. (2011). Percepción ambiental en dos comunidades cubanas. *M+A. Revista Electrónica de Medioambiente*, 0(10), 13-29. https://doi.org/10.5209/rev_MARE.2011.n10.15854
- Bravo, D. (2017, septiembre 17). El ministro Fander Falconí presentó programa de educación ambiental. *El Comercio*. <https://bit.ly/3tzdx3s>
- Busch, K.C., Henderson, J.A., & Stevenson, K. T. (2019). Broadening epistemologies and methodologies in climate change education research. *Environmental Education Research*, 25(6), 955-971. <https://doi.org/10.1080/13504622.2018.1514588>
- Cadilhac, L., Torres, R., Calles, J., Vanacker, V., & Calderón, E. (2017). Desafíos para la investigación sobre el cambio climático en Ecuador. *Neotropical Biodiversity*, 3(1), 168-181. <https://doi.org/10.1080/23766808.2017.1328247>
- Castro, J., & Gallego, A. (2015). La educación energética una prioridad para el milenio. *Revista Científica*, 1(21), 97-110. <https://doi.org/10.14483/udistrital.jour.RC.2015.21.a11>
- Collado, J. (2019). Big History in the Ecuadorian Educational System: Theory, Practice, and Public Policies of Environmental Education. *Journal of Big History*, 3(2), 49-66. <https://doi.org/10.22339/jbh.v3i2.3250>
- Dieste, B., Coma, T., & Blasco-Serrano, A. C. (2019). Inclusión de los objetivos de desarrollo sostenible en el currículum de Educación primaria y secundaria en escuelas rurales de Zaragoza. *Revista Internacional de Educación para la Justicia Social*, 8(1), 97-115. <https://doi.org/10.15366/riejs2019.8.1.006>
- Estrada, L. (2012). *Concepciones sobre la Educación Ambiental de el cuerpo docente participantes en la Red Andaluza de EcoEscuelas* [Tesis doctoral, Universidad de Málaga]. <https://bit.ly/3f1CUFM>
- Falconí, F. (2018). *TiNi Tierra de niñas niños y jóvenes para el buen vivir*. Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura. <https://bit.ly/3o2aO1e>
- Falconí, F., & Hidalgo, E. (2019). Educación Ambiental y Formación Docente en el Ecuador. *Cuaderno de Política Educativa*, 7, 2-18. <https://bit.ly/3hgbv5I>
- Fazey, I., Fazey, J.A., Fischer, J., Sherren, K., Warren, J., Noss, R.F., & Dovers, S.R. (2007). Adaptive capacity and learning to learn as leverage for social-ecological resilience. *Frontiers in Ecology and the Environment*, 5(7), 375-380. [https://doi.org/10.1890/1540-9295\(2007\)5\[375:ACALTL\]2.0.CO;2](https://doi.org/10.1890/1540-9295(2007)5[375:ACALTL]2.0.CO;2)



- Fernández, M.L. (2003). *Humanismo para el siglo XXI: Propuestas para el Congreso Internacional "Humanismo para el siglo XXI"* (Vol. 31). Universidad de Deusto.
<https://bit.ly/3g7cOmy>
- Ferrer, A.M.A., Astudillo, J.E., & Martínes, J.S. (2019). La práctica del Alli Kawsay desde la resistencia. Caso de Zhiña, Ecuador. *Universum (Talca)*, 34(2), 81-104.
<https://doi.org/10.4067/S0718-23762019000200081>
- Gädicke, J., Ibarra, P., & Osses, S. (2017). Evaluación de las percepciones medioambientales en estudiantes de enseñanza media de la ciudad de Temuco, Región de La Araucanía. *Estudios pedagógicos (Valdivia)*, 43(1), 107-121.
<https://doi.org/10.4067/S0718-07052017000100007>
- Garcés, S. (2012). Contextualización de la Educación Ambiental. En *Educación, interculturalidad y ambiente: Experiencias prácticas en centros educativos en Ecuador* (pp. 27-46). FLACSO Ecuador. <https://bit.ly/3tBIZOm>
- González, A. (2016). Programa de Educación Ambiental sobre el cambio climático en la educación formal y no formal. *Revista Universidad y Sociedad*, 8(3), 99-107.
<https://bit.ly/3tzLAIA>
- González, E.J., Bello, L., Maldonado, A. L., Cruz, G.E., & Méndez, L.M. (2019). Nuevos desafíos para la educación ambiental: La vulnerabilidad y la resiliencia social ante el cambio climático. *UNED Research Journal*, 11(1), S71-S77. <https://doi.org/10.22458/urj.v11i1.2324>
- González, E., Maldonado, A., & Cruz, G. (2018). The vision of high school students regarding their vulnerability and social resilience to the major adverse effects of climate change in municipalities with a high risk of flooding / La visión de los jóvenes de bachillerato a su vulnerabilidad y resiliencia social frente a los embates del cambio climático en municipios de alto riesgo a inundaciones. *PsyEcology*, 9(3), 341-364.
<https://doi.org/10.1080/21711976.2018.1483568>
- Hardy, V., Cuevas, A., & Gallardo, O. (2019). Aprendizaje y resiliencia en la gestión local de riesgos de desastres. *Risk Management*, 11.
<https://bit.ly/3hf3oGE>
- IPCC (2018). *Summary for policy makers. In: Global warming of 1.5°C*. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty). IPCC. <https://bit.ly/3y1In82>
- Jackson, L. (2016). Education for Sustainable Development: From Environmental Education to Broader Views. En *Handbook of Research on Applied Learning Theory and Design in Modern Education* (Vol. 1, pp. 41-64). IGI Global.
<https://doi.org/10.4018/978-1-4666-9634-1.ch003>
- Kothari, A., Demaria, F., & Acosta, A. (2014). Buen Vivir, Degrowth and Ecological Swaraj: Alternatives to sustainable development and the Green Economy. *Development*, 57(3-4), 362-375. <https://doi.org/10.1057/dev.2015.24>
- López, J. (2016). *La mejora del proceso de enseñanza-aprendizaje en educación ambiental. Un estudio centrado en la educación general básica de Ecuador* [Tesis doctoral, Universidad Complutense de Madrid].
<https://bit.ly/33Il7hP>
- Lozano, R., Lukman, R., Lozano, F. J., Huisingsh, D., & Lambrechts, W. (2013). Declarations for sustainability in higher education: Becoming better leaders, through addressing the university system. *Journal of Cleaner Production*, 48, 10-19.
<https://doi.org/10.1016/j.jclepro.2011.10.006>
- Ministerio del Ambiente y Agua. (2017). *Estrategia Nacional de Educación Ambiental para el Desarrollo Sostenible* (Dirección de Información Seguimiento y Evaluación Unidad de Gestión del Conocimiento Ambiental Área de Educación Ambiental, p. 56). Ministerio del Ambiente y Agua.
<https://bit.ly/3o0SSnP>
- Mejía-Cáceres, M. A., Huérano, A., Reid, A., & Freire, L. M. (2020). Colombia's national policy of environmental education: A critical discourse analysis. *Environmental Education Research*, 0(0), 1-24.
<https://doi.org/10.1080/13504622.2020.1800594>
- Mineduc (2019). *Memoria de sostenibilidad del Programa de Educación Ambiental "Tierra*



- de Todos*" (Núm. 1; p. 50). Ministerio de Educación. <https://bit.ly/3f933Cr>
- Mineduc (2020). *Proyecto Educativo Institucional* (p. 66). Ministerio de Educación. <https://bit.ly/2RJrLla>
- Monroe, M.C., Plate, R.R., Oxarart, A., Bowers, A., & Chaves, W.A. (2019). Identifying effective climate change education strategies: A systematic review of the research. *Environmental Education Research*, 25(6), 791-812. <https://doi.org/10.1080/13504622.2017.1360842>
- Naciones Unidas (1989). Declaration of the United Nations Conference on the Human Environment, 1972. *Indian Journal of Public Administration*, 35(3), 680-684. <https://doi.org/10.1177/0019556119890340>
- Olsson, D., & Gericke, N. (2017). The effect of gender on students' sustainability consciousness: A nationwide Swedish study. *The Journal of Environmental Education*, 48(5), 357-370. <https://doi.org/10.1080/00958964.2017.1310083>
- Ortega, M.A.A., & Muñiz, R.M.M. L. (2019). Cambio climático y educación ambiental. *Quaestio-Revista de Estudos em Educação*, 21(1), 81-99. <https://doi.org/10.22483/2177-5796.2019v21n1p81-99>
- Pavez-Soto, I., León-Valdebenito, C., & Triadú-Figueras, V. (2016). Jóvenes universitarios y medio ambiente en Chile: Percepciones y comportamientos. *Revista Latinoamericana de Ciencias Sociales*, 14(2), 1435-1449. <https://doi.org/10.11600/1692715x.14237041215>
- Rodrigo-Cano, D., Picó, M.J., Dimuro, G., Rodrigo-Cano, D., Picó, M.J., & Dimuro, G. (2019). Los Objetivos de Desarrollo Sostenible como marco para la acción y la intervención social y ambiental. *RETOS. Revista de Ciencias de la Administración y Economía*, 9(17), 25-36. <https://doi.org/10.17163/ret.n17.2019.02>
- Sandoval-Díaz, J., Cuadra-Martínez, D., Orellana-Fonseca, C., & Sandoval-Obando, E. (2020). Diagnóstico comunitario ante desastres climáticos: Una experiencia de aprendizaje-servicio. *Alteridad*, 16(1), 23-37. <https://doi.org/10.17163/alt.v16n1.2021.02>
- Sarmiento, P.J. (2013). Bioética ambiental y ecopedagogía: Una tarea pendiente. *Acta bioethica*, 19(1), 29-38. <https://doi.org/10.4067/S1726-569X2013000100004>
- Severiche, C., Gómez, E., & Jaimes, J. (2016). La educación ambiental como base cultural y estrategia para el desarrollo sostenible. *Telos: Revista de Estudios Interdisciplinarios en Ciencias Sociales*, 18(2), 266-281. <https://bit.ly/3tvHWiZ>
- Soler-Cárdenas, S.F., & Soler-Pons, L. (2012). Usos del coeficiente alfa de Cronbach en el análisis de instrumentos escritos. *Revista Médica Electrónica*, 34(1), 01-06. <https://bit.ly/2Tc3nct>
- Timm, J.M., & Barth, M. (2020). Making education for sustainable development happen in elementary schools: The role of teachers. *Environmental Education Research*, 27(1), 1-17. <https://doi.org/10.1080/13504622.2020.1813256>
- UNICEF (2012). *Educación sobre el Cambio Climático y el Medio Ambiente* (Manual de escuelas amigas de la infancia, p. 44). Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura. <https://bit.ly/2QZham8>
- Vicente, M., Fernández, A., & Izagirre, J. (2018). Does gender make a difference in pro-environmental behavior? The case of the Basque Country University students. *Journal of Cleaner Production*, 176, 89-98. <https://doi.org/10.1016/j.jclepro.2017.12.079>



Normas Editoriales

(Publication guidelines)



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Publication Guidelines of «Alteridad»

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1. General information

«Alteridad» is a bilingual scientific publication of the Salesian Polytechnic University of Ecuador (UPS), published since January 2006 uninterruptedly, on a semi-annual basis (January-July).

It is an arbitrated scientific journal, which uses the peer-review system under the double-blind review, in accordance with the publication standards of the American Psychological Association (APA). The compliance with this system ensures authors an objective, impartial and transparent review process, making it easier for authors to be included in reference international databases, repositories and indexes.

«Alteridad» is indexed in the Web of Science's Emerging Sources Citation Index (ESCI), at the Scientific Electronic Library Online (SciELO), in the REDALYC Scientific Information System, in the directory and selective catalog of the Regional Online Information System for Scientific Journals of Latin America, the Caribbean, Spain and Portugal (Latindex), in the Directory of Open Access Journals (DOAJ), in the European Reference Index for the Humanities and Social Sciences (ERIHPLUS), in the Ibero-American Network of Innovation and Scientific Knowledge (REDIB), on the Dialnet Portal; it is evaluated in the Information Matrix for Journal Analysis (MIAR), the Integrated Classification of Scientific Journals (CIRC), and the Qualis review system for CAPES journals. In addition, it is in repositories, libraries and specialized catalogs around the world.

The journal is published in two versions: electronic (e-ISSN: 1390-8642) and printed (ISSN: 1390-325X) in Spanish and English; each manuscript is identified with a Digital Object Identifier System (DOI). All articles published in «Alteridad» have the Creative Commons Attribution-Non-Commercial-Share Equal license (RoMEO blue journal).

2. Scope and policies

2.1. Topics

«Alteridad» is a journal specialized in Education and its transdisciplinary lines such as Didactics, Public Policies, School Management, Edu-communication, ICT, Social Pedagogy, among others; and all those disciplines related to the main topic.

2.2. Sections

The journal has a semi-annual periodicity (20 articles per year), published in January and July and has two sections of five articles each by number; the first referring to a **Monographic** topic



prepared in advance and with thematic topic and the second, a section of **Miscellaneous**, composed of varied contributions within the theme of the publication.

2.3. Contributions

All manuscripts must be original, and must not have been published in any other journal or must not be in the arbitration or publication process in another journal. Empirical research results are published in Spanish, Portuguese or English, and studies and state-of-the-art are also admissible:

- **Researches:** 5000 to 6500 text words, including title, abstracts, descriptors, tables and references. Particular assessment will be made of research results, methodological rigor, the relevance of the subject, the quality of scientific discussion, the variety, timeliness and richness of bibliographic references (preferably publications indexed in JCR and Scopus). At least 35 references are expected.
- **Literature studies and reviews:** 6000 to 7000 text words, including tables and references. The debate generated, the relevance of the subject, the originality, current and selective contributions and references of around 70 works (preferably from publications indexed in JCR and Scopus) will be particularly valued.

3. Editorial process

3.1. Submission of manuscripts

Manuscripts must be submitted only and exclusively through the Open Journal System (OJS), in which all authors must register in advance, although only one will be responsible for the correspondence. No author may submit or review two manuscripts simultaneously, estimating a time of four consecutive numbers (2 years). An article may have a maximum of 3 authors, although if justified depending on the size of the study, there may be up to 5.

«Alteridad» informs the reception of the manuscript submitted by the authors; the information related to the acceptance or rejection of the manuscript is sent by email and the platform; and in the case of acceptance, the author is also informed of the editing process.

In the website of the journal, in the Guidelines section, are presented the Guidelines for the Authors, the format of the structure of the articles, the cover page and cover letter, the pre-submission list, the evaluation forms by the external reviewers and a guide for the submission of the article through OJS. Before the submission, it is strongly recommended that the manuscript be checked with the Pre-Check Protocol. Two documents should be sent simultaneously:

- a) Cover page and cover letter (use the official model), on which will appear
 - Cover page (Title, Abstract and key words provided in the Manuscript).
 - Full name of each of the authors, organized in priority order; followed by the professional category, institution, email of each author and ORCID number. It is mandatory to indicate if the authors have a PhD academic degree (include Dr. before the name).
 - A **Cover letter** will also be included indicating that the manuscript is an original contribution, has not been sent or evaluated in another journal, with the signature of the authors, and accep-



tance (if applicable) of formal changes to the manuscript compliant with the rules and partial transfer of rights to the publisher.

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3.2. Revision process

Upon having received the document and in a maximum period of 30 days, the correspondence author shall receive a notification, indicating whether the manuscript is estimated or dismissed for the arbitration process by the scientific reviewers. In the case that the article has formal problems, or does not address the educational subject, or has a high similarity percentage to another document(s), the editorial board shall dismiss the work without the option to return it. Conversely, if it has superficial problems, it will be returned to the author for the corrections before starting the evaluation process. The submission date of the article will be considered based on the final submission when the article is presented with the corrections.

The articles will be scientifically evaluated by an average of three experts of the topic. Reports will indicate the following recommendations: Accept the Submission, Publishable with Modifications, Sent the manuscript back for its Review, Not Publishable. The acceptance or rejection of the manuscript for its publication will be decided from the analysis of external reports. In the case of dissenting results, it shall be forwarded to a new opinion, which shall be final. The protocol used by reviewers is public (researches; studies and state-of-the-art).

In general, once the external scientific reviews are taken into view, the criteria justifying the decision on the acceptance/rejection of the manuscript by the Editorial board are:

- Current and novelty.
- Relevance and significance: Advancement of scientific knowledge.
- Originality.
- Reliability and scientific validity: Proven methodological quality.
- Organization (logical coherence and formal presentation).
- External support and public/private funding.
- Co-authoring and internationalization degree of the proposal and the team.
- Presentation: Good writing.

The timeline for the scientific evaluation of manuscripts, after the previous estimation procedures by the Editorial Board is a maximum of 100 days. In relation to the manuscripts sent for Calls for papers, their scientific review dates begin once the call finishes. Manuscripts that are positively evaluated and require modifications must be sent with the changes, within the next 15 days.

3.3. Editing and publishing of the manuscript

The edition and layout processes of the accepted articles is performed by the Technical Board of the journal in coordination with the Abya-Yala Editorial. «Alteridad» reserves the right to make style corrections and editorial changes if necessary to improve the manuscript. A proof of printing in PDF format will be sent to the authors for the correction of typography and spelling in a maximum of three days.



Abya-Yala Editorial will carry out, free of charge for the authors, the professional translation of the final version of the manuscript into the English language (or Spanish, according to the original version), which will guarantee the consultation and international dissemination of the manuscript. The articles will be published on the journal's platform in a timely manner. All articles, in their two language versions (Spanish and English), are published in PDF, HTML, EPUB and XML-Jats format.

3.4. Promotion and dissemination of the published article

The authors are committed to give maximum diffusion to their article published in «Alteridad». In this sense, they are encouraged to promote their published article on academic networks (Academia.edu, ResearchGate, Mendeley, Kudos), social (Twitter, Facebook, LinkedIn, also publishing the DOI), institutional repositories, web or blog staff, among others. Authors are also encouraged to share the published article through email lists, research groups and personal contacts.

«Alteridad» has a Metric Measurement System (PlumX) that allows verifying the compliance with this commitment. For the submission of future articles by authors of «Alteridad», the impact of previous works will be taken into account.

4. Structure of the manuscripts

The manuscripts shall be submitted in typeface Arial 10, simple spacing, fully justified and without tabs or white space between paragraphs. Only large blocks (title, authors, abstracts, key words, credits, and captions) will be separated with white space. The page must be 2 centimeters in all its margins. Manuscripts must be submitted in Microsoft Word document (.doc or .docx), requiring the file to be anonymized in File Properties to avoid the information related to the identification of the author/s.

4.1. Cover page

Title (Spanish and English): Concise but informative, in Spanish on the first line and in English in the second, consisting of as many significant terms as possible. The title is not only the responsibility of the authors, and changes can be proposed by the Editorial Board. A maximum of 80 characters with space are accepted.

Abstract (Spanish and English): It must be presented in a concise way and in this order: Justification, objectives, methodology used (approach and scope), more relevant results, discussion and main conclusions. It must be written impersonally “The present work analyzes...”. In the case of the Abstract, the use of automatic translators will not be accepted because of their poor quality. It will be between 220/230 words.

Key words (Spanish and English): 6 keywords must be presented for each language version directly related to the topic of the manuscript. The use of the keywords presented in UNESCO's Thesaurus will be positively valued (<http://bit.ly/2kIgN8I>) or the controlled vocabulary of IRESIE (<http://bit.ly/2mgg4m8>).

4.2. IMRDC Structure

For those works involving empirical research, the manuscripts will strictly respect the IMRDC structure, with the headings of Economic Supports and Notes being optional. The works



involving Literature Studies and Revisions may be more flexible under their headings, especially in Methodology, Results and Discussion. In all types of works, bibliographic references are mandatory.

1. **Introduction and state of the play:** It should include the theoretical foundations and purpose of the study, using bibliographic citations, as well as the review of the most significant literature of the topic at the national and international level. The use of high-impact references (JCR and Scopus) will be positively valued.
2. **Methodology:** It must be written in a way that the reader can easily understand the development of the research. It should contain the explanation on the approach (quantitative, qualitative or mixed) and the scope (exploratory, descriptive, correlational or explanatory). When appropriate, it shall describe the sample and the sampling form, as well as it must refer to the type of statistical analysis applied. If it is an original methodology, it is necessary to set out the reasons that have led to its use and describe the possible limitations.
3. **Results:** Efforts will be made to highlight the most relevant results and observations of the investigation, describing, without making judgments, the material and methods used for the analysis. The results will be presented in figures or/and tables according to the journal's standards (See section 4.4). They will appear in a logical sequence in the text, tables or figures, avoiding data redundancy.
4. **Discussion and conclusions:** Discussion and conclusions: It will summarize the most important findings, relating the observations with interesting studies, pointing to contributions and limitations, without resulting in data already commented in other sections. In addition, the discussion and conclusions section should include deductions and lines for future research.

4.3. Economic support and notes

Economic support (optional): Council Science Editors recommends that authors specify the source of funding for the research. Works on the endorsement of competitive national and international projects will be considered a priority. In any case, for the scientific assessment of the manuscript, it must be anonymized with XXXX only for its initial evaluation, in order not to identify authors and research teams, which must be set out in the Presentation Letter and subsequently in the final manuscript.

Notes (optional) will go, only if necessary, at the end of the article (before references). They should be used to clarify terms or make marginal annotations. Note numbers are placed in superscript, both in the text and in the final note. Notes collecting simple bibliographic citations (without comments) are not allowed, as these should be in the references. If it contains a cite, the reference must also be found in the Bibliography section.

4.4. Bibliography

Bibliographical citations should be reviewed in the form of references to the text. Bibliography that is not cited should not be included in the text. Its number must be sufficient and necessary to contextualize the theoretical framework, methodology used and research results in an international research space: Minimum 35 for empirical research manuscripts, and around 70 for literature studies and reviews.

They will be presented alphabetically by the author's first last name (adding the second one only in case the first one is very commonly used, and joined with a hyphen). The quote should be extracted from the original documents, preferably journals and to a lesser extent books. Given the significance of citation indices and impact factor calculations, the use of references from indexed



publications in JCR and/or Scopus and the correct citation following APA 6 norms is valued (<http://bit.ly/2meVQcs>).

It is mandatory that quotes with DOI (Digital Object Identifier System) be reflected in the References (can be obtained on <https://search.crossref.org/>). All journals and books without DOI must contain a link (in its online version, if applicable, and in a shorten version using Bitly: <https://bitly.com/>), and the websites must include the consultation date using the format provided.

Journal articles must be presented in English, with the exception of those in Spanish and English, in which case they will be presented in both languages using square brackets.

Norms for the references

a) Periodic publications

- **Journal article (one author):** Ochoa, A. (2019). The type of participation promoted in schools is a constraint factor for inclusive education. [El tipo de participación que promueve la escuela, una limitante para la inclusión]. *Alteridad*, 14(2), 184-194. <https://doi.org/10.17163/alt.v14n2.2019.03>
- **Manuscript from a journal (until twenty authors):** Guarderas, P., Larrea, M., Cuvi, J., Vega, C., Reyes, C., Bichara, T., Ramírez, G., Paula, Ch., Pesantez, L., Íñiguez, A., Ullauri, K., Aguirre, A., Almeida, M., & Arteaga, E. (2018). Sexual harassment in Ecuadorian universities: Content validation for instrument development. [Acoso sexual en las universidades ecuatorianas: Validez de contenido de un instrumento de medición]. *Alteridad*, 13(2), 214-226. <https://doi.org/10.17163/alt.v13n2.2018.05>
- **Manuscript from a journal (without DOI):** López, L., & Ramírez-García, A. (2014). Medidas disciplinarias en los centros educativos: ¿Suficientes contra el acoso escolar? *Perfiles Educativos*, 36(145), 32-50. <https://bit.ly/37Xd5mw>.

b) Books and chapters of books

- **Complete books:** Cuéllar, J.C., & Moncada-Paredes, M.C. (2014). *El peso de la deuda externa ecuatoriana*. Abya-Yala.
- **Chapter of books:** Padilla-Verdugo, J. (2014). La Historia de la Educación desde los enfoques del conocimiento. In E. Loyola (Ed.), *Ciencia, Tecnología y Sociedad (CTS). Miradas desde la Educación Superior en Ecuador* (pp. 107-128). Abya-Yala. <https://bit.ly/3etRnZH>

c) Electronic means

- Aunión, J. (2011, marzo 12). La pérdida de autoridad es un problema de toda la sociedad, no es específico del aula. *t*. <https://bit.ly/2NIM9Dp>

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The headings of the article shall be numbered in Arabic. These will be without full case of capital letters, no underscores, no bold ones. The numbering must be at most three levels: 1. / 1.1. / 1.1.1. A carriage return will be established at the end of each numbered heading.

Tables and figures must be presented in the text in Microsoft Word® located on the place where the authors consider they should be. They shall be used only when necessary and suitable, their use should be limited for reasons of spaces (maximum 6 between tables and figures). Both must be listed



in Arabic and titled with the description of their content. If the source of the table or figure is not of its own elaboration, the authors must incorporate the source consulted below the table [for example, Source: Romero-Rodríguez (2016, p. 32)].

Tables must be elaborated in Microsoft Word document, thus tables cut and pasted from other documents that cannot be edited in the diagramming process will not be accepted. The figures, in addition to being incorporated in the Microsoft Word document®, must be sent as supplementary material during the submission in the «Alteridad» OJS, with a quality greater than 600 dpi, in TIFF, JPEG or PNG files.

5. Fees and APC

«Alteridad» is an Open Access journal, included in the Directory of Open Access Journals (DOAJ) that offers all its production online for the entire scientific community. It also does not set any economic fees throughout the editorial process for the publication of the articles, including scientific review, layout and translation thereof. There is no publication fee, no Article Processing Charge (APC) associated with this publication, neither for authors nor for readers. The journal is also licensed by Creative-Commons Attribution-Non-Commercial-Share Equal (RoMEO blue journal), which allows free access, download and archive of published articles. All expenses, inputs and financing of «Alteridad» come from the contributions made by the Salesian Polytechnic University.

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Normas de Publicación en «Alteridad»

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1. Información general

«Alteridad» es una publicación científica bilingüe de la Universidad Politécnica Salesiana de Ecuador (UPS), editada desde enero de 2006 de forma ininterrumpida, con periodicidad fija semestral (enero-julio).

Es una revista científica arbitrada, que utiliza el sistema de evaluación externa por expertos (*peer-review*), bajo metodología de pares ciegos (*doble-blind review*), conforme a las normas de publicación de la *American Psychological Association* (APA). El cumplimiento de este sistema permite garantizar a los autores un proceso de revisión objetivo, imparcial y transparente, lo que facilita a la publicación su inclusión en bases de datos, repositorios e indexaciones internacionales de referencia.

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La revista se edita en doble versión: electrónica (e-ISSN: 1390-8642) e impresa (ISSN: 1390-325X) en español e inglés; siendo identificado cada trabajo con un *Digital Object Identifier System* (DOI). Todos los artículos publicados en «Alteridad» tienen licencia Creative Commons Reconocimiento-No-Comercial-Compartir igual (RoMEO blue journal).

2. Alcance y política

2.1. Temática

«Alteridad» es una revista especializada en Educación y sus líneas transdisciplinarias como Didáctica, Políticas Públicas, Gerencia de Centros Escolares, Educomunicación, TIC, Pedagogía Social, entre otras; y todas aquellas disciplinas conexas interdisciplinariamente con la línea temática central.

2.2. Secciones

La revista tiene periodicidad semestral (20 artículos por año), publicada en los meses de enero y julio y cuenta por número con dos secciones de cinco artículos cada una, la primera referida a un



tema **Monográfico** preparado con antelación y con editores temáticos y la segunda, una sección de **Misceláneas**, compuesta por aportaciones variadas dentro de la temática de la publicación.

2.3. Aportaciones

Todos los trabajos deben ser originales, no haber sido publicados en ningún medio ni estar en proceso de arbitraje o publicación. Se editan preferentemente resultados de investigación empírica, redactados en español, portugués o inglés, siendo también admisibles estudios y selectas revisiones de la literatura (*state-of-the-art*):

- **Investigaciones:** 5000 a 6500 palabras de texto, incluyendo título, resúmenes, descriptores, tablas y referencias. Se valorarán especialmente los resultados de la investigación, el rigor metodológico, la relevancia de la temática, la calidad de la discusión científica, la variedad, actualidad y riqueza de las referencias bibliográficas (preferiblemente de publicaciones indexadas en JCR y Scopus). Se esperan mínimo 35 referencias.
- **Estudios y revisiones de la literatura:** 6000 a 7000 palabras de texto, incluidas tablas y referencias. Se valorará especialmente el debate generado, la relevancia de la temática, la originalidad de las aportaciones y referencias justificadas, actuales y selectivas de alrededor de 70 obras (preferiblemente de publicaciones indexadas en JCR y Scopus).

3. Proceso editorial

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En un plazo máximo de 30 días, a partir de la recepción del documento, el autor de correspondencia recibirá una notificación, indicando preliminarmente si se estima o desestima para el arbitraje por los revisores científicos. En el caso de que el artículo presente deficiencias formales, no trate el tema educativo, o tenga un elevado porcentaje de similitud con otro(s) documento(s), el Consejo editorial desestimará el trabajo sin opción de vuelta. Por el contrario, si presenta carencias superficiales de forma, se devolverá al autor para su corrección antes de comenzar del proceso de evaluación. La fecha de recepción del artículo no computará hasta la recepción correcta del mismo.

Los artículos serán evaluados científicamente por una media de tres expertos en el tema. Los informes indicarán las siguientes recomendaciones: Aceptar el envío, Publicable con modificaciones, Reenviar para revisión, No publicable. A partir del análisis de los informes externos, se decidirá la aceptación o rechazo de los artículos para su publicación. En el caso de resultados discrepantes se remitirá a un nuevo dictamen, el cual será definitivo. El protocolo utilizado por los revisores es público (Investigaciones; Estudios y revisiones de la literatura).

En general, una vez vistas las revisiones científicas externas, los criterios que justifican la decisión sobre la aceptación/rechazo de los trabajos por parte del Consejo Editor son los siguientes:

- Actualidad y novedad.
- Relevancia y significación: Avance del conocimiento científico.
- Originalidad.
- Fiabilidad y validez científica: Calidad metodológica contrastada.
- Organización (coherencia lógica y presentación formal).
- Apoyos externos y financiación pública/privada.
- Coautorías y grado de internacionalización de la propuesta y del equipo.
- Presentación: Buena redacción.

El plazo de evaluación científica de manuscritos, superados los trámites previos de estimación por el Consejo Editor, es de 100 días como máximo; los remitidos para *Calls for papers*, sus fechas de revisión científica se inicien al cierre de los mismos. Los trabajos que sean evaluados positivamente y requieran modificaciones, deberán ser reenviados con los cambios, dentro de los siguientes 15 días.

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El proceso de corrección de estilo y maquetación de los artículos aceptados es realizado por el Consejo Técnico de la Revista en coordinación con la Editorial Abya-Yala. «Alteridad» se reserva el derecho de hacer corrección de estilo y cambios editoriales que considere necesarios para mejorar el trabajo. A los autores de artículos se enviará una prueba de impresión en formato PDF para su corrección únicamente de tipografía y ortografía en un máximo de tres días.

La Editorial Abya-Yala realizará, gratuitamente para los autores, la traducción profesional de la versión final del manuscrito al idioma inglés (o español, según la versión original), lo que garantizará



su consulta y difusión internacional. Los artículos serán publicados en la plataforma de la revista en tiempo y forma. Todos los artículos, en sus dos versiones idiomáticas (español e inglés), son publicados en formato PDF, HTML, EPUB y XML-Jats.

3.4. Promoción y difusión del artículo publicado

Los autores se comprometen a darle la máxima difusión a su artículo publicado en «Alteridad». En este sentido, se les exhorta a compartir y archivar su artículo publicado en las redes académicas (Academia.edu, ResearchGate, Mendeley, Kudos), sociales (Twitter, Facebook, LinkedIn, publicando en estos también el DOI), repositorios institucionales, web o blog personal, entre otras. Asimismo, se anima a los autores a compartir el artículo publicado a través de listas de correo electrónico, grupos de investigación y contactos personales.

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Los trabajos se presentarán en tipo de letra Arial 10, interlineado simple, justificado completo y sin tabuladores ni espacios en blanco entre párrafos. Solo se separarán con un espacio en blanco los grandes bloques (título, autores, resúmenes, descriptores, créditos y epígrafes). La página debe tener 2 centímetros en todos sus márgenes. Los trabajos deben presentarse en documento de Microsoft Word (.doc o .docx), siendo necesario que el archivo esté anonimizado en Propiedades de Archivo, de forma que no aparezca la identificación de autor/es.

4.1. Portada

Título (español) / Title (inglés): Conciso pero informativo, en castellano en primera línea y en inglés en segunda, conformado por el mayor número de términos significativos posibles. El título no solo es responsabilidad de los autores, pudiéndose proponer cambios por parte del Consejo Editorial. Se aceptan como máximo 80 caracteres con espacio.

Resumen (español) / Abstract (inglés): Se describirán de forma concisa y en este orden: Justificación del tema, objetivos, metodología empleada (enfoque y alcance), resultados más relevantes, discusión y principales conclusiones. Ha de estar escrito de manera impersonal “El presente trabajo analiza...”. En el caso del *Abstract* no se admitirá el empleo de traductores automáticos por su pésima calidad. Tendrá como extensión entre 220/230 palabras.

Descriptores (español) / Keywords (inglés): Se deben exponer 6 descriptores por cada versión idiomática relacionados directamente con el tema del trabajo. Será valorado positivamente el uso de las palabras claves expuestas en el Thesaurus de la UNESCO (<http://bit.ly/2kIgN8I>) o del Vocabulario controlado del IRESIE (<http://bit.ly/2mgg4m8>).

4.2. Estructura IMRDC

Para aquellos trabajos que se traten de Investigaciones de carácter empírico, los manuscritos respetarán rigurosamente la estructura IMRDC, siendo opcionales los epígrafes de Apoyos y Notas. Los trabajos que se traten de Estudios y revisiones de la literatura podrán ser más flexibles en sus



epígrafes, especialmente en Metodología, Resultados y Discusión. En todas las tipologías de trabajos son obligatorias las Referencias bibliográficas.

1. **Introducción y estado de la cuestión:** Debe incluir los fundamentos teóricos y el propósito del estudio, utilizando citas bibliográficas, así como la revisión de la literatura más significativa del tema a nivel nacional e internacional. Se valorará positivamente el uso de referencias de alto impacto (JCR y Scopus).
2. **Metodología:** Debe ser redactado de forma que el lector pueda comprender con facilidad el desarrollo de la investigación. Deberá contener la explicación sobre el enfoque (cuantitativo, cualitativo o mixto) y el alcance (exploratorio, descriptivo, correlacional o explicativo). En su caso, describirá la muestra y la forma de muestreo, así como se hará referencia al tipo de análisis estadístico aplicado. Si se trata de una metodología original, es necesario exponer las razones que han conducido a su empleo y describir sus posibles limitaciones.
3. **Resultados:** Se procurará resaltar los resultados y las observaciones más relevantes de la investigación, describiéndose, sin hacer juicios de valor, el material y métodos empleados para el análisis. Los resultados se expondrán en figuras o/y tablas según las normas de la revista (Ver epígrafe 4.4). Aparecerán en una secuencia lógica en el texto, las tablas o figuras imprescindibles, evitando la redundancia de datos.
4. **Discusión y conclusiones:** Resumirá los hallazgos más importantes, relacionando las propias observaciones con estudios de interés, señalando aportaciones y limitaciones, sin redundar datos ya comentados en otros apartados. Asimismo, el apartado de discusión y conclusiones debe incluir las deducciones y líneas para futuras investigaciones.

4.3. Apoyos y Notas

Apoyos (opcionales): El *Council Science Editors* recomienda a los autor/es especificar la fuente de financiación de la investigación. Se considerarán prioritarios los trabajos con aval de proyectos competitivos nacionales e internacionales. En todo caso, para la valoración científica del manuscrito, este debe ir anonimizado con XXXX solo para su evaluación inicial, a fin de no identificar autores y equipos de investigación, que deben ser explicitados en la Carta de Presentación y posteriormente en el manuscrito final.

Las notas (opcionales) irán, solo en caso necesario, al final del artículo (antes de las referencias). Deben ser utilizadas para aclarar términos o hacer anotaciones marginales. Los números de notas se colocan en superíndice, tanto en el texto como en la nota final. No se permiten notas que recojan citas bibliográficas simples (sin comentarios), pues éstas deben ir en las referencias. En caso de contener alguna cita, su referencia deberá encontrarse también en la sección de Referencias bibliográficas.

4.4. Referencias bibliográficas

Las citas bibliográficas deben reseñarse en forma de referencias al texto. No debe incluirse bibliografía no citada en el texto. Su número ha de ser suficiente y necesario para contextualizar el marco teórico, la metodología usada y los resultados de investigación en un espacio de investigación internacional: Mínimo 35 para los manuscritos de investigaciones de carácter empírico, y alrededor de 70 para los estudios y revisiones de literatura.

Se presentarán alfabéticamente por el apellido primero del autor (agregando el segundo solo en caso de que el primero sea de uso muy común, y unido con guion). Las citas deberán extraerse de



los documentos originales preferentemente revistas y en menor medida libros. Dada la trascendencia para los índices de citas y los cálculos de los factores de impacto, se valorarán positivamente el uso de referencias provenientes de publicaciones indexadas en JCR y/o Scopus y la correcta citación conforme a la Norma APA 6 (<http://bit.ly/2meVQcs>).

Es prescriptivo que todas las citas que cuenten con DOI (Digital Object Identifier System) estén reflejadas en las Referencias (pueden obtenerse en <https://search.crossref.org/>). Todas las revistas y libros que no tengan DOI deben aparecer con su link (en su versión on-line, en caso de que la tengan, acortada, mediante Bitly: <https://bitly.com/>), y de los sitios web además la fecha de consulta en el formato indicado.

Los artículos de revistas deben ser expuestos en idioma inglés, a excepción de aquellos que se encuentren en español e inglés, caso en el que se expondrá en ambos idiomas utilizando corchetes.

Normas para las referencias

a) Publicaciones periódicas

- **Artículo de revista (un autor):** Ochoa, A. (2019). The type of participation promoted in schools is a constraint factor for inclusive education. [El tipo de participación que promueve la escuela, una limitante para la inclusión]. *Alteridad*, 14(2), 184-194. <https://doi.org/10.17163/alt.v14n2.2019.03>
- **Artículo de revista (hasta veinte autores):** Guarderas, P., Larrea, M., Cuvi, J., Vega, C., Reyes, C., Bichara, T., Ramírez, G., Paula, Ch., Pesantez, L., Íñiguez, A., Ullauri, K., Aguirre, A., Almeida, M., & Arteaga, E. (2018). Sexual harassment in Ecuadorian universities: Content validation for instrument development. [Acoso sexual en las universidades ecuatorianas: Validez de contenido de un instrumento de medición]. *Alteridad*, 13(2), 214-226. <https://doi.org/10.17163/alt.v13n2.2018.05>
- **Artículo de revista (sin DOI):** López, L., & Ramírez-García, A. (2014). Medidas disciplinarias en los centros educativos: ¿Suficientes contra el acoso escolar? *Perfiles Educativos*, 36(145), 32-50. <https://bit.ly/37Xd5mw>

b) Libros y capítulos de libro

- **Libros completos:** Cuéllar, J.C., & Moncada-Paredes, M.C. (2014). *El peso de la deuda externa ecuatoriana*. Abya-Yala.
- **Capítulos de libro:** Padilla-Verdugo, J. (2014). La Historia de la Educación desde los enfoques del conocimiento. In E. Loyola (Ed.), Ciencia, Tecnología y Sociedad (CTS). *Miradas desde la Educación Superior en Ecuador* (pp. 107-128). Abya-Yala. <https://bit.ly/3etRnZH>

c) Medios electrónicos

- Aunión, J. (2011, marzo 12). La pérdida de autoridad es un problema de toda la sociedad, no es específico del aula. *El País*. <https://bit.ly/2NlM9Dp>



Normas para epígrafes, tablas y figuras

Los epígrafes del cuerpo del artículo se numerarán en arábigo. Irán sin caja completa de mayúsculas, ni subrayados, ni negritas. La numeración ha de ser como máximo de tres niveles: 1. / 1.1. / 1.1.1. Al final de cada epígrafe numerado se establecerá un retorno de carro.

Las tablas y figuras deben presentarse incorporadas en el texto en Microsoft Word® ubicadas en el sitio en el que los autores consideren que deben estar. Se emplearán únicamente cuando sean necesarias e idóneas, debiendo limitarse su uso por cuestiones de espacios (máximo 6 entre tablas y figuras). Ambas deben ser enumeradas en arábigo y tituladas con la descripción de su contenido. Si la fuente de la tabla o figura no fuera de elaboración propia, los autores deberán incorporar al pie de la tabla o la figura la fuente de la que se extrae [por ejemplo, Fuente: Romero-Rodríguez (2016, p. 32)].

Las tablas deben estar elaboradas en el propio documento de Microsoft Word®, por lo que no se aceptarán tablas cortadas y pegadas de otros documentos que no puedan ser editados en el proceso de diagramación. Las figuras, además de ser incorporadas en el documento de Microsoft Word®, deberán ser enviadas como material complementario al momento del envío en el OJS de «Alteridad», debiendo tener una calidad superior a 600 dpi, en archivos de tipo TIFF, JPEG o PNG.

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