

We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

Open access books available

186,000

International authors and editors

200M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com



A Critical Role of the Psychologist: A Way to Achieve Complexity in Educational Psychology

Carlos Ossa-Cornejo

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.80509>

Abstract

The purpose of this chapter is to present a theoretical proposal for the adoption of a professional role characterized by thinking and acting critically, in order to generate educational changes. Educational psychology has been shaped by theoretical and epistemological perspectives that have not placed emphasis on the reflection or discussion of issues relevant to discipline, which has led to establishment of areas, functions and roles that are unclear and lacking consensus, from a paradigmatic logic of simplicity. It is proposed, through the bibliographic review of articles and book chapters, a position of educational psychology that promotes critical thinking as an essential part of the professional role, which allows, on the one hand, to discuss the foundational basis of this discipline, allowing greater clarity on the scope of the scientific and the professional field. On the other hand, it allows the development of a facet of promotion of changes in the educational community, from this same critical role, bringing it closer to a paradigm of complexity. Finally, the advantages and disadvantages of this position are discussed, and it is concluded that this view would establish a new perspective of educational psychology, which can be complemented by the traditional view.

Keywords: educational psychology, professional role, educational change, complexity, critical thinking

1. Introduction

Educational psychology has a long history that has been lost in the dawn of time, hand in hand with the first concerns of Greek philosophers in relation to human thought and their ability to know. However, as a discipline it does not have a transient nature of more than 100 years, a scarce time compared to other fields of knowledge.

It is possible to establish that its birth and development is mainly generated in the twentieth century, spite the identification of a varied range of European precursors such as North Americans [1] in the previous centuries. The birth and consolidation of this discipline, found between the years 1900 and 1920, is sustained and guided by ideologies and conceptual frameworks linked to the behavioral and functionalist perspective of psychology [1, 2], that will print an unmistakable seal of scientificity, evaluation and intervention of the medium to guide such behavior. This seal will be maintained throughout the twentieth century as part of the professional role.

These perspectives of psychology and their cognitivist derivation (cognitive behavioral psychology) were developed on the basis of the conception of the world and the human being of the paradigm of simplicity, which aims to value objectivity, control and reduction of variables [3, 4]. Even though other psychological views populated the twentieth century (psychoanalysis, humanistic psychology, transpersonal or systemic psychology, etc.), they have not had the same impact on educational psychology, as well as on education as a socio-cultural phenomenon, perhaps due to the fact that they search exactly the opposite, that is, the integrity, the subjectivity, the emotional; in other words, the complexity.

With a discipline inspired by the eighteenth and nineteenth centuries, and materialized in the twentieth century, I think it is fair, at the dawn of the twenty-first century, to establish a reflexive, innovative and transformative review of the educational psychology. This is necessary because even with the great amount of knowledge and expertise that has accumulated, educational psychology has not significantly impacted the educational process or contributed to the sociocultural change that is required in these times to learn and teach [5].

What kind of educational psychology does the twenty-first century need? This is a great question to answer. However, little has been done about it [6].

In this chapter we propose a resignification of the work of the educational psychologist in order to establish a complex and non-simplistic discipline that allows facing the essential tensions and dilemmas that have never been clarified [6] such as: what is the identity of educational psychology, and what is the purpose in the generation of knowledge. This desirable horizon, educational psychology from the complexity, requires a crucial tool: the availability of critical thinking. The nature of a professional is to use criticality to generate change, both of themselves as a professional and as a person, as well as of the educational community in which they are located.

The critical concept has different acceptations, on the one hand, it is seen as something decisive or of priority, which must be resolved in a timely manner, and on the other hand, as the constant evaluation of an idea or situation (definition from the Royal Spanish Academy or RAE in Spanish) [7]. In this way, and from a superficial synthesis of these acceptations, critical thinking is a tool that would allow facing relevant situations of the person or the community through questioning and reflection, in order to achieve a change in said situation, and therefore, should be the strategy that allows the work of educational psychologists to promote change as a part of the sociocultural interaction in the educational community, a focus that César Coll was already pointing out in 2001.

2. Transitions of educational psychology from simplicity to complexity

Munné [8] has pointed out that the discussion of simplicity and complexity is linked to the search for knowledge, which relates this discussion with an ontological and epistemological analysis with which human beings have explained reality. The preceding is due to the fact that it is a search for knowledge that has guided the development of scientific and professional disciplines. The way in which this search has been based has been to a great extent, although not in a single dimension, on the rationality and reductionism that are characteristics of the traditional and positivist scientific outlook. This has allowed the capturing and understanding of reality in a sequential and orderly manner, and with basic processes of cognition that promote the processing of information in an expeditious and efficient manner, in order to achieve clear, measurable and unambiguous knowledge.

This perspective is oriented by the human need of seeing this reality as something ordered, perfect and harmonious [4, 8], where even the knowledge of the people and the educational theory should also be equally ordered, structured, and specified in stereotyped actions, with a hierarchical, clear and objective management, that leaves out the problems and noises that arise in the educational level (such as learning difficulties, school demotivation, violence and power) as they cannot be explained nor adequately controlled [4, 9].

According to the perspective of the simplistic paradigm, psychology as a scientific discipline (as well as the traditional educational psychology) would fit greatly in that model, as it would present characteristics that are focused on individual attention (preferably), on the assessment of technical knowledge, in the functionality of a pathology, in the standardization of behaviors to behavioral standards (norms), and in the hierarchical relation between the fields of knowledge [6].

Even the history of educational psychology has been influenced by the characteristics of simplicity, as its birth and consolidation seemed to have responded more to pragmatic-conceptual determinations, such as the adherence to the behavioral theory of the 1920s and 1930s, rather than an academic reflection [6]. This adoption of the scientific position (uncritical and amoral), has established a reductionist approach that is focused on the teaching and learning process as a central object of educational psychology [1].

It is necessary to properly recognize the contribution of a scientific view of simplicity that has allowed the conceptual and empirical field of psychology to develop as a serious and respectable discipline, thus, producing the same result in educational psychology. However, nowadays this view has been imposed as the only acceptable paradigm for the development of knowledge and professional performance, generating difficulties in the theoretical, paradigmatic and even technical evolution that this discipline presents in its link with the educational process, which results in an inability to provide adequate answers for the challenges that arise [10].

Therefore, it is necessary to direct our practices toward the development of a perspective centered on complexity, as it is part of our everyday reality, and can give an account of our most

human characteristics, the solidary interconnection of the phenomena, and the uncertainty and the contradiction [3]. Its nature is holistic and evolutionary, in constant transformation, and includes the subject as an integral part of the construction of change. It sees knowledge as a multidimensional aspect, integrated by diverse approaches, which allow the integration of diversity, error, interculturality, emotionality and uncertainty [11].

This paradigm is characterized by a transdisciplinary conception of knowledge and praxis, which is achieved through an intricate conformation that must modify itself and, at the same time, modify the subjects that integrate its action, in a constant and participatory manner. In particular, it would allow the generation of a complex, dynamic and non-linear methodology that centrally deals with variability. This paradigm should be endowed with characteristics that are simultaneously so general as to explain phenomena in a vast variety of human situations, which is what science requires, and, at the same time, be able to accept specificities that rescue individuality and subjective contextualization [12].

Thus, in educational psychology, a view that comes from this paradigm is needed to a great extent, due to the fact that education is, precisely, one of the eminently complex areas of human interaction that requires balancing community needs such as discipline, coexistence and the curriculum, with individual needs, motivation and learning demand.

It would imply constructing from psychoeducational knowledge, with awareness, participation and meaning, aiming for a change and allowing it to change us, that is, with a tension between the technical and the critical versus knowledge and practice. In other words, generating knowledge, tools and techniques from theoretical and empirical bases as it has traditionally been done, but reflecting and modifying said elements from experience and interdisciplinary collaboration [6].

The preceding would also imply understanding and valuing the teaching-learning process as a tension between stability and change, given the need to transmit knowledge (what we call recurrence), in order to maintain the culture and, at the same time, to generate new knowledge, to produce what should lead us to change and transformation. In addition, it implies the establishment of a tension between the expertise, with all the knowledge and power that it can grant a person, and the inexperience, with all its ingenuity and dependence, while also valuing the social interaction and feedback that we generate with the other members of the educational community [13]. Finally, it would involve promoting the tension between the construction of knowledge, the techniques and professional identity, and the construction of knowledge based on the expert and inexperienced collaboration of the views, professional and non-professional, of those who share the educational framework.

To achieve this perspective from the complexity, it is of great importance to discuss the tensions of the discipline, as it is through reflection and dialog that we define the limits of knowledge and its adaptation to everyday reality. This does not involve leaving out research and disciplinary conceptualization, but establishing a balance between the latter and the social and cultural reality.

Through this, it would be possible to channel one of the greatest challenges promoted by the perspective of complexity, that is, transdisciplinarity [3]. This concept has been recently developed, due to the evolution that disciplinary groups have experienced in research, as a

result of cultural valuation, being an ideal that combines the main values of social constructionism, in clear opposition to the reductionism and disciplinary focus that has been generated in some fields of knowledge that are born from the simplistic view.

3. Critical thinking as a strategy for the evolution of educational psychology

The critical perspective is a position in the search for knowledge that allows us to reveal other different perspectives, which opens our understanding toward interpretations different from those given to us by tradition. Critical psychology has its roots in the critical theory of the Frankfurt School, with thinkers such as Horkheimer, Adorno, Marcuse, or Habermas [14].

In this view the acceptance of the world as it is was rejected, with its inequalities and injustices, and with the domination of classes, indicating that reality is not determined by natural reasons, but by historical and particular reasons that lead to a certain order [15]. Some of the most significant, worldwide known, authors of this perspective are Michel Foucault and Paulo Freire. Foucault is mainly known for the redefinition of concepts such as power, knowledge and discourse, as power is not exercised only with sovereignty or laws, nor with weapons or force, but with knowledge. In this sense, knowledge refers to all our opinions and knowledge about reality, to our convictions about basic facts of daily life, as well as to the value parameters we give to such events, good and evil, what is normal, and right or wrong, whether that is to an individual or social organization level.

Freire rescues the human sphere in a more social sense, politically committed with education, and argues that the traditional powers as well as authority impose an inequitable system in which the poor are deprived of their opportunity to participate and change the schemes that maintain said inequity. In addition, he advocates an education that breaks the culture of silence and generates awareness in the oppressed of the cultural and economic causes of their situation, that is, to free the human being through the awareness of their reality and their potential. For this purpose, education must be changed, because this is one of the great mechanisms that reproduce the established order and domesticates individuals in those realities that do not allow them to evolve as human beings [15].

Critical psychology does not act only on dominant theories, it also deals with methods, and its central task is to face the values and practices of psychology that do not review or question the forms of oppression that could be being transmitted or reproduced by them. The questioning, through critical judgment, of the different ways of exercising power, as well as its explicit and implicit manifestations in psychological practice and in daily life, are subject of critical studies, due to the fact that they can be presented as natural ways of being of some situations not discussed or, in some cases, argued as the only appropriate form of social existence.

Criticism as a reflective activity, in a kind of thinking that allows us to analyze the level of foundation of an information or idea, based both on reflection itself and on the reflection of others [16, 17]. In this way, psychology has been developed into two flows, on one hand, from social critical psychology, that is, a more theoretical approach that questions the processes

and sociocultural phenomena [18]. And on the other hand, from cognitive psychology, which has developed the concept of critical thinking, which has historically been defined as a type of elaborate thinking, that is, a cognitive process that involves evaluation and reflection [16, 19].

This type of thinking allows the construction of new knowledge, and the strategic use of it in the solution of problems present in everyday life [19–21]. Critical thinking is also defined as a type of process that is both complex and cognitive, and is composed of interrelated subprocesses that allow a person to evaluate analytically and reflectively process, judge and accept, or reject information produced in social contexts or in scientific studies [22].

However, it should not be considered only as a process oriented toward information but also to action, in a context of problem solving and interaction with other people [23, 24]. Likewise, Saiz [25] states that critical thinking is aimed at the effective resolution of situations that allow achieving wellness.

Taking account of these considerations, it is possible to consider critical thinking as a fundamental tool for the twenty-first century professionals, due to the fact that, currently, society requires professionals with high-quality work and research skills for the development of disciplines. Professionals that will not be influenced by ideological pressures or power groups, but rather, be able to move toward an autonomy of thought [26, 27]. Critical thinking is a fundamental tool in order to achieve the above, as it allows the development of high-level cognitive skills needed to achieve these tasks. This kind of thinking is considered + a tool that allows people to confront situations with less ingenuity while transcending toward the implicit objectives of processes, thus, it is essential for today's professionals, who must face increasingly complex and diverse social situations [27].

There are some situations that nowadays would benefit educational psychology by using critical thinking as a tool of their performance, as they would allow educational psychology to contribute not only to knowledge but also to social change. One of these situations is related to the relevance and effectiveness of cognitive assessment models and instruments, which are very needed in education; another example is the overcoming of the gap between theory and practice that has characterized various conceptualizations and proposals of educational psychology [6].

It is necessary to understand that the use of critical thinking as part of professional development must consider the purpose of community change in order to achieve greater welfare situations, both individual and collective [25]. This implies serious ethical considerations regarding the way in which we face both the professional exercise and the generation of disciplinary knowledge.

The ethical component in professional construction has been considered as a secondary element in the conceptualization of educational psychology in different cultures [28], due to the fact that usually, as a scientific discipline, it should be axiologically neutral (trait inherited from the paradigm of simplicity). However, this alleged neutrality is unthinkable of achieving in the educational context as its essence is eminently cultural [29].

A proposal with critical thinking in educational psychology needs to consider, among others, the previously seen topics, and complement their conceptual and practical evolution with them. This path is fundamental for the present time, based on the multiplicity of challenges that society, history and politics have brought to the education of the twenty-first century, which affect, I believe directly, this discipline.

Not considering these aspects (a path taken by traditional educational psychology) involves constructing fragmented and reductionist proposals of the human being, the educational process and the sociohistorical and political context [13], this fragmented view has allowed our discipline to be co-responsible and complicit in situations that are seen as negative. For example, the labeling and maintenance of conditions that enabled, and still enable today, discriminatory education of children and young people who present situations of intellectual disability, endorsing an unfair and segregating system.

We must have a reflection in regard to the way in which educational systems are confronted with current social requirements [5], asking, what education does the twenty-first century need? This question can be accompanied by our question stated in the introduction to this chapter. What educational psychology does the twenty-first century education need? The answer is, in my opinion, a critical and complex educational psychology.

4. A critical educational psychology as a means to achieve a complex educational psychology

A critical educational psychology should be understood as a field of action, training and critical research in the face of situations that negatively affect the educational process, including discrimination in policies and the educational system, which prevent the achievement of an education for all, as well as the recognition of human diversity as a universal right of the human being. In order to achieve this, such education should use critical thinking in massive standardization processes that fail to generate good levels of meaningful or contextualized learning for the vast majority of students [6].

In addition, a critical educational psychology could provide new insights into teaching-learning techniques and processes, so that they are able to generate both a result that is appropriate for students (and that meets quality criteria for teachers), and a process that enables the experimentation of a satisfactory pedagogical relation. And, in this context, this kind of education could support the generation, promotion and prioritization of democratic, liberating and significant relationships among the members of the educational community, in order to promote actions, spaces and policies of school and social coexistence that promote happiness, participation and meaning.

As Redondo points out [30], we should not only expect from educational psychology a proposal based on scientific knowledge that enables a psychological explanation to individual and social problems, and on more than one occasion, that makes a tradition of the psychologization of social problems, but we should also expect a proposal of empowerment that allows educational communities (at any level) to collaborate in the co-construct of their own meaningful educational establishments. The foregoing is relevant due to the fact that that is precisely the purpose of inclusive education [31], which is directly linked to the search for common welfare, through meaningful and dialogued consensus, an idea that can also be achieved through critical perspective.

The school organization is a complex reality as the notion of education itself is complex, thus, its study and action should be approached from the same perspective. It is possible to find the conditions of complexity that pointed out for organizations in general (related to the productive

field) [32], and characteristics of socio-affectivity, individual and group evolution, socio-cultural guidelines, political and ethical-regulatory impositions, etc., that are clearly evident in the school organization.

Complexity must be comprehended from the complex [33], which would imply abandoning certain beliefs and paradigms that have strongly marked the field of educational psychology (such as the focus of the teaching and learning process, individualization, and the pathologisation of behaviors). Therefore, the adoption of critical analysis should also be counted, so that a questioning of the concepts, actions, and meanings of those actions is developed [34].

Educational psychology, from a critical and complex perspective, provides an epistemological framework more in line with the great concerns of today's society, through the development of a disciplinary and professional field that would enable us to collaborate in participative and satisfactory social processes and institutions for professionals of the same area as well as for the community in general, and this certainly would allow us to achieve greater social and political relevance for educational professionals, both for teachers and non-teachers.

This would be achieved through well-known strategies, dialog, reflection, participation, the willingness of agreements; social tools that can be articulated with other logical (scientific and administrative) and technological (digital means of information and communication) tools. In the complex perspective all these elements have a place and are complementary, as they are all products of culture, history and society.

The social-(methodo)logical-technological articulation is carried out through the ethical and social understanding and valuation, which we must give to the educational phenomenon, instead of letting ourselves be caught in traps set by the simplistic view such as the excessive concern for the measurement and evaluation by the quality indicators that have been imposed in the majority of the educational systems in the world [35].

Looking for the meaning of education and the actions that generate learning is one of the central features of the socioconstructivist perspective of learning, and this is exactly what a complex and critical educational psychology should promote, as it is precisely in its core that such constructivist perspective is developed. However, it is necessary to recognize, that given the fact that there is a variety of interests and understandings in a society, we could have different meanings when it comes to education; but there is something that should not be forgotten in this twenty-first century, the fact that the imperative of human rights and the preservation of the environment has been established. For this reason, one of the aspects that can mainstream this disparity of interests and senses is the notion of quality of life, which leads to promote healthy and sustainable environments, respectful and reciprocal human relations, and self-care behaviors [36, 37].

Critical and complex educational psychology must value as an educational purpose the achievement of conditions that ensure a positive and nutritious quality of life for the members of the educational community. In addition, it should promote dialog and democratic consensus among the members of said community, as well as support respect and participation in political and administrative systems. Finally, it should encourage reflection, innovation and adaptation of people, groups and organizations to the incidences of the environment, promoting change at individual, group and organizational levels.

These purposes of critical and complex educational psychology can be achieved through the support of two tools that emerge from the reflection on new perspectives for education and psychology, posed by educators and psychologists interested in the evolution of this field. One of these tools is institutional metacognition, defined as a process of participatory reflection in the educational institution, which allows analyzing information, actions, assumptions and regulations (among others), with the participation of members of the community, in order to make people aware of the ideas, routines and actions that underlie educational decisions, enabling organizational learning and the development of learning communities [38–40].

A second element of support for the tasks outlined above is the notion of a critical friend as central role of the educational professional; this idea of a critical friend establishes the figure of an agent that questions and promotes the change of educational actors through communication and reflection, guiding these agents to impose significant changes in their decisions and actions [41–43]. The role of the critical friend is characterized by its empowering nature, to the extent that its action is oriented to promote collaborative work, potentially contributing to generate a global vision of the school [44], and above all, to favor reflective processes on the practices, make explicit assumptions and beliefs that can facilitate the transformation of educational discourses and practices [45].

These tools, among others that can be integrated or constructed, are necessary for educational psychology to maintain the basic elements that define it as a complex and critical proposal, by prioritizing, as previously indicated, reflective, communicational and participation processes in the educational community.

5. Conclusions

In light of the above, it can be noted that educational psychology presents a history of respectable tradition, contributing to the development of educational processes for just over 100 years. However, nowadays, a great problem related to the relevance and effectiveness achieved by educational psychologists when trying to contribute to educational improvement has begun to be considered [46].

The foregoing does not imply that this discipline is no longer relevant or obsolete, or that it does not share common topics with education and the school system, but rather that it is restricted by a simplistic and technical view of the person, the community and education in general. This simplistic view specifically emphasizes what is less relevant to society and education: The human being.

For this reason, a way to modify that is to redirect the focus and essence of educational psychology, equipping it with tools such as critical thinking, which will provide spaces for reflection and systematic evaluation in the face of its knowledge and the actions that it undertakes with the purpose of establishing effective and significant changes.

The traditional educational psychology cannot offer the answers that the educational challenges of the twenty-first century demand. Therefore, these answers should be obtained through the construction and evaluation of a critical and complex educational psychology, as the latter values the search of senses, collaboration, participatory reflection, innovation and creativity, etc.

The innovative approach proposed, would offer to the educational system, professionals who understand the mixed nature of the teaching and learning process, which are both individual and collective; value the great imperatives of the twentieth century, such as social participation, the valuation of human and civil rights, the democratization of management spaces, the sustainability of the environment and the impact of the human being in their environment, etc. Concerns that are, in turn, related to the topic of quality of life, which should be one of the central purposes of today's education, as it combines elements of personal well-being, socio-cultural, environmental, etc. [37].

This critical and complex educational psychology can support this response relevant to the current educational situation through at least two tools: the first being the institutional meta-cognition, a tool for school management that, based on reflection and participatory dialog, can contribute to the search of intentional and significant actions in the learning and coexistence of the educational community and school organization [40]; while the second is the role of a critical friend, a performance that educational psychologists can achieve, through advisory instances that seek to promote resignification for change, both on a personal and institutional level [41, 42].

The benefits of this position of critical and complex educational psychology are that, on one hand, there would be conscious and intentional discipline in the achievement of a quality education, while taking care of the development and respect of human values. On the other hand, there would be an innovative educational psychology that promotes an organizational change, so that it would seek to generate instances in order for the community and the educational organization to be able to adapt, in an appropriate way, to the always dynamic socio-political and historical environment.

Likewise, elements that have a greater relationship with the social than with the cultural will be reinforced, which would give a space of importance to people rather than, mainly, to knowledge. The promotion of participation, democratization of decisions and critical reflection will enable people to take more informed and respectful decisions regarding the rights of the community.

On the other side, considering the obstacles and disadvantages that may arise, we cannot fail to mention the impact of the paradigm of simplicity that often restricts the development and the potential of the disciplines. Besides, it should be noted that complexity encourages and respects uncertainty and chaos as fundamental parts of the construction of knowledge, and that is exactly what is often not allowed in educational environments.

In relation to the above, it can be projected as a difficulty, the valuation of change in the educational organization, a central element in a critical psychology, as that change is precisely what should give us new answers and development conditions. However, change is an annoying and unpleasant process for many people, and it is a phenomenon that disrupts the continuum of educational institutions, which suggests that educational agents are reluctant to promote and value change as part of the process of human formation.

Finally, we must consider the same construction of educational psychology as a discipline, and the difficulty of modifying the idea that education responds to individual processes, centered on the cognitive and based on logical and orderly sequentialities, issues that have dominated the definition of this field from the traditional perspective.

The possibility of generating a critical and complex educational psychology, should be a necessary horizon for this discipline, so that we can move forward with the current challenges and face them with relevant and constructive responses from the society and the human being, which would allow us to lay the foundations for a society that reaches, in the near future, these great ideals that we have today.

Author details

Carlos Ossa-Cornejo

Address all correspondence to: cossa@ubiobio.cl

Educational Science Department, Education and Humanities Faculty, Bio-Bio University, Chillán, Chile

References

- [1] Arancibia V, Herrera P, Strasser K. Manual de Psicología Educacional. Santiago: Edic. Pontificia Universidad Católica de Chile; 2007
- [2] Coll C, Palacios J, Marchesi A. Desarrollo Psicológico y Educación. Vol. 2. Madrid: Alianza Editorial; 2001
- [3] Morin E. Introducción al Pensamiento Complejo. Barcelona: Gedisa; 2001
- [4] Colom A. Teoría del caos y práctica educativa. Revista Galega de Ensino. 2005;13(47): 1325-1343
- [5] Coll C. Enseñar y aprender en el mundo actual: Desafíos y encrucijadas. Pensamiento Iberoamericano. 2010;7:44-66. Retrieved from: http://www.psyed.edu.es/grintie/prod-Grintie/articulos/CC_2010_PensamientoIberoamericano.pdf
- [6] Ossa C. Qué es y qué hace el psicólogo educacional. Una Mirada crítica para una propuesta compleja. In: Martínez S, Opazo D, Ossa C, Pereira C, Vásquez C, editors. Enfoques Psicosociales Emergentes. Abriendo Rutas Desde lo Local. Concepción: Edic. Universidad del Bio-Bio; 2015
- [7] Real Academia Española, RAE. Diccionario de lengua española. Edición del tricentenario. 2018. Retrieved from: <http://dle.rae.es/?id=BKFoPJO>
- [8] Munné F. El retorno de la complejidad y la nueva imagen del ser humano: Hacia una psicología compleja. Revista Interamericana de Psicología. 2004;38(1):23-31
- [9] Ferreira G, De Castro D. Psicologia da Educação: Uma disciplina em crise no pós-construtivismo. Revista Semestral da Associação Brasileira de Psicologia Escolar e Educacional, SP. 2012;16(1):143-151

- [10] Cecilio I, Pereira L, Alves de Lima V. Psicologia Escolar em Rondônia: Formação e práticas. *Revista Semestral da Associação Brasileira de Psicologia Escolar e Educacional*. 2010; **14**(2):333-340
- [11] De Jesús M, Andrade R, Martínez D, Méndez R. Re-pensando la educación desde la complejidad. *Polis: revista de la Universidad Bolivariana*. 2007; **6**(16):1-13. Retrieved from: <http://www.redalyc.org/articulo.oa?id=30501602>
- [12] Mateo García M. Notas sobre la complejidad en la Psicología. *Anales de Psicología*. 2007; **19**(2):315-326
- [13] Alarcón P. Hacia una pedagogía de la coexistencialidad. *Revista Paulo Freire*. 2005; **4**(3):63-85
- [14] Montero M. Crítica, autocrítica y construcción de teoría en la psicología social latinoamericana. *Revista Colombiana de Psicología*. 2010; **19**(2):177-191
- [15] Cassany D. Los significados de la comprensión crítica. *Revista Lectura y Vida*. 2010; **26**(3):32-45
- [16] Paul R, Elder L. La mini-guía para el Pensamiento crítico. Conceptos y herramientas. In: Fundación para el Pensamiento Crítico. 2003. Retrieved from: www.criticalthinking.org
- [17] Hager P, Kaye M. Critical thinking in teacher education: A process-oriented research agenda. *Australian Journal of Teacher Education*. 1992; **17**(2):26-33. DOI: 10.14221/ajte.1992v17n2.4
- [18] Gergen K. Realidades y relaciones. Aproximaciones a la construcción social. Barcelona: Paidós; 1996
- [19] Facione P. Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction. Millbrea, CA: The California Academic Press; 1990
- [20] Black B. An overview of a programme of research to support the assessment of critical thinking. *Thinking Skills and Creativity*. 2012; **7**:122-133
- [21] Halpern D. Teaching critical thinking for transfer across domains dispositions, skills, structure training, and metacognitive monitoring. *American Psychologist*. 1998; **53**(4):449-455
- [22] Tung CA, Chang SY. Developing critical thinking through literature reading. *Feng Chia, Journal of Humanities and Social Sciences*. 2009; **19**:287-317
- [23] López G. Pensamiento crítico en el aula. *Docencia e Investigación*. 2012; **XXXVII**(22):41-60
- [24] Daniel M, Auriac E. Philosophy, critical thinking and philosophy for children. *Educational Philosophy and Theory*. 2011; **43**(5):415-435. DOI: 10.1111/j.1469-5812.2008.00483.x
- [25] Saiz C. Pensamiento Crítico y Cambio. Madrid: Pirámide; 2017
- [26] Marsillac AL, Gastalho de Bicalho P. Desencontros entre uma prática crítica em psicologia e concepções tradicionais em educação. *Revista Semestral da Associação Brasileira de Psicologia Escolar e Educacional*. 2012; **16**(1):153-160

- [27] Yang YT. Cultivating critical thinkers: Exploring transfer of learning from pre-service teacher training to classroom practice. *Teaching and Teacher Education*. 2012;**28**:1116-1130
- [28] Pasmanik D, Jorquera C, Winkler M. Etica Profesional en perspectiva: Psicología y Educación en contrapunto. In: Catalán J, editor. *Psicología Educacional: Proponiendo Rumbos, Problemáticas y Aportaciones*. La Serena: Edit. Universidad La Serena; 2011. pp. 271-304
- [29] Bazán D. El oficio de pedagogo: Aportes para la construcción de una práctica reflexive en la escuela. Homo Sapiens Ediciones: Rosario; 2008
- [30] Redondo JM. Una psicología educacional al servicio de la calidad y equidad de la educación chilena. In: Catalán J, editor. *Psicología Educacional: Proponiendo Rumbos, Problemáticas y Aportaciones*. La Serena: Edit. Universidad La Serena; 2011. pp. 305-322
- [31] Booth T, Ainscow M. La Guía para la Inclusión Educativa. Fundación Creando Futuro: Santiago de Chile; 2011
- [32] Pastor J, León A. Complejidad y psicología social de las organizaciones. *Psicothema*. 2007; **19**(2):212-217
- [33] Labarrere A. Aprendizaje, complejidad y desarrollo: Agenda curricular para enseñar en los tiempos actuales. *Revista de Psicología de la Universidad de Chile*. 2006;**XV**(2):65-76
- [34] Ruz J, Bazán D. Transversalidad Educativa: La pregunta por lo instrumental y lo valórico en la formación. *Pensamiento Educativo*. 1998;**22**:13-39
- [35] Santos-Guerra M. Las trampas de la calidad. *Acción Pedagógica*. 1999;**8**(2):78-81
- [36] Guevara H, Domínguez A, Ortunio M, Padrón D, Cardozo R. Percepción de la calidad de vida desde los principios de la complejidad. *Revista Cubana de Salud Pública*. 2010; **36**(4):357-360. Retrieved from: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-34662010000400011&lng=es&tlng=es
- [37] Urzúa A, Caqueo-Urizar A. Calidad de vida: Una revision teórica del concepto. *Terapia Psicológica*. 2012;**30**(1):61-71. DOI: 10.4067/S0718-48082012000100006
- [38] Arístegui R, Bazán D, Leiva J, López R, Muñoz B, Ruz J. Hacia una pedagogía de la convivencia. *Psykhé*. 2005;**14**(1):137-150. DOI: 10.4067/S0718-22282005000100011
- [39] Ossa C, Castro F, Castañeda MT, Castro J. Metacognición institucional para un aprendizaje organizacional participativo: Herramienta innovadora de gestión escolar. *Gestión de la Educación*. 2016;**1**(1):11-21
- [40] Ossa C, Figueroa I, Rodríguez F. Institutional metacognition as an improvement tool for educational management. In: Altinay F, editor. *Open and Equal Acces for Learning in School Management*. London: Intechopen; 2018
- [41] Evans S. The community psychologist as critical friend: Promoting critical community praxis. *Journal of Community & Applied Social Psychology*. 2014;**25**(4):355-368. DOI: 10.1002/casp.2213

- [42] Figueroa I, Gómez MP. Cuestionar y problematizar la propia práctica: Investigación Acción Transformadora en los procesos de desarrollo profesional docente. *Summa Psicológica*; 2015;**12**(2):31-42. DOI: 10.18774/summa-vol12.num2-258
- [43] Stokes L. Lecciones de una escuela indagadora: Formas de indagación y condiciones para el aprendizaje del profesorado. In: Lieberman A, Miller L, editors. *La indagación como base de la formación del profesorado y la mejora de la educación*. Barcelona: Octaedro; 2003. pp. 173-192
- [44] Nieto J. Modelos de asesoramiento a organizaciones educativas. In: Domingo J, Coord., *Asesoramiento al centro educativo, colaboración y cambio en la institución*. Barcelona: Octaedro-EUB; 2001. pp. 147-166
- [45] Vezub L. La formación y el desarrollo profesional docente frente a los nuevos desafíos de la escolaridad. *Profesorado: Revista de Curriculum y Formación del Profesorado*. 2007;**11**(1):23. DOI: <http://doi.org/http://www.ugr.es/local/recfpro/rev111ART2.pdf>
- [46] Barbosa DR, Rebello MP. Psicologia Educacional ou Escolar? Eis a questão. *Psicologia Escolar e Educacional*. 2012;**16**(1):163-173