



Retrospective and New Theoretical Proposals on Peace Education

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Abstract

The goal of this documentary-bibliographic research, the results of which we present in this article, was to outline the general panorama of the evolution of the epistemological and institutional foundations of the culture of peace and its promotion through education. The authors found that, since the 1940s, the construction of a culture of peace has been a priority on the agenda of international and national governing bodies concerned with human development. Education emerges as the key factor in building harmonious human relationships based on the principles of peace, tolerance, and respect for the Other. Yet the educational models that have operated until now are insufficient to meet the demands of 21st-century individuals, who must navigate increasingly complex realities. Achieving a culture of peace through education is possible only by establishing a new type of pedagogy, complexity education, that enables students to understand the perplexities and fluctuations of the present moment. This model should foster intellectual curiosity and analytical intelligence; the capacity to generate non-standardized solutions and alternative approaches to problems; the ability to listen to and assimilate the discourse of others, re-examine one's own perspectives, overcome prejudice, and cultivate empathy.

Keywords: Complex Thinking, Complexity Education, Development of the Peace Culture, Peace Education

INTRODUCTION

Currently, profound changes are taking place in all spheres of human life. The economy, politics, culture, and society, all are marked by a volatile historical period characterized by increasing degrees of freedom, interculturality, and metaheuristic learning; an understanding that solutions to problems are approximate, provisional, and neither exact nor definitive; and a conviction of the need to foster peaceful and creative ways to transform conflicts. The educational field is also undergoing profound transformations.

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Therefore, in almost three decades of this new millennium, there has been considerable development in theories, concepts, and research in this sector. These developments have led to the abandonment of the principles of authoritarian pedagogy, with its contradictions between teacher and student (subject-object relationships), and the idea of dominance and submission. They have fostered the development of students' creative possibilities and intelligence; they have motivated a rethinking of the methodological foundations of education and the modernization of content.

These scientific and pedagogical contributions serve as the basis for the implementation of a new form of teaching that meets the expectations of the new generations in the 21st century, with innovative methods that enable the training of individuals capable of responding to the contemporary world's demands and empowering human beings as transformers of themselves and their realities. One of these reforming educational forms is based on complex thinking and seeks, above all, to develop a peace culture in students. Nevertheless, what do we understand by the concept of "peace culture"? How has it developed throughout human history? What theoretical proposals for defining this term and instilling it in students exist in the 21st century? These questions have been widely discussed in the field of peace education by various scholars and practitioners over the past decades.

OBJECTIVE AND METHOD

The purpose of this article is to present an overview of the peace culture's epistemological and institutional foundations' evolution and its promotion through education. This is an initial approach to the subject of peace education through a documentary-bibliographic study, the results of which are presented below. The work was based on the method of critical analysis, following which first, bibliography and documents were searched and compiled, continued by their evaluation. Second, the analysis, interpretation, and integration of the results were carried out through a combination of the following four processes: theoretical consolidation, theoretical application, use of metaphors and analogies, and synthesis (Bisquerra, [1996](#)). Finally, the article offers a reflection on the prolegomena and new theoretical proposals for peace education.

RESULTS AND DISCUSSION

Peace Culture's Prolegomena

Current concepts and practices of peace education are the fruit of a long history: from the moderate pacifism of the ancient Greeks, the "peace" of totalitarian systems, to the postulates of culture for positive peace, interculturality and logical pluralism, in the 20th–21st centuries. Thus, Aristotle (384 BC–322 BC) considered in his treatise on the ideal regime, the possibility of a contemplative or isolated life for the polis that goes hand in hand with defensive considerations and the right to war (*Jus ad Bellum*) to prevent being enslaved at the hands of others, since "[...] those who are not capable of facing dangers with courage, are slaves of whoever attacks them" (VII.15.1334a20–22,297); without ruling out self-imposed slavery as a result of peace and leisure for those who only cultivate military virtue (Aristotle,

[2015](#)). This is moderate pacifism or “making war by virtue of peace” (Rosler, [2016](#)).

Without a doubt, the peace culture represented the quintessence of early Christianity with its postulates of “love of neighbor” and an austere life dedicated to others, which were taken up again in the 13th century by the Franciscan order. One of the principles of Franciscan philosophy was to achieve congruence between one’s way of being and one’s way of dealing with reality through a constant encounter with the Self and the Other: “[...] a generous approach to the poor to recognize them as persons and discover in them personal values [...]”; to acquire religious experience (the encounter with God) through practice that “[...] gradually and progressively broadens and deepens thanks to countless encounters that open horizons and always invite one to go further, in search of a desired infinity”, Merino in 1982.

Another version of the concept of peace emerged at the end of the 15th century, when, through the *Treaty of Tordesillas* in 1494, with the consent of the Pope, the kings of Spain and Portugal signed an agreement to divide the navigation and conquest zones of the Atlantic Ocean and the New World (not only without the consent of the “conquered”, but also after destroying or enslaving a large part of the indigenous population in the “discovered” lands), in order to avoid conflicts of interest and “live in peace and harmony”¹.

In the 17th century, Jan Amos Komenský (Comenius, 1592-1670) the father of pedagogy, first proposed peace education. Given the warlike context in which he lived (the Thirty Years’ War), one of the most important ideals for him was peace: his work *Angelus Pacis* is a message to the global peace conscience. From his point of view, peace is a value that must be protected by an international court charged with preventing the causes of armed conflicts (Hernández-Rojas, [1998](#)).

Likewise, education, whose objective is the moral, political, and Christian renewal of humanity, is the quickest path to world peace. Therefore, everyone must have access to education (not just the elite or the enlightened); all people have an innate aptitude for knowledge. Comenius deduced that just as there is harmony and peace in the macrocosm, humankind must also become a harmonious whole (at peace with itself and with others) if all its potential and abilities, and not just its reason, are fully developed (Palacios, [1978](#)).

Comenius’ ideas were taken up by the *New School* movement (18th-19th centuries) with the thought of Jean Jacques Rousseau (1712-1778) on education as the ideal path to forming free citizens, aware of their rights and

¹ Author’s Note: It is important to note that, in pursuit of the same goal of “living in peace”, the *Non-Aggression Treaty* between Nazi Germany and the Soviet Union (*the Molotov-Ribbentrop Pact*) was signed in 1939. At the same time, Polish lands were divided between the two powers, while thousands of Poles, Jews, Ukrainians, and representatives of other nations, or “enemies of the people”, were destroyed and tortured in Hitler’s and Stalin’s concentration camps “in the name of peace and justice”. Other examples include the 1938 *Munich Treaty*, signed by Nazi Germany, the United Kingdom, France, and Italy, which allowed Nazi Germany to annex the Sudetenland region west of Czechoslovakia; or the current agreement being negotiated between Putin’s Russia and the United States on the “partition” of Ukraine for the sake of “achieving peace”.

duties, who respect and live in peace with others, participate in and deliberate on community organization and public affairs (Palacios, [1978](#)). The same motives of achieving peace in a united Europe that drove Rousseau inspired Immanuel Kant (1724-1804), whose favorite novel was *Emile, or about Education*, to develop a philosophy “for making peace”.

According to Kant, philosophy assumes the critical function of the reasons we give for why we do what we do and calls into question human relations when we resolve conflicts with violence, war, or injustice. It brings to the tribunal of reason itself all the reasons we give ourselves in our theories and in the practice of our relations: theoretical reason and practical reason, for example, those given to support violence, war, or injustice. The critique of reason² is the true tribunal of all its conflicts: “Without such critique, reason is as if in a state of nature, unable to assert or secure its theses and claims in any way other than through war” (Kant, [1978](#)).

Likewise, in his work *On Perpetual Peace* (or *For Perpetual Peace, Zum ewigen Frieden. Ein philosophischer Entwurf*) (1795), Kant discerns a world structure and a perspective of government that favors peace by postulating a juridical project (Kant, [2012](#)). In this essay, Kant proposes a peace program to be implemented by the governments of the time. The objective of this treatise is to find a world structure and a perspective of government for each state, particularly one that favors peace. The Kantian project is a juridical one, not an ethical one: Kant does not expect men to become better, but rather believes it is possible to construct a juridical order that considers war illegal. He speaks of moral philosophy as a reflection on what human customs are and what they should be (Martínez-Guzmán, [2001](#)).

Kantian peace philosophy and the pedagogical precepts of the *New School* persisted over time and later, in the mid-19th century, they appeared, along with the ideas of Christian anarchism and anarcho-pacifism³, in the works of the Russian writer Leo Tolstoy (1828-1910).

At the beginning of the 20th century, in the context of the First World War, the need to work toward international understanding that would allow for overcoming tensions and hostilities between states was emphasized. At the end of the war, an educational movement characterized by the idea of avoiding war, as well as by its strong internationalist component, emerged. In the 1920s, the first traces of peace studies appeared with the emergence of statistical analysis of the causes of conflict and war (Lewis Fry Richardson, Quincy Wright, Pitirim Sorokin, Kenneth Boulding, Anatol Rapaport, Adam Curle, among others). This is an interdisciplinary area of quantitative social sciences and mathematics dedicated to systematizing research into the origins of human conflicts and the conditions for peace

² Author’s note: In the *Critique of Pure Reason* (1781), Kant sets forth his transcendental idealism and lays the foundations for a new way of conceiving knowledge and man that still informs our thinking.

³ Author’s note: Anarcho-pacifism (pacifist anarchism or nonviolent anarchism) is the anarchist movement that rejects all forms of violence, whether from the state or from struggles between social forces, promoting pacifism and active nonviolence. One of the social leaders who championed this form of nonviolent, secular, and democratic resistance in the mid-20th century was Gandhi, whose actions against British imperialism in India led to the country’s independence.

(Salazar-Mastache, [2009](#)).

In Europe, this phase lasted until the 1930s, when totalitarian ideas such as Fascism, Nazism, and Stalinism experienced a significant rise. In contrast, in the United States, the first non-governmental peace organizations (NGOs) emerged between 1934 and 1945; and in 1942, in England, the *Oxford Famine Relief Committee* (OXFAM) was established to assist people suffering from famine caused by the war.

Institutionalization of Peace Studies and Peace Education

As an academic field, peace studies began to develop in the 1940s. After World War II, humanity, concerned with creating different ways to generate peace from social, cultural, economic, political, and educational perspectives, promoted an understanding of international peaceful coexistence through training in intercultural issues and international cooperation. Both avenues were fostered by the creation of the United Nations and UNESCO with its *Associated Schools Project*, which incorporates education for human rights and disarmament.

In 1948, a *Peace Studies program* was introduced for the first time at Manchester College in Indiana, United States, and the *Universal Declaration of Human Rights* was signed. Article 28 of this Declaration proclaims that “Individuals, groups, peoples, and all humanity have the inalienable right to a just, sustainable, and lasting peace” (Grasa, [2000](#)).

Based on the studies of Kenneth Boulding, Anatol Rapaport, and Herbert Kelman, the *Center for Peace Research on Conflict Resolution* was created at the University of Michigan in the United States in the 1950s, and the work *Research Exchange on the Prevention of War* was published. In 1954, the *Center for Advanced Studies in the Behavioral Sciences* was opened at Stanford University, and the *French Institute of Polemology*⁴ was founded in France, with Bert Roling becoming a central figure for his research on war that contributed to the development of international law. At the same time, in this decade, the *Theodore Lentz Peace Research Center* was established in the United States with the aim of mobilizing social scientists for so-called peace science (Salazar-Mastache, [2009](#)).

In the 1960s, peace research gained momentum. Thus, in 1959, Johan Galtung founded the *Peace Research Institute* (PRIO) in Oslo, Norway, which proposed the definition of positive peace and structural violence. Galtung believes that, in addition to direct, physical or verbal, and visible violence, there is also structural violence and cultural violence, which are invisible but no less violent. These are the roots of direct violence

⁴ Author’s note: Polemology (from the Greek πολεμος [polemos] “war”, “conflict”, and λογος [logos] “study”) is a neologism coined by the French sociologist Gaston Bouthoul. It is defined as the objective and scientific study of wars as a social phenomenon susceptible to observation, aimed at preventing and resolving the international conflicts that can trigger them. As an academic discipline, it was founded after World War II. It studies the so-called “polemogenic” factors, such as, for example, the possible correlations between explosions of violence and recurrent economic, cultural, psychological and demographic phenomena (Grasa, 2000).

and encompass certain sociopolitical and cultural forms of a society: repression, exploitation, marginalization, and the culture of violence, such as the legitimization of violence through patriarchy, racism, sexism, or xenophobia.

In 1964, the *International Peace Research Association* (IPRA) was founded, and in 1966, the *Stockholm International Peace Research Institute* (SIPRI). In their studies, the authors refer to peace as the set of interactions of (sustainable) human rights and human development, disarmament, democracy, and degrowth (see figure 1) (Pérez-Viramontes, [2018](#)).

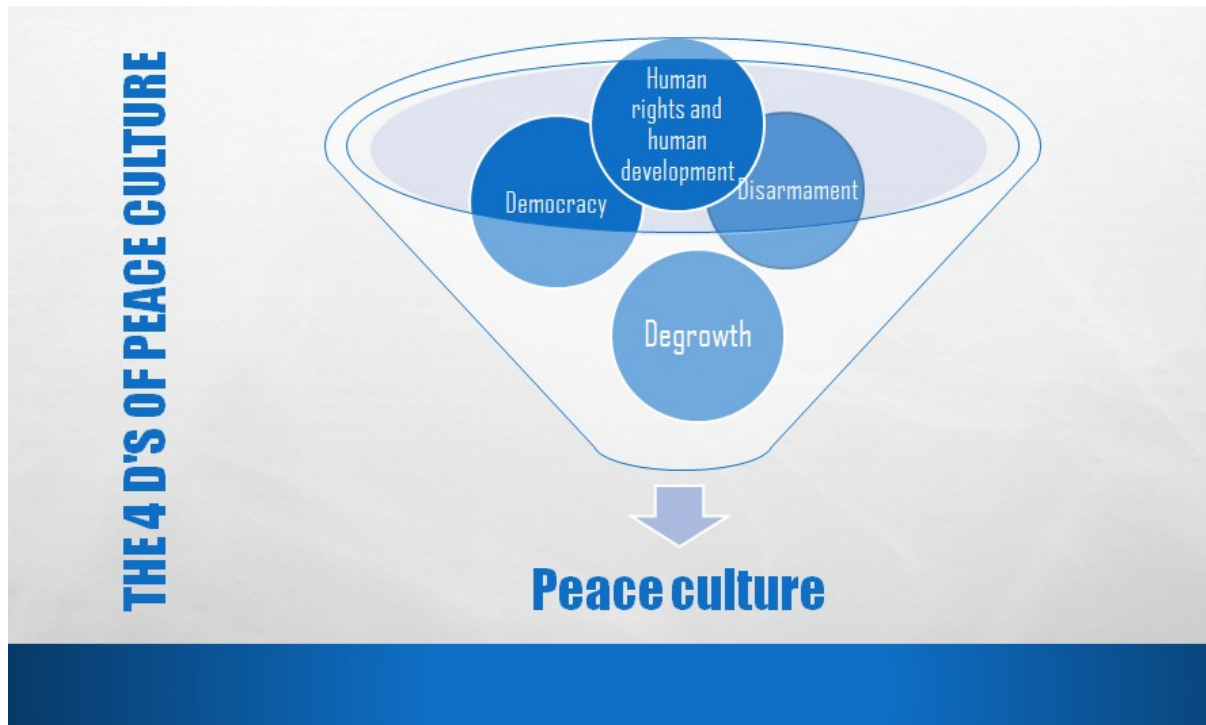


Figure 1. The conceptualization of the peace culture in Peace Studies of the 1960s. Source: own elaboration.

In this decade, peace education was enriched by Paulo Freire's contributions, who linked education with the development of peoples and the overcoming of social inequalities, as well as by the social and pedagogical proposals and practices of Mahatma Gandhi, based on firmness in the truth and nonviolent action, the development of personal autonomy, and disobedience to unjust structures.

In the 1970s, in the midst of the arms race, special emphasis was placed on issues related to the arms industry, the nuclear threat, and the bipolarity of the world, divided into two opposing military blocs. Towards the end of the 1980s, peace education shifted toward practical approaches and emphasized coexistence within the immediate community (classroom, school, neighborhood, etc.). Thus, it aims to prepare students to participate actively and responsibly in building a peace culture, acting within their own communities with nonviolent conflict resolution programs. Peace education is perceived as an alternative to changing violent, exclusionary, and intolerant human behaviors in peaceful relationships (Grasa, [2000](#)).

Therefore, it can be said that in the early stages of the development of the concept of peace, this term was associated with the opposite of conflict or war (see Table 1).

Table 1. Peace as the opposite of conflict or war.

No.	Author(s)	Understanding the Concept of "Peace"
1.	Aristotle (4th century BC)	Moderate Pacifism and <i>Jus ad Bellum</i>
2.	Jan Amos Komenský (Comenio) (17th century)	Global awareness of peace through the moral, political, and Christian renewal of humanity (harmonical man)
3.	Jean-Jacques Rousseau (18th century)	Peaceful coexistence and respect among free citizens, aware of their rights and duties participating and deliberating on community organization and public affairs.
4.	Leo Tolstoy (19th century)	Anarcho-pacifism.
5.	Lewis Fry Richardson, Quincy Wright, Pitirim Sorokin, Kenneth Boulding, Anatol Rapaport, Adam Curle (20th century)	Scientific study of conflicts and statistical analysis of the war's causes.
6.	Johan Galtung (1960's)	The notion of structural violence and the need to live in peace.

Source: own elaboration.

In the 1990s, peace education became closely related to intercultural education. Thanks to new information and communication technologies, contacts were established between different peoples and communities with diverse experiences, and access was provided to materials, centers, and individuals working on peace education in very different contexts and situations of conflict and violence. In 1995, the UNESCO General Conference proclaimed the *Declaration and Integrated Plan of Action on Education for Peace, Human Rights and Democracy*, which in Article 8 states:

Education should develop the capacity to recognize and accept the values that exist in the diversity of individuals, genders, peoples, and cultures, and to develop the capacity to communicate, share, and cooperate with others. Citizens of a pluralistic society and a multicultural world must be able to accept that their interpretation of situations and problems stems from their own lives, the history of their society, and their cultural traditions. Consequently, no single individual or group has the only answer to problems, and there may be more than one solution to every problem. People should therefore understand and respect one

another and negotiate on equal terms with a view to seeking common ground. Education should thus strengthen personal identity and foster the convergence of ideas and solutions that reinforce peace, friendship, and fraternity among individuals and peoples (UNESCO, [1995](#)).

From the study carried out, it can be argued, that from the 1970s to the late 1990s, several proposals for programs to rebuild the social fabric and educate for peace emerged based on the ideas developed by Jesuit Father Pedro Arrupe. It is worth mentioning that Arrupe dedicated his works to the issues of human formation and the educational apostolate. He promoted the apostolic renewal of the schools and universities of the *Society of Jesus*. He created the *Secretariat of Education at the Curia* to strengthen global unity and coordination in the sector. He encouraged the growth and international expansion of the *Fe y Alegría Popular Education Movement*. He founded the *Jesuit Refugee Service*, with a human, educational, and spiritual commitment (Virtual Center for Ignatian Pedagogy – CPAL, 2019).

In 1999, the *2000 Manifesto for a Peace Culture and Non-Violence* was drafted by the group of Nobel Peace Prize Laureates (UNESCO, [2000](#)). Following this initiative, the UN proposed the need to: “[...] expand initiatives for a peace culture undertaken by higher education institutions in various parts of the world” (ONU, [1999](#)) and approved the *Declaration and Program of Action on a Peace Culture*, which in Chapter 1 states:

A peace culture is a set of values, attitudes, traditions, behaviors, and lifestyles based on: a) respect for life, an end to violence, and the promotion and practice of non-violence through education, dialogue, and cooperation; b) full respect for the principles of sovereignty, territorial integrity, and political independence of States and non-interference in matters essentially within the internal jurisdiction of States, in accordance with the Charter of the United Nations and international law; c) full respect for and promotion of all human rights and fundamental freedoms; d) commitment to the peaceful settlement of conflicts; e) efforts to meet the development and environmental protection needs of present and future generations; f) respect for and promotion of the right to development; g) respect for and promotion of the equal rights and opportunities of women and men; h) respect for and promotion of the right of all persons to freedom of expression, opinion, and information; i) adherence to the principles of liberty, justice, democracy, tolerance, solidarity, cooperation, pluralism, cultural diversity, dialogue, and understanding at all levels of society and among nations; and encouraged by a national and international environment conducive to peace (ONU, [1999](#)).

Likewise, in 2005, pursuant to Resolution A/60/33 adopted by the UN General Assembly, the *Movement for a Peace Culture* was declared. A response to this call was the *Final Report of Civil Society on the United Nations International Decade for a Peace Culture and Non-Violence* (2010), which, through a survey of 475 organizations from 125 countries, showed that the world is ready to “transform the culture of war into a peace culture”

(Fundación Cultura de Paz, [2010](#)).

In the same year, 2010, the *World Social Forum on Peace Education*, held at the *International Congress on the Human Right to Peace* in Santiago de Compostela, Spain, drafted the *Santiago Declaration on the Human Right to Peace*. This document emphasizes the need for:

[...] a positive conception of peace, which goes beyond the strict absence of armed conflict and is linked to the elimination of all types of violence, whether direct, political, structural, economic, or cultural, in the public and private spheres. This requires the economic, social, and cultural development of peoples as a condition for meeting the needs of human beings, as well as effective respect for all human rights and the inherent dignity of all members of the human family (World Social Forum on Peace Education, 2010).

In September 2015, the United Nations (UN) and the Economic Commission for Latin America and the Caribbean (ECLAC) developed the *2030 Agenda for Sustainable Development* of the UN General Assembly. This document aims to transform and influence the formation of equitable and inclusive societies with the principle of sustainability in the economic, social, and environmental spheres. Therefore, the content and objectives of the *2030 Agenda* proclaim an end to social inequalities and, thereby, promote inclusive economic growth through decent work and the fulfillment of the human rights of every person (ONU-CEPAL, [2016](#)).

From there, as a result of our analysis we can affirm that different international instruments developed during the 20th and 21st centuries support peace education: the *Charter of the United Nations* (1945), *Universal Declaration of Human Rights* (1948), *International Covenant on Economic, Social and Cultural Rights* (1966), *Convention on the Elimination of All Forms of Discrimination against Women* (1979), *Convention on the Rights of the Child* (1989), *Plan of Action on Education for Peace, Human Rights and Democracy* (1995), *2000 Manifesto for a Culture of Peace and Non-Violence* (1999), *Convention on the Rights of Persons with Disabilities* (2006), *Final Report of Civil Society on the United Nations International Decade for a Peace Culture and Non-Violence* (2010), *The Santiago Declaration on the Human Right to Peace* (2010), *Agenda 2030 for the Sustainable Development of the General Assembly of the United Nations Organization* (2015), *Practice Material: What is Peace Education and Training and How to Do It? Peace Education and Pedagogy* from the Office of the High Commissioner for Peace (2017), among others.

As can be seen from the outcome of our study, the development of both the concept of peace and peace education has gone through several stages: from the moderate pacifism of the ancients and *Jus ad Bellum*; the idea of “creating” a harmonious man and the global awareness of peace through the moral, political, and Christian renewal of humanity, peaceful coexistence, and respect among free citizens, aware of their rights and duties of modernity; the anarcho-pacifism and the scientific study of conflicts and statistical analysis of the causes of war of the early 20th century; to “positive peace”, the notion of structural violence and the need to live without war,

and the 4Ds of the peace culture of the mid- and late 20th century.

However, in the 21st century, under new conditions of the development of our society, new conceptualizations of the peace culture and peace education are emerging, related to the idea of complexity and the need to promote intercultural communication and logical pluralism.

The new theoretical proposals of peace education: the idea of increasing complexity

Undoubtedly, education is responsible for instilling the values of peace culture in society; however, on what precepts should peace education be based in 21st century? The answer to this question leads to an analysis of the *complexity of knowledge* and scientific evidence that suggests there is no single logical truth.

As established in the *2030 Sustainable Development Goals* (SDGs) of the UN's *2030 Agenda*, to contribute to the solution of problems now called *super-complex* (climate change, cities, energy, gender equality, and health and life sciences) and thus produce positive consequences for real growth and the improvement of living conditions, thereby ensuring the fulfillment of the fundamental human rights of all people. These goals demand that education (primary, secondary, and higher education) reach a higher level of standards to respond to the changing needs of a more complex and diversified economy. The *2022 UNESCO World Conference on Higher Education* was dedicated to these topics. The *Diagnostic Report on Higher Education and Science Post-COVID-19 in Ibero-America*, and the *Universidad Iberoamérica 2030* program elaborated by the Organization of Ibero-American States for Education, Science and Culture (OEI), was also presented within its framework.

In this context, it is necessary to analyze the concept of complexity. It should be noted that this term has come to play a transcendental role in the exact sciences, from mathematics to biology and complex disciplines such as fractal geometry, artificial life, complex network science, non-classical logic, non-equilibrium thermodynamics, chaos science, catastrophe theory, among others, while recognizing, however, the social and human sciences as the most complex (Sotolongo, [2006](#)).

This new paradigm is based on the idea that knowledge is life itself and, at the same time, the most exciting, risky, and dangerous of all the acts or processes that living beings can carry out. In order to live, we are continually exploring the environment, constructing and betting on possibilities, risking our existence. Thus, knowledge is not something that is already there, but rather the very construction of living itself. It is a phenomenon that is created, not discovered, in shared activities (complex networks) (Maldonado, [2014](#)).

Complex thought breaks with the Platonic-Aristotelian postulates regarding hierarchies of knowledge and forms of knowing, establishing a worldview through a dialectical perspective. It questions the Cartesian ideal of absolute separation between the subject and the object of knowledge (or the study of the surrounding world from outside this world) and recovers Kant's conception of the *fusion of subject and object* in the cognition of the world, of the active extraction of knowledge (the relationship "the object does

not exist without the subject and the subject does not exist without the object”), which leads to the study of the surrounding world as part of this world (Taeli-Gómez, [2010](#)). From this perspective, as an episteme of peace education, complex thought aims at the democratization/horizontality of teaching (a shift from the subject-object relationship in the classroom to a subject-subject relationship).

Furthermore, this approach proposes a new notion of reality as a process, not as a final, “made”, “finished”, “given” entity; it reconsiders determinism, causality, prediction, and the change in form and ideal that these notions presuppose; it recognizes values as integral to human cognition with the intention of overcoming the absolute separation between knowledge and values; it demands responsibility as a constitutive element in the production of scientific knowledge; it values the dialectical unities of the simple and the complex, chance, uncertainty, chaos, indeterminacy and emergence, and nonlinearity (Lipman, [1998](#)).

Complex thought is configured under the principles of systematization and organization, hologrammatics, retroactivity, recursion, autonomy/dependence, dialogue, and the reintroduction of the knower into all knowledge. Education based on complex thinking means indeterminate learning modes, in the sense that the complexity of a phenomenon lies precisely in the *degrees of freedom*⁵ exhibited by the phenomenon or system in question: greater degrees of freedom lead to greater complexity, and fewer degrees of freedom lead to lesser complexity. A growingly complex phenomenon is one that gains information, learns, or becomes nonlinear.

Therefore, education can be viewed as a *system of increasing complexity*, and not as a phenomenon centered on memory, didactics, programs, indicators, measurements, impact, skills, competitiveness, evaluations, and the criteria that characterize contemporary education. In this new understanding of education, the current main feature of its formal variant, institutionalization and strict structures⁶, is also admissible (Maldonado, [2014](#)).

On the other hand, since the objective of intentional education is the transformation of individuals’ structural behavior in accordance with the ideal of man corresponding to the socio-political and economic aspirations of each culture, this process cannot be rigid or predictive, but rather

⁵ Author’s note: The concept of *degrees of freedom* originates in physics and refers to a process of increasing indeterminacy or the increase in degrees of freedom in the dynamics of a phenomenon or system. Hence, complex systems are *increasing complexities* (Yaneer Bar-Yam, 1997).

⁶ Author’s note: Here it refers to the education as a *social institution*, one of the substructures of society, a system composed of many elements and relationships between them: subsystems, management, organization, human resources, infrastructure, etc. Each educational system is characterized by its objectives, content, plans, and study programs, duly structured taking into account the previous levels and providing for the curricula of those that follow. The pillar of the educational system is its main goal, or the answer to the question: what expectations does society have at a given historical moment regarding the person it will educate? It exists in three dimensions: social (education in the world, education in a certain region or country, etc.); of levels (primary education, upper secondary education, higher education); of profiles (special education, normal education, university education, informal education, etc.) (Zhizhko, 2017).

approximate, tentative, open, and adaptive (like a living system). Teaching cannot cause learning, but rather condition it and determine it through uncertainty, chaos, and disorder. In this process, what the teacher teaches is not a dogma: the student determines the veracity of the acquired knowledge in practice (Morin, [2003](#)).

It should be clarified that chaos and disorder in the educational process do not imply the recognition of epistemological chaos or the impossibility of acting clearly in the world. Constructing the world subjectively presupposes the consideration of a dialectical perspective without contradictory relationships and linear interconnections. Education as increasing complexity consists of the unfinished and intrinsically open process of knowledge, nourished by science and adapting to the “[...] new scientific era: the era of possibilities or probabilities in scientific matters [...] the crisis of uncertainties that have replaced old certainties”, since “[...] the same physical laws, instead of expressing certainties, are now said to express probabilities” (Tunnermann, [2001](#)).

In complex peace education, the student should not be considered a disconnected, abstract, ideal object, but rather a subject from his/her real perspective, a concrete and contextualized eco-social minimum related to the whole through the educational process. This implies recognizing that the historical-natural process, ultimately determined materially, converges within the student. The current student-subject is no longer conceived as “a brick”, “a screw in the economic machine”, but as a relationship, a microsystem embedded in the social fabric (Maldonado, [2013](#)).

Consequently, students should not be considered as objects upon which teachers impose their power (knowledge, etc.), but rather as “[...] subjects who contextually construct their own systems of ideas, knowledge, and theories within a social structure”. According to the above, it can no longer be argued that knowledge is “transmitted”. Furthermore, the “[...] absence of a linear student-subject-atom allows for the enhancement of critical thinking, since one of the reasons for its lack of development lies in the epistemological inconsistencies of the teaching-learning process” (Maldonado, [2014](#)).

On the other hand, education as a process of training of social subject-actors (concrete and contextualized eco-social minimums) requires us to accept the indivisibility of its three types: formal, non-formal and informal education, as well as the need for interrelation of public educational policies with economic, social, etc. policies.

Key Competencies for Complex Peace Education

Educating for a peace culture means developing in students key competencies⁷ (interdisciplinary and supradisciplinary) that refer to the individual's ability to perform complex, multifunctional, and

⁷ Author's note: In this case, unlike the neoliberal term “competence”, according to which teaching aims to increase the competitiveness of the student, we understand this concept from dialectical philosophy and neo-Marxism (Feu, 1984; Prescott, 1985, among others), where “teaching by competencies seeks, above all, the integral development of the student's personality” (Zhizhko, 2017).

multidisciplinary activities appropriate to the requirements of society and the time; effectively solving current individual and social problems.

One of these is mastery of *complex and multidisciplinary thinking*, which involves integrating two perspectives: quantitative and qualitative; the analytical leap from the local to the global, from the micro to the macro, from the theoretical to the practical, from the inductive to the deductive; acting intelligently, imagining possibilities, devising outstanding scenarios, and conceiving meaningful alternatives. Understanding the complexities and uncertainties in which we live requires analytical intelligence, intellectual curiosity, and the ability to go beyond intuition or simple common sense.

From the perspective of Canto-Sperber and Dupuy (2004), “[...] being complex is being able to become more complex” (Canto-Sperber, Dupuy, 2004). This competency requires certain capacities for understanding past events and visualizing future trends. It also requires the management and handling of truly complex situations, such as environmental conservation and sustainable development. It is indisputable that addressing these problems and challenges does not require routine and normative skills that seek only to apply rules; instead, other types of more complex and multidisciplinary capacities are essential for efficient performance in everyday and professional life.

Likewise, it is important to know how to *manage and resolve problems and conflicts*, which means combining “[...] various cognitive and motivational processes that are orchestrated to achieve a specific goal that could not be achieved solely through the application of a known routine or algorithm” (Hersh-Salganik, 2004). It also represents “[...] producing behavioral changes that allow preventing conflicts and violence, both overt and structural violence; resolving conflicts peacefully; and creating conditions that lead to peace, both at the interpersonal and intergroup, national, or international levels” (UNICEF, 2015).

The ability to manage and resolve problems and disputes involves: perceiving and understanding different positions, negotiating conflicting interests in order to accept bilateral solutions; functioning democratically in groups, reaching agreements across cultural differences, developing unity strategies; being able to analyze the issues at stake, the origins of the conflict, the reasons for both sides, and failed attempts at reconciliation, as well as building negotiated solutions across cultural differences (Perrenoud, 2008).

It is also essential to learn *to live in a diverse and multicultural world*. The necessary condition for achieving fruitful coexistence in a multicultural society is to create scenarios that help new intercultural identities and values, within the framework of existing power configurations, to be conceptualized through different cultural resources, overcoming boundaries and transgressing limits to understand otherness in its proper sense, creating “a zone beyond the border”, establishing intercultural mechanisms for shaping the individual’s socio-cultural experience. Equally,

Pedagogies that focus on the transformation and construction of a peace culture foster changes in the way individuals and groups relate to one another through practices of social justice that include fair relationships,

tolerance, inclusion, respect for human rights in all spheres, mediation, interpersonal and intercultural encounters, and so on. Likewise, they integrate one's own experience with reality, stimulate the transformation and overcoming of violence transmitted from generation to generation, and foster peaceful and creative ways to transform conflicts, analyze them, engage in dialogue, debate respectfully, cooperate, arbitrate, recognize one's own interests and needs and those of others, among many other practices and capacities (Office of the High Commissioner for Peace, 2017).

In this process, communication understood as dialogue, collective reflection, sharing, participation, inclusion, as well as a new perspective on the Other and an approach to the understandings and practices that the Other has adopted in a society where, due to globalization and technological development, new identities and forms of inclusion/exclusion are constantly being created: the connected and the disconnected; the wealthy and the vulnerable; the integrated and the excluded; those who follow social norms and the marginalized.

In this sense, Giroux's border pedagogy helps develop in students the skills necessary for coexistence in a diverse and multicultural world. Its main concept is *transgression*: a certain existential state of the person in the educational process, conditioned by the changes the individual achieves in internal identifying determinants and the expansion of his/her own experience through the inclusion of other socio-cultural and semantic fields. *Transgressive progress* creates new horizons of knowledge, opens the possibility of choosing different forms of further development, and resembles the process of bifurcation (branching) (Giroux, [1997](#)).

Giroux refers to the boundaries of the domain as those limits that must be transgressed, challenged, and redefined, creating the intercultural mechanisms that shape the individual's socio-cultural experience (Giroux, [2005](#)). With the support of border pedagogy, students "overcome confines", break boundaries to know and understand the Other, act in the area beyond the border, internalize intercultural values, and create new identities.

Another key competency for developing a peace culture in students is *acting intelligently*. This includes the ability to imagine possibilities, devise outstanding scenarios, and conceive meaningful alternatives, which should be a constant pattern for the individual. Analytical intelligence is identified with the widespread idea of intellectual curiosity, that is, with the ability of people to go beyond intuition or simple common sense to understand both the complexities and uncertainties of the current moment and the unpredictability of the dominant economic world. It involves:

- Generating and justifying ideas, transforming them into practical actions;
- Using creativity, knowing how to plan, and setting goals;
- Analyzing information;
- Making decisions and solving problems;
- Thinking systemically, focusing on results;
- Possess analytical and organizational skills;
- Know how to organize you own time;
- Work as part of a team;

- Provide quick and appropriate responses; act with determination and strategy;
- Master formal verbal and written language; make use of technology; possess a communication culture (Zhizhko, [2017](#)).

Thus, the development of a peace culture in students facilitates a series of competencies, each of which ensures mastery of certain facets of human behavior that lead students to a new perception of the world around them and of others, and allows them to achieve a new position regarding everyday events based on pluralism regarding the concept of truth (logical pluralism) and interculturality. It is worth mentioning that in this process, intercultural communication plays a fundamental role.

CONCLUSION AND SUGGESTIONS

Summarizing, the results of our documentary-bibliographic research show that the evolution of peace culture has several stages. Thus, in the Ancient World, peace was agreed with *Jus ad Bellum*; in the Modern Age, because several wars broke out in Europe, was sought peaceful coexistence of nations and countries and education aimed at developing a harmonious individual; in the early 20th century, with the First World War and its disastrous consequences, starts statistical study of conflicts and causes of war; the mid- and late 20th century, marks the rise of the development of a peace culture and peace education and their institutionalization involving the field of public policy, scientific studies, education, and peace organizations and institutions.

Since the 1940s, after the Second World War, peace culture and peace education have been on the agenda of international, regional and national human development governing bodies (UN, UNESCO, UNISEF, ECLAC, etc.), having established the *Office of the High Commissioner for Peace*, the *Peace Culture Foundation*, the *World Social Forum on Peace Education*, among others, as well as having developed several guiding documents on the peace culture in the Western world.

Likewise, during this period, the conceptualization of peace undergoes changes from its understanding as “living without war”, “the opposite of direct violence”, “positive peace or the opposite of structural violence”, “the set of interactions of the 4Ds: human rights and human development, disarmament, democracy, degrowth”, etc. Equally, several scientific institutions and organizations that emerged in the mid-20th century in different countries contributed to the study of the origins of conflicts and their nature (even creating the so-called *science of peace* and *polemological studies*). Numerous NGOs around the world have also contributed to the development of a peace culture.

In the 21st century, according to the postmodern vision of several scholars, the peace culture and peace education are the processes which involves sustainable development, overcoming social inequalities, the promotion of intercultural communication and logical pluralism. They are also related to the idea of *complexity*, which arises from the hypercomplexity of post-industrial society: complex economies, complex sciences, complex human relations, etc., as well as the complexification of knowledge not only

in the exact sciences, but, more than anything, in the social and human sciences, that reflect the process built through collaboration and interaction of individuals, creating complex networks based on the facts of everyday life and human needs.

However, the fact that education is the key factor in building harmonious (complex) human relations founded on the principles of peace, tolerance, respect for others, environmental protection, and harmony with oneself and others, does not mean that the educational models that have operated until now, can satisfy these demands that reality imposes on humankind in the 21st century.

According to followers of the complexity education approach (Canto-Sperber and Dupuy, [2004](#); Giroux, [1997](#), [2005](#); Rychen and Hersh-Salganik, [2004](#); Lipman, [1998](#); Maldonado, [2013](#), [2014](#); Morin, [2003](#); Pérez-Viramontes, [2018](#); Perrenoud, [2008](#); Sotolongo and Delgado, [2006](#); Taeli-Gómez, [2010](#); Tunnermann-Bernheim, [2001](#); Zhizhko, [2017](#), among others), structural changes are required, even in the conception of education as a socio-cultural phenomenon: when a key social institution for “molding” the individual according to the socio-political and economic pretensions of the group in power becomes the growing complexity of subject-subject relationships in the classroom, where knowledge is not “deposited” in the student-empty vessel, but rather is conditioned and its acquisition is encouraged, enhancing creativity, critical thinking, and independent work.

Building a culture for peace means ceasing to think of education as something impersonal and objective (that which “represents the sum of everything we must know”), and beginning to create contextualized and individualized educational content (that “for which we must know”); building vertical education, without hierarchies and positioning, with respect for the dignity of the subjects of the educational process, with flexible curricula, considering the fundamental role of imagination, fantasy, play, and the meaning of emergencies. It is important to follow the new educational ideal: a free, innovative, reflective and self-reflective, critical, plural human being, capable of self-education, self-organization, living in a multicultural environment, reconsidering the meaning of difference, and being sensitive to the experience of the other.

Achieving a culture for peace through education is only possible by building a new type of teaching that guides students to understand the perplexities and fluctuations of the moment through the development of their intellectual curiosity and analytical intelligence, their ability to find non-standardized and alternative solutions to problems, their capacity to assimilate others’ discourse, recognize their own discourse, eliminate prejudices, and be capable of empathizing.

Future research will be dedicated to analyzing the role of intercultural communication in developing a peace culture in students.

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