SECTION: ARTICLES

Democracy, intelligence and (sound) education in the perspective of John Dewey*[1]

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The foundation of democracy is faith in the capacities of human nature; faith in human intelligence and in the power of pooled and cooperative experience.
John Dewey

Abstract

In this article, which has the opportunity to be included in the centennial celebration of the publication of *Democracy and Education*, we intend to reflect on the foundations of three core notions present throughout John Dewey's work, especially in the aforementioned publication. We refer to the notions of *democracy, intelligence and education,* which seem to be in a structural relationship. The title of John Dewey's original work does not include the term *intelligence*. However, it seems crucial to anchor the theory of education, based on a democratic conception, to this structural idea and include it in the author's theory. Indeed, according to Dewey's philosophy, education is represented as a test to the validity of the ideal of a democratic society and takes on the responsibility of creating the conditions for the implementation of such society. In Dewey's conception democracy is much more than just a form of government. It is the opportunity for a complete fulfillment of human potential. In this context, only an ability such as intelligence can be used to act upon an always evolving and uncertain world with a tendency for constant improvement. To this end, the conception of intelligence that allows us to fulfill such ideal must therefore be clarified.

Keywords

Democracy – Intelligence – Education – Pragmatism – John Dewey.

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Introduction

On the centennial of the publication of *Democracy and Education,* it becomes necessary to reflect on some of John Dewey's ideas with regard to education, teaching and learning, as well as to learning priorities and the way it depends (and to what extent) on what we consider and know about the knowledge process, the evolution of society and what is proper and desirable for any human being. Everything we believe education should be has an impact on the world we build and live in for future generations.

We should take into consideration some fundamental assumptions that should guide us in the reflection undertaken herein: education is a process of growth, an essential method of progress and social reform, an improvement tool and should reflect human intelligence. Therefore, a sound education is only conceivable when the school system promotes critical thinking among individuals (a good and effective method of thought), an ethical development and a socially fair, rational and open way of life. Hence, in *Democracy and Education,* Dewey defends that the teaching methods are a true test to the consistency of democracy.

Dewey states that a theory of knowledge that does not have a concrete and significant impact on the world of education is an inadequate and artificial theory. It is therefore essential to enhance the existing integration between the personal and social dimensions of intelligence and the mind with a theory of knowledge and learning. For this to happen effectively, the paradigm that has dominated in a more or less recent past, and the pedagogical theories that, in turn, result from an incorrect philosophical tradition must be overcome: the dualistic conception involving the theories of knowledge and learning. Briefly, this dualism is expressed in the following points: the opposition between empirical and rational knowledge, between passivity and activity, intellect and emotions, and knowledge and action.

One of the fundamental ideas that we advocate herein is that there is a parallel between what Dewey defends as the nature of intelligence and the way democracy functions, or should function. It is important to clarify to what extent the concept of education, the notion of democracy and the idea of intelligence are interrelated in order to sustain a more accurate and effective learning model. The philosopher from Vermont strongly advocated the necessary coordination between education and democracy. He wrote at length about the value of "faith in democracy" and how it needs to be worked in education. Our approach aims to clarify how John Dewey substantiates such coordination through a pragmatic conception of intelligence. We could pursue a path focused more on politics, but that would provide us with a very limited meaning, since the very notion of politics has, for the philosopher, a more vital, fundamental scope. This is not to say that such approach is not important and correct, but there is more: the touchstone of Dewey's proposal entails - and what we defend - a specific skill of an intelligent being. It is as if we were stating that it is an intelligent attitude that makes democratic practice possible. And it is such attitude that provides a sound education. With this goal in mind, we will clarify how the concepts of *democracy* (an open, social, communicative, ethical and *intelligent* way of life), intelligence (reflective, methodological, meaningful and democratic ability

to interact) and *education* (project in which human abilities can be and should be worked in order to make democracy possible and enhance intelligence toward a humanistic achievement of life) can be understood. Coordinated in this way, the three ideas maintain a significant unit.

What seems unique in Dewey's theoretical construction is its relationship with the idea of intelligence. Not disregarding the sociopolitical component (which would be foolish for the pragmatic philosopher), we understand that the correlation between democracy and education takes on a more consistent basis with the instrumentalist theory of the author. Ideas, in the author's conception of *Democracy and Education,* are important tools that the human being forges and uses when interacting with the challenges he faces in life. Democracy and democratic practices involve, of course, a set of social and philosophical assumptions. The value of an open social organization is constructive, which includes the active participation of all individuals. However - and this is at the core of our approach - the social and educational philosophical system developed by John Dewey has its foundation in the notion of intelligence.

Democracy

The concept of democracy addressed by the author was framed within the historical situation of his time and holds no noteworthy novelty. However, it is not the contemporaneity of *Democracy and Education,* whose publication occurred more than a century ago, that is discussed herein. The present work has been performed especially throughout this year, on the occasion of its centennial. The contemporaneity of the work must be, above all, contextualized in the zeitgeist (in the Hegelian sense of the term). Dewey advocated from the beginning that philosophers think, debate and shape their views, their arguments and their beliefs within the temporal context in which they live. They can deliberate from an inherited conceptual heritage of the historical past, foresee future scenarios (some even had the faint desire of having "the last word"), but the mental images are always those of their contemporaneity. Marcus Vinicius da Cunha, among others, recently reflected on how we reread Dewey today, on the fact that this new reading can even "involve some degree of misreading" (CUNHA, 2016, p. 26), insisting on the size of the *audience* of any text by applying the assumptions of Aristotle's rhetoric (CUNHA, 2016, p. 32). The way we read a text always involves a special, and not absolutely neutral, perspective. Robert Boostrom also reinforced this aspect, referring to *Democracy and Education:* "While it is a foundational document for the flowering of public schooling and for the US experiment in progressive education in the 1920s and 1930s, we live in an era that rejects progressive policies, and questions the necessity, benefit or practicality of public education" (BOOSTROM, 2016, p. 4).

Mordechai Gordon and Andrea English have also recently questioned about what can, or cannot, Dewey's theory tell us today in a globalized world: "To what extent was Dewey able to anticipate the changes and challenges to a democratic education that have been brought about by the phenomenon of globalization?" (GORDON; ENGLISH, 2016, p 977). Other authors point out the huge impact that Dewey's ideas

still have today, for example, Kambouchner (2013) or Stefano Oliverio, Maura Striano and Leonard Waks (2016), who find in the philosophy of *Democracy and Education* an inspiration for contemporary educational policies in the context of the European Union: "Dewey's vision of education through intercultural communication as leading to a fusion of horizons can be of use in reconceiving democratic education within European nations" (OLIVERIO; STRIANO; WAKS, 2016, p. 19). Jürgen Oelkers (2000) also addressed the issue on the applicability of the work in the future (albeit with some weaknesses), anchored in the very formulation Dewey provided. The former states that *Democracy and Education* should be framed: 1) in the critical response provided by Dewey to the "German philosophers"; 2) in the configuration of what liberalism meant at the time; and 3) in the need to value education for democracy in today's society. In this respect, the work presents some weaknesses, in particular "a reduction of education basically to social experience or experimental learning" (OELKERS, 2000, p. 15). However, the work has the undeniable merit of associating concepts and promoting the need to enhance democracy for the society of the future.

In addition to the context as well as to what we can benefit from the philosopher's theses, or weaknesses, there is something of great value in his program: democracy is a vital setting to the truly human project, to what Adalberto Dias de Carvalho called "anthropological project" (CARVALHO, 1992). In other words, Dewey wrote at length about the virtues of the democratic political system in a way that presently there is nothing new, but a hundred years ago it was a combat that justified all revealed militancy. We cannot say that *Democracy and Education* presents a systematic foundation and an in-depth approach to the concept of democracy. In fact, the fulfillment of democracy involves a compromise between the right to freedom of individuals and the promotion of the common good. In political terms, it involves a social project that ensures decent material living conditions for all citizens, control over domain claims of some social sectors (elites), and maintains ethical levels of operation of social, administrative, economic and financial institutions. For democracy to function well it is necessary to ensure a participatory citizenship among its members and an educational system that ensures the required skills for this role. Dewey always saw this social model as desirable and sought to build an educational system that could be adjusted to it. There is clearly some "faith" in this political model: "Foundation of democracy is faith in the capacities of human nature, faith in human intelligence and in the power of pooled and cooperative experience" (Dewey, 1987, p. 219). Much of what Dewey says about democracy in itself is revealed as belief, a belief associated with a value, an asset. However, it is not enough to merely emphasize the social character of human nature. There are many possible forms of social and political organization. A totalitarian ideology, an uncontrolled bureaucratic or ultraliberal model are also forms of social life. Of course, Dewey did not propose such ways.

Many years after writing that democracy is a way of life, John Dewey wrote (during World War II) a short text entitled *Creative Democracy,* concerned with what was yet (still needs) to be done toward democratic civilization, which we held (then) for granted as the result of the progress of nations. In fact, in view of the threat of the Nazi regime against countries already living in democratic political systems, there was a need to reaffirm the

values of free thought and peaceful and tolerant civilization, social progress, knowledge and respect for the principles of ethics. That alone would be enough to emphasize that democracies have a fragile and unstable life, and need constant defense and work to promote them through educational systems. However, Dewey furthers his analysis in line with its deepest ideals: "Democracy is a personal way of individual life" (DEWEY, 1988, p. 226, emphasis added). The foundation recalled was more than just a criticism about the brutality, tyranny, injustice and illegitimacy of the Nazi regime. The principle of virtue of the person as an individual was once again recalled, as an ideal primarily rooted in personal skills and then as a social model. "Democracy could be seen as 'organic', as synergistic and evolving, rather than 'atomistic'", as stated by Scott London (2000), supporting the idea of an ideal that is at the same time evolving and vital. More than just a sum of individuals, democracy can be conceived as an evolving community in which individualities have a role in promoting growth and the common good. There is clearly an ideal dimension that is adopted, contributing to the virtuous collective life. In this regard, Richard Bernstein, in "Dewey's vision of radical democracy" (BERNSTEIN, 2010), reminds us that democracy has not always had the positive meaning that today is attributed to it. Many liberal thinkers saw in democracy a danger of mediocre populism. Since 1888, in the year he published "The ethics of democracy", Dewey established a theory that began dominating his thinking: "Democracy is a form of government only because it is a form of moral and spiritual association" (DEWEY, 1969, p. 240). Bernstein concludes that "Throughout his life Dewey argued that without a vital democratic ethos or culture, political democracy becomes hollow and meaningless" (BERNSTEIN, 2010, p. 291). Democracy is an ethical and vital idea.

This conception of democracy is clearly present in Democracy and Education, but the work is mostly focused on education rather than on democracy[5]. The latter concept was not addressed herein in a systematic, thorough and descriptive way. It is generally used in a vague and general sense, and treated in a manner different from that of political science. The idea that underlies the philosopher's work is a model of an ideal society, a generic social way of life, which reflects a world that welcomes the participation of all while reconstructing existing social systems in order to implement a civilizational progress (FLEW, 2000). Dewey's belief in the goodness of democracy - to the extent that he identifies it with modern life - is justified precisely as an idea, as an intelligent, rational and emotional, individual and collective project, which is the meaning of the very notion of "idea", according to the author. The idea of democracy is particularly true as a guide to social action, as a projection of a good solution to social problems, as a form of intervention, a reconstruction strategy (to use a phrase so dear to the author of *Reconstruction in Philosophy*), an enhancement of liberation interests. It is a good idea:

> Good ideas lead to action holding solutions to problems and that can serve as a model for the development of other ideas. Ideas are adaptive devices, such as beliefs and, as such, are

5- It was in fact an editorial suggestion related to the circumstances of international politics (World War I) that dictated the adoption of this heading, relegating to the subheading the name that conveyed the original purpose of the author - Introduction to Philosophy of Education.

> dynamic parts. The Darwinian matrix that Dewey adopts for his theory of knowledge requires the adaptive mechanisms to be more or less stable, that is, they cannot be definitive forms, but rather moments of the adaptation strategy. (MATOS FERNANDES, 2013, p. 103).

This conception is expressed in Dewey's words: "Modern life means democracy, democracy means freeing intelligence for independent effectiveness—the emancipation of mind as an individual organ to do its own work" (DEWEY, 1977, p. 229).

The rational form of social organization, holding the characteristics of an open and critical relationship, adjusted by inquiry and experimentation processes and subject to constant review in which individuals can contribute intelligently, materializes in the idea of democracy. This has both ethical and rational foundations. Democracy, as John Dewey (1984, p. 328) wrote, should be "the idea of community life itself". More than just a form of government, democracy is "a mode of associated living, of conjoint communicated experience" (DEWEY, 1986, p. 93). The answer to the question "can there be one or various forms of social and political organization based on rationality?" is affirmative. Democracy is such form of common life in which rational regulation has to command the various hypotheses that arise in collective projects. Moreover, it is the way of life that allows the necessary openness for critical thinking and experience exchanges among individuals.

Community life is in itself a spontaneous phenomenon. However, its organization in a rational and moral way is not inevitable. Dewey is aware that there is a natural form of aggregation and, above all, with regard to the organisms, a vital interest in interacting together, cooperatively. But this is only an organic basis, however important it may be. There is, then, a rational work that goes beyond this ontological convenience of aggregation:

> Association or joint activity is a condition of the creation of a community. But association itself is physical and organic, while communal life is moral, that is emotionally, intellectually, consciously sustained. (DEWEY, 1987, p. 330).

What stands out in this point of view is that there is a natural tendency of life forms that develops toward a spontaneous interaction, justified perhaps by the common vital interests of each of the organisms, i.e., there is an associative behavior set at a merely organic level. But there is another type of action, featuring a common way of life and that is due to the work of intelligence, emotion and conscious instance, without which a collectivity will never be a community: it is the interaction driven by common and reasonably established interests and purposes. As the author states: "No amount of aggregated collective action of itself constitutes a community" (DEWEY, 1987, p. 330). An organic basis is therefore necessary from which intelligent behavior is strengthen. Dewey insists on the moral dimension that characterizes the community in which communication is a prerequisite[6].

6- Commenting on these aspects of the instrumentalist theory, Maria do Rosário de Carvalho highlights the intertwining that exists in Dewey's theory between communication and community: "Consciousness of participation in the community is a product of communication, and the latter the activity of building and sharing common meanings - common, society and communication thus have the same roots and the same role" (CARVALHO, 2000, p. 478).

Community is, in fact, a key concept. Lynda Stone in "Re-thinking Dewey's democracy: shifting from the process of participation to an institution of association" has a point when stating that we should focus on the idea of community and associations to ensure participation. Among the set of key concepts associated with democracy, such as *participation, context, ideologies, democratic governance and association,* the latter embodies best the purpose of the author of Democracy and Education. As stated by Stone, "it is interesting that Dewey's treatment of participation is not specifically political. For him, the natural function of human participation occurs in consciousness and then develops in an isomorphic form as a social function" (STONE, 2016, p. 81). What Dewey understood as the scope of democracy was the world of free and conscious experience exchanges, a form of social life, and a space for shared communication that, according to Stone, is shaped by the notion of institutionalized association, institutionalized community. The conceptual relationships between this idea and Habermas' theory are obvious.

It is also worth emphasizing that, for the author of "The ethics of democracy", democracy is not expressed in a kind of numerical accounting of individuals, where most agglomerated citizens define the common good. In this seminal text of 1888, Dewey (1969, p. 234) states that "the heart of the matter is found not in voting nor in the counting the votes to see where the majority lies. It is in the process by which the majority is formed". We believe that this aspect conveys well the idea that it is not just a demographic sum, but rather a democratic idea.

Despite a certain analogy with the common natural activities, the idea of community is a form of rational regulation, a moral ideal, a rational and intelligent thing; intelligence applied to the problems of ordinary life, but a collective and not individual intelligence[7]. Democracy is the possibility for individuals to find rational rules, without appealing to any transcendent foundation. Apart from a moral ideal, there are communicative conditions and ways of being that make democracy a more open way of life of society. There are moral, ethical, esthetical, economic and other foundations justifying democracy. However, John Dewey adds another, decisive to our theme: the interdependence of the method of democracy and the method of science. What do these two notions have in common? In *Freedom and Culture,* Dewey (1939, p. 102) indicates the connection between each: "Freedom of inquiry, toleration of diverse views, freedom of communication, the distribution of what is found out to every individual as the ultimate intellectual consumer, are involved in the democratic as in the scientific method". In Ethics, the author conclusively establishes:

> [...] the method of democracy, of a positive toleration which amounts to sympathetic regard for the intelligence and personality of others, even if they hold views opposed to ours, and of scientific inquiry into facts and testing of ideas (DEWEY, 1987, p. 329).

7- In this regard, J. Miguel Esteban, in his introductory text to the anthology (in Castilian Spanish) of social and political texts of John Dewey, which is entitled "Pragmatismo Consequente", states that "socialization of intelligence and consciousness is one of the requirements for social fulfillment of democracy" (ESTEBAN, 1996, p. 34). This author also points out that "long before Jürgen Habermas, Dewey saw in the modes of action of science the regulatory model of a participatory democracy" (1996, p. 31- 32).

Replacing traditional authority for scientific guarantee is not the same as finding the algorithmic key to solving all problems as intended, in a certain way, by the scientific socialism of Marx and Engels. According to Dewey, and cited by Sidney Hook, "the life of democracy in our day and age depends upon taking the method of science home into our own controlling attitudes and dispositions, employing the new techniques as means of directing our thoughts and efforts to a planned control of social forces" (HOOK, 2008, p. 233). In *Logic, the Theory of Inquiry* there is a social setting that structures the inquiry methods: "all inquiry proceeds within a cultural matrix which is ultimately determined by the nature of social relations" (DEWEY, 1938, p. 487). David Fott, in *John Dewey: America's Philosopher of Democracy,* understands that this is also a fundamental aspect that defines democracy: "for Dewey democracy as a way of life depends crucially on faith in scientific method" (FOTT, 1988, p. 77).

As a model of practice and as a social life project adapted to an intelligent way of life, this idea of democracy is held as a prerequisite for an existence adjusted to the development, progress and "improvement" of ways of political organization that are supported on a civilizational program, which in turn is mirrored in the logic applied to science. However, it does not exactly describe a situation that exists. Democracy is an idea, not a fact. This view is also shared by Marcus Vinicius da Cunha, to whom democracy, as defined by Dewey, is a utopia: "Dewey created a utopia" (CUNHA, 2016, p. 28), and *Democracy and Education* "does not make a description, but a projection of how education could be in a particular society, a democratic society" (CUNHA, 2016, p. 26). We may dare to say that there is something metaphysical in all this, although John Dewey himself would not like such a statement. Here, the metaphysical term does not denote a specific tradition of philosophy, but rather a dimension that is not limited to the conditions of a mechanized everyday life. Jim Garrrison has a point when he states in a conversation with other researchers working on the philosopher's work: "I believe Dewey sought spiritual democracy in the tradition of Walt Whitman (whom Dewey calls 'the seer of democracy') in that Dewey shows us how to live in intimate relation with the rest of existence" (HICKMAN; NEUBERT; REICH, 2009, p. 231). This statement leaves us reflecting on a more existential meaning, which we often do not have access to when we read the author of Experience and Education.

Intelligence

All this has a very close relationship with the naturalistic perspective of philosophy that the author adopted when in contact with the evolutionary theory of Darwin (DEWEY, 1997), and with the principle of continuity adopted from C. S. Peirce. Democracy is a concept that is fully adapted to the instrumentalist project as a whole. It involves a social and cultural theory, a metaphysics of natural life and also a very specific notion of knowledge, learning and science. This view is also defended by Hilary Putnam in *Renewing Philosophy,* designating as central idea an "epistemological justification of democracy". Recalling the words of Dewey, Hilary Putnam clearly states his analysis project: "Democracy is not just one form of social life among other workable forms of social life; it is the precondition for the full application of intelligence to

the solution of social problems" (PUTNAM, 1992, p. 180). Here is the essence of the original conception of democracy for instrumentalism. When anchoring it as a "prerequisite" of intelligent attitude, this conception avoids the merely institutional approach to democracy and transforms it into the setting that allows the notion of open field, in which the natural world constantly challenges our mind and at the same time conveys the idea that there is an answer to social problems (including the issues on learning, schooling and education in general).

There is a plethora of concepts that the philosopher receives from Peirce's work, namely: a) the idea that the order of things (the real) is an uncertain world; b) that human knowledge is a construction in order to solve practical and theoretical and concrete problems, and the attempt to find the best possible solution; c) the notion, inherited from the founder of pragmatism, of a "community of inquiry". They represent the three core pragmatic principles. Such epistemological assumptions are decisive in defining the contours of democracy. Conceived as a *way of life,* democracy is the stage we need to improve the practice of scientific inquiry. It offers both freedom of thought and expression and commits us to the ideas of a philosophy of experimentation, which is the basis of the instrumentalist theory of knowledge and learning. We should be aware, however, in the interpretation of Dewey's theory, of his conception of knowledge (based on the epistemological perspective of Charles Peirce, which has a modular basis provided by scientific work), which could lead us to believe that the foundation of democracy has "scientific" contours. What is in question is a pragmatic conception of knowledge.

Therefore, regarding the importance of the idea of *continuity* in experience, the dependence of mind development in relation to participation in joint actions, the unity between method and learning contents, the conception of the mind of the individual that learns as a thinking exercise that perceives and tests the meanings of behaviors, actions and events are contributions that allow philosophy of education to approach the relationship between rationality and forms of education. The notion of experience has therefore a structural relationship with the notion of intelligence, just as Dewey conceives it. This brings us to a guiding reorganization through action, through the material of experience. It is necessary to conceive experience as something in which the individual participates and not as the action he suffers.

The setting of a pluralistic conception of the universe of knowledge and intelligence is also important. Pluralism is a challenge for such conception because it summons a stage on which multiple possibilities are presented, although a critical power can be exerted on it. Basically, it corresponds to what Popper entitled as *open universe* in which all possible contingencies require a control exercise from the rational being. The criteria of rationality must be erected against a contingency setting, a *realm of many possibilities*. As such, the ability to deal with the future is one of the characteristics of intelligence[8]. Hence the challenge launched by the contingent world is one that calls for the development of rational skills, pragmatically understood. In view of the latter, education is exercised as a confrontation with the future.

8- It is very important to consider this epistemological closeness between Dewey and Popper, whether on the nature of knowledge, or on the idea of a society that allows this kind of knowledge, which, in essence, is what they regard as democracy. This closeness between the epistemological and educational points of view has already been discussed by Matos Fernandes (2008).

The pluralism, open society or even the open world require an appropriate concept of intelligence. The main reason for the evocation of the notion of intelligence toward the conception of a democratic universe was given by John Dewey (1987, p. 51) himself: "The crisis in democracy demands the substitution of the intelligence that is exemplified in scientific procedure for the kind of intelligence that is now accepted". What is also true is that: "Mankind now has in its possession a new method, that of cooperative and experimental science which expresses the method of intelligence" (DEWEY, 1987, p. 58). The association of such ideas is typically pragmatic, inherited from Peirce. Concepts such as community of inquiry, experimental intelligence, hypothesis application in an uncertain context, among others, are constitutive notions of the philosophical branch of the initial pragmatism. We can even connect the personal and social dimensions together. Intelligence is an ability of each individual; it is a personal skill, but it also has a social dimension. The author strongly criticizes the elitist and conservative vision built around such idea, which reflects social standards. John Dewey (1935, p. 52) states that "The last stand of oligarchical and anti-social seclusion is perpetuation of this purely individualistic notion of intelligence". Moreover, he states that "It is useless to talk about the failure of democracy until the source of its failure has been grasped and steps are taken to bring about that type of social organization that will encourage the socialized extension of intelligence" (DEWEY, 1935, p. 53). These statements define exactly what we want to reflect on the philosophy implicit in *Democracy and Education*. We cannot understand intelligence within the traditional logic.

Another key aspect to pragmatism is the notion of habit. The mind always works from habits, experienced processes. The habit, in addition to the connotation of a personal experience, clearly has a social, community dimension, according to Charles Peirce. Moreover, satisfaction refers to the relation with what a community - the community of experts - corroborates, i.e., what satisfies the requirements of the scientific community. Dewey, who greatly insisted on the social dimension of knowledge, did not associate this vague and merely rhetorical dimension to satisfaction. He did not defend that social pressure exerted by the community on individuals was what characterized the truth, nor the idea that agreement on the criteria and on the need for standards would be a mere social arrangement. What is important to stress is the connection between the intelligent and rational resolution of problems and the successful processes of interaction or, better still, the transaction with the surrounding reality. What belief holds as natural is the fact that it is the result of habit. What it reveals is a harmonious relation between the essence of the thinking process and problem solving strategies within the biological and social spheres.

When trying to overcome atavistic dualisms in Western thought, Dewey understood thinking, within the logic of pragmatism, as a form of action, and this is what constitutes a major change compared with traditional philosophies. Thought, being a form of action, intervention, is a way of building meanings. And the action may or may not be rational depending on whether it makes sense or not for the community that shares the experience. Therefore, we say that this pragmatic maxim defines the notion of pragmatic rationality. Rationality, or rather intelligence, is perfectly understood as a guarantee of efficacy,

which is measured in terms of the consequences that our concepts have and that should be submitted to the experimental test. In other words, being intelligent is revealed as a way of action control (which is considered an intelligent and rational action to Peirce and Dewey), which will be explained in the future through its consequences. This means that, in essence, an intelligent attitude is a characteristic of a behavior that has to do with the adjustment sought between what are our beliefs and the right, practical effect, corrected through experimentation. An intelligent attitude is shown through the ability to anticipate possible scenarios of action as well as make good choices. It is in scientific activity that we can recognize, for example, the application of intelligence.

We also need to remember the fact that scientific procedure (taken as model by Deweyan pragmatism) is assumed as temporary, hypothetical and does not fall in dogmatizations, which often happens in the field of common sense. As to its nature and origin, scientific knowledge can only be understood as controlled common sense, similar to Popper's theory. The continuity between these two modes of intelligent behavior depends on the way John Dewey views scientific theories - they are instruments devised by scientists to solve problems: "scientific conceptions, like other instruments, are hand-made by man in pursuit of realization of a certain interest" (1930, p. 109). Moreover, he adds what he understands as instrumentalism: "[...] instrumentalism is a theory not about personal disposition and satisfaction in knowing, but about the proper objects of science" (1929, p. 151, emphasis added). This does not mean that there is no personal dimension or subjective experience in the inquiry process, nor satisfaction on the individual produced by the discovery of solutions. But in the epistemological reflection that satisfaction cannot be the criterion on the suitability of theories and as a basis for judgment on the validity of scientific hypotheses. Only experimentation can be the basis for assessing the truth, or rather guarantee the positive value of scientific hypotheses. The fallibilism underlying the pragmatic epistemology reinforces the practice of careful experience, an experimental procedure dependent on a community, thrifty in certainties, suited to the democratic conception defended by Dewey. Ruyh Anna Putnam writes in that direction in "Democracy and value inquiry": "Fallibilism in any social arena demands that all relevant voices be heard. The sciences flourish where the free exchange of ideas and results is encouraged" (PUTNAM, 2009, p. 286).

If intelligence is our ability to interact by using ideas, and if with the latter we draw a plan of action, we see its applicability in the organization of our lives, particularly in the way we build the universe of social interaction. An idea is not a pictorial construction of objects that are in front of our eyes, but a meaning or sense. It does not correspond to a kind of mental object that mirrors something external. Therefore, according to Dewey, the *idea* is not a mental artifact whose details can be verified as coincident or as the contours of the objects of the outside world. It is rather understood as a meaning that the individual experiences in his interaction. This conception gives a sense of the dynamic dimension of the idea. It is not a static (even mental) entity.

However, there is somewhat of an objective in the meaning and that is revealed in the behavior and in the action shared by rational individuals toward that same sign;

there is something public, shareable, and that can be observed and communicated. Meaning is not, as Wittgenstein also considered, a personal and private reserve. Through use, application and rules that we follow in our judgments and actions, i.e., in behavior patterns (an expression so dear to Dewey), we see that there is a behavioral matrix formed by habits and that is precisely the meaning ideas acquire. Through the evolutionary starting point, the success of the "life process" (Dewey, 1903, p. 13) is understood as something that transcends us. The situation and context are not subjective instances of the rational individual, they are not the internal environment of the individual. They are aspects of the objective field, in which the process of signification unfolds. If we understand intelligence as the ability to interact through the use of ideas, we have a clear action in order to develop the whole process of knowledge, whether scientific or not.

John Dewey adds another factor, or rather recalls what he also advocates for scientific judgments, namely the need for the verdict of a community. This is a fundamental principle: value judgments must be certified by a behavior observed and controlled by others. There is no private criteria. And the same happens with moral judgments. It is intelligence that governs moral action (including ethical judgments). Moral judgments, as practical judgments, are the kind that reflect an intention of action. This interpretation is very explicit in "The Logic of Judgments of Practice":

> Propositions exist relating to agenda - to things to do or be done, judgments of a situation demanding action. There are, for example, propositions of the form: M. N. should do thus and so; it is better, wiser, more prudent, right, advisable, opportune, expedient, etc., to act thus and so. (DEWEY, 1916, p. 335).

Since judgments always have a dual character, i.e., they both refer to ends and means and are located within the context of a situation (which always has something indeterminate), they will not only be appropriate and consistent, but the attitude of the individual or individuals will also be intelligent. When we assign value to something, we perform an action that may have a propositional nature, which in turn expresses a judgment. When this happens, we do not just declare a statement but mainly we make a prediction while assuming an intention, a plan, a strategy. As the author writes in *Quest for Certainty,* "It involves a prediction, it contemplates a future in which the thing will continue to serve, it will do" (DEWEY, 1930, p. 261). If they are not descriptive, value judgments hold an observable potential. But can we accurately know if the decision made, for example, was the right action? There are many possible and better decisions. It is up to intelligence to seek the interaction that improves practical action, becoming itself a factor of appreciation of human behavior.

Another aspect to consider in the characterization of intelligence is that which concerns the communicational and linguistic dimension of our mind. This is a dimension that gives intelligence a social configuration of interaction. In the social field, we do not have a guarantee that the criteria adopted are the most appropriate or truthful. In another text (MATOS FERNANDES, 1998, p. 130) we have underlined the importance of

the community of inquiry in Dewey's epistemology. The philosopher argues that one of the basic ideas of his pragmatism consists in claiming that human intelligence is rooted in social experience, as the meaning of things has to be shared with others.

> To have the same ideas about things which others have, to be like-minded with them, and thus to be really members of a social group, is therefore to attach the same meaning to things and to acts which others attach. Otherwise, there is no common understanding, and no community life. But in a shared activity, each person refers what he is doing to what the other is doing and vice-versa. (DEWEY, 1966, p. 30).

This is a condition of mental life as what characterizes it is the ability to provide meaning to experiences, and meaning depends on social interaction. Meaning, according also to Wittgenstein, is not "private". At its core and in its structure, what determines the meaning of intellectual work is the result of a communicative situation: "Meaning for Dewey was a social construction" (GARRISON, 1995, p. 719). And there are some communicational and symbolic conditions so there can be mutual understanding.

Realizing the action of others and making others perceive our actions is what characterizes us as rational beings: "To formulate the significance of an experience a man must take into conscious account the experience of others" (DEWEY, 1966, p. 227). There must be an agreement between the members of a society so that the understanding of each of the various situations acquires meaning. To this end, we try to refer to the performance of any act (thought, action or words) in relation to the performance of others. Understanding language as communication and not as a set of expressions broadens the concept and provides it a more vital, concrete note that, according to Dewey, allows it to become one of the systemic elements of organic and human existence.

The importance of habits in the formation of ideas and the use of ideas is also attributable to language. The linguistic habits determine the symbols and contexts that provide meaning to linguistic acts. The communicative dimension of rationality involves the situation that holds the discourses and all other forms of communication. Dewey, in a way, *naturalized* language to describe it as a "way of life". Naturalizing language is including it in the natural process of life. And analyzing language is to consider it within that dimension. Sleeper also discovers this principle:

> Linguistic practice, Dewey argues, follows the existential practice that governs behavior of all organisms by means of the sign-signified relation, the causal, existential connection of the quality with the thing as qualitatively individual. What Dewey is arguing is that we get our semiotic from our semantics, not our semantics from our semiotic. (SLEEPER, 1986, p. 139).

Democracy, as a rational way of organizing life, must also be subject to the same criteria. In this respect, James Campbell (1999, p. 3) points to a decisive requirement: "Democracy as a way of life is tested by interactive living". Many critics have accused this philosopher of relying too much on the cooperative dimension of science, of idealizing

democracy itself, or that his thoughts did not apply to the concrete political life. The following statement is an example of this criticism:

> [...] Dewey's sense of democracy as a culture, though it brought a powerfully expanded perspective to the understanding of democracy, did have a cost. Usually he paid comparatively little attention to the forms of political democracy; his attention was on democracy as a style of education, a moral tendency. (FRANKEL, 1981, p. 25).

It is true that democracy is an ideal and, as such, has a reason to be moral (ROCKEFELLER, 1991). But the emphasis on the moral dimension of democracy is only part of its foundation. The other pillar of this ideal is held in science. This is the meaning of Hilary Putnam's argument, tersely summed up: "The intelligent conduct of communal inquiry is what democracy is all about" (PUTNAM, 1992, p. 200). There is no rationality that belongs to an individual, regardless of the form of communication. It is not a transmission of thoughts and analysis of propositions. We must understand that intelligence is an ability to act, interact. The social interaction dimension is fundamental in its conception of intelligence. The individual does not act or think alone. He shares experiences, uses language and uses the community to validate his ideas. It is an intelligent attitude. Fundamental virtues can arise from it, such as cooperation and the construction of an open world. If education is geared toward this.

Education

The social dimension of learning is essential, but it does not introduce a relativization of knowledge as many have argued, and feared. On the contrary, when the social condition of the construction of knowledge is introduced, we consider that an external factor exists and has the task of assessing the controlled significance of propositions and all forms of language used in the communication of experiences. It is the social factor that breaks up the solipsism. In fact, this posture is congruent with the pragmatic philosophy. According to the latter, what characterizes intelligent life is an attempt to better organize experience by reconstructing it, i.e., starting from what already exists so as to, in an exercise of constant criticism, find solutions that integrate into existing (material, individual, social, historical, etc.) conditions and that result in a good, always temporary solution, but that must keep the ideal of perfectibility. This is one of the contours of a structuring pillar of the pragmatic philosophy - the notion of continuity - that nothing is done with an absolute rupture and, above all, that there are in fact real dualisms between past and present, individual and social, common sense and science, body and mind, theory and practice, the real and the ideal. For this philosopher it is clear that the educational task is a program of both personal development and social progress. However, to argue that education has a social basis and represents a social interest is not enough: "The conception of education as a social process and function has no definite meaning until we define the kind of society we have in mind" (DEWEY, 1966, p. 97). We will therefore have to worry about clarifying the kind of society which is consistent with the ideal of educating for a project that will allow the human being to evolve toward a better civilizational

environment. We cannot just postulate the social character of knowledge and learning, the need to always - and necessarily - be included in a well-equipped linguistic program, in a situation of communication to establish the conditions for the possibility of meaningful knowledge. All this was defended by the author before the linguistic and communicative shift caused by some later philosophical movements. These points are essential to a pragmatic conception of intelligence, social life and knowledge.

The purpose of introducing the intelligence dimension into the life of the community enables, within the pragmatic perspective, the development of human potential. To this end, there must be a project of controlled evolution. This is the purpose of education. There is an essential aspect of which Dewey's belief largely depends on the virtues of educational action: meliorism. In a small text entitled "Education and Social Direction", he argues that "the unsolved problem of democracy is the construction of an education which will develop that kind of individuality which is intelligently alive to the common life and sensitively loyal to its common maintenance" (DEWEY, 1982, p. 57). This dependent relationship of the virtues of democracy and rationality in relation to education was repeatedly treated by Dewey. It is in his Democracy and Education that this issue is better and more systematically addressed:

> [...] since democracy stands in principle for free interchange, for social continuity, it must develop a theory of knowledge which sees in the knowledge the method by which one experience is made available in giving direction and meaning to another (DEWEY, 1966, p. 344-345).

The idea of democracy the author argues is more than just a political regime. It has a moral dimension that works as an ideal (CAMPBELL, 1998, p. 40). The process of teaching - and learning - is a form of communication, in the sense of *mutual understanding,* of sharing the same code and language system, have in common specific knowledge, share the space of a community. Resuming Ryle's reflection, we see that the typical notion of conveying information, i.e., to make one know, requires oral or written information to be *transferred* into the mind of the listener or reader.

The apprehension of meaning is an act of intelligence, and the way meanings are worked structure the way we manipulate the concepts. They give us the impression of rationality, control over the determination of the meanings of behaviors. Dewey's idea, presented in *Democracy and Education,* that society itself, along with the whole system of meanings, only exists through and even in communication makes also sense. Dewey presents this idea following the reflection on the society's need to constantly renew itself by the transmission of culture to new generations: "Society not only continues to exist by transmission, by communication, but it may fairly be said to exist in transmission, in communication" (DEWEY, 1966, p. 4). To make sense, to have a meaning is therefore a prerequisite for an intentional and controlled action.

Within a pragmatic perspective, the educational models to be adopted should be in harmony with the fundamental substratum of knowledge, namely experience or rather the experimental method. This becomes clear in the association of the idea of knowledge to an activity that produces *sensitive effects,* i.e., that is guided by an understanding of meaning

as a result of the action. Thus, knowledge abandons the fixist approach and is postulated as a process of exploring the meanings our intelligence works on.

By recognizing the importance of habits in the formation of the scientific mind, Dewey has to clarify to what extent they do not conflict with the desired critical mindset. From a pragmatic understanding of *habit,* we can understand its function as a structuring element of the ideals of rationality applied to education. Moreover, with regard to a full citizenship, rationality emerges as an educational value. The issues of everyday life and political participation go hand in hand with the skills to learn how to criticize. We should ponder on the importance that habits have in the characterization of rationality, whether for the various forms of education or for the rational skills themselves.

Dewey (2002) himself, in *A Escola e a Sociedade*[9], clarified that the aforementioned was not what was intended, but the need to create intelligent learning habits linked to real problems and to a problem-solving environment developed based on a community of inquiry. The justification of a model such as this lies, in our point of view, in understanding the nature of rationality or, to use a word dear to Dewey, intelligence. In *A Escola e Sociedade* and *How we think* (DEWEY, 1991), a learning program is established in which students should basically be placed in practical situations involving them in problem-solving strategies. But we must remember that not all experiences are positively educational, as the author states in *Experience and Education,* "some experiences are mis-educative" (DEWEY, 1963, p. 25), "everything depends upon the quality of the experience which is had" (DEWEY, 1963, p. 27), and that "the central problem of an education based upon experience is to select the kind of present experiences that live fruitfully and creatively in subsequent experiences" (DEWEY, 1963, p. 27-28).

Another key aspect of promoting sound education lies in the idea and in the educational program of critical thinking. In *Democracy and Education* (especially in chapter 12, "Thinking in Education"), Dewey advocated that education should consist, above all, in developing the ability to think, and that this method (since everything depended on the method) could not be dissociated from experience: "The initial stage of that developing experience which is called thinking is experience" (DEWEY, 1966, p. 153). If there is no anchoring in concrete situations in which we are interested and in problems, we hardly escape the traditional scheme of content transmission.

All this should support an education that contributes to a democratic society, while promoting the development of intelligence. However, some commentators, including Gert Biesta, argue that Dewey did not quite conceive a theory of democratic education (BIESTA, 2010, p. 214), i.e., in the author's view, Dewey did not design a program that explained how democratic education should be implemented. Similarly, John Quay argues, in "Not 'democratic' education but 'democracy and education': Reconsidering Dewey's oft misunderstood introduction to the philosophy of education", that Dewey established the basis of his educational theory in his conception of experience (QUAY, 2016, p. 1018), referring to the conception of transaction and, above all, of occupation, which, if understood in the sense of a shared experience, can be an educational strategy

9- Translator's note: Original title "The School and Society".

conducive to the growth of people and consequently for democratic practices. However, we think that John Dewey's purpose is clearly one of formulating a hypothesis in the field of philosophy of education, rather than just a pedagogical proposal. He intends to clarify the ideas, similar to Charles Peirce, and more specifically the merit of placing education at the center of human development.

Conclusion

For Dewey the notion of democracy is an ideal that suits the perspective of a pragmatic conception of man, society and civilization. It enables the conception of knowledge that is constantly evolving, dependent on a community that provides meaning and certifies knowledge. And intelligence, as ability to act in an intentional, controlled, efficient and progressive manner, is essential for democracy to work. Finally, the conception of education as a growth process requires intelligence so that everything can be applied in an evolutionary way. Dewey did not provide a pedagogical model, as did Freinet, which involved the application of *parliamentary* schemes within the classroom. The notion of democracy is more than just a model of governance. It is an ideal. The application of the virtues of science, inquiry and personal and social progress are the major guidelines for such connection. We may, in this sense, receive a *sound* education.

We can conclude that, while *Democracy and Education* is already a centennial text and therefore somehow outdated, it still has a role to play in philosophy of education. The work continues to provide us with material to contemplate on, as its questions are extremely ambitious. They involve a multiplicity of dimensions that require the reflection on every human being, their life, ethics and politics. It might even, as Boostrom argues, have a weak impact on contemporary discourses and practices: "even ardent admirers of Dewey and of Democracy and Education find it to be difficult and impractical" (BOOSTROM, 2016, p. 4). This author adds that "Dewey is a hard read" (BOOSTROM, 2016, p. 10). To read Dewey involves a lengthy and comprehensive reflective exercise, which does not abound in the spheres of decision-makers of current educational policies. However, Boostrom raises an uncomfortable question: "Why Dewey can't help us?" (BOOSTROM, 2016, p. 19). Largely because it is not part of the public school agenda. Nevertheless, instead of thinking that *Democracy and Education* no longer serves us, because our world has the features it has - it is global, automated, commodified, and everything has changed in relation to the 1916 context - we may as well consider, following the perspective of Nell Noddings, that our time has already run out or begins to run out, and the typical patterns of liberalism, such as excessive competition, standardization, bureaucratization should now be replaced by habits of cooperation, responsibility, of disciplinary connections, of another intelligence (NODDINGS, 2013).

What we wanted to point out is that democracy, according to John Dewey's perspective, manifests itself in very specific social dynamics, a form of institutional organization that implies a relationship, a form of communication and inquiry, evident in what the philosopher understood as intelligence. He did not consider it a *faculty,* but rather a form of behavior that seeks to connect the contexts in order to provide the best,

most effective and fairest answer. It is within the framework of a pragmatic philosophy that the idea of intelligence makes more sense. Many research projects carried out in recent years have reconsidered his thinking, especially in the field of social and political analysis. Regardless of the merits and relevance of these analyses, what we find in this article is the explanation of the idea of democracy based on the notion of intelligence, and education as the way to progressively fulfill such ideal. It is a progress that only an intelligent attitude can promote. We must, as Dewey wrote in "The democratic faith and education", "humanize science and technology" (DEWEY, 1989 p. 260). We conclude with Dewey's words that: "In this achievement science, education, and the democratic cause meet as one" (DEWEY, 1989, p. 260).

References

APEL, Karl-Otto. **Toward a Transformation of Philosophy.** London; Boston; Henley: Routledge: Kegan Paul, 1980.

BERNSTEIN, Richard. Dewey's vision of radical democracy. In: COCHRAN, Molly (Ed.). **The Cambridge companion to Dewey.** Cambridge: Cambridge University Press, 2010. p. 288-308.

BIESTA, Gert. The most influential theory of the century: Dewey, democratic education, and the limits of pragmatism. In: TRÖHLER, Daniel; SCHLAG, Thomas; OSTERWALDER, Fritz (Ed.). **Pragmatism and modernities.** Rotterdam: Sense, 2010. p. 207-224.

BOOSTROM, Robert. The peculiar status of Democracy and Education. **Journal of Curriculum Studies,** v. 48, n. 1, p. 4-22, 2016.

CAMPBELL, James. Dewey and democracy. In: HASKINS, Casey; SEIPLE, David I. (Ed.). **Dewey reconfigured:** essays on Dewey pragmatism. New York: State University of New York Press, 1999. p. 1-17.

CAMPBELL, James. Dewey's conception of community. In: HICKMAN, Larry A. (Ed.). **Reading Dewey:** interpretation for a postmodern beneration. Bloomington; Indianapolis: Indiana University Press, 1998. p. 22-42.

CARVALHO, Adalberto Dias de. **A educação como projecto antropológico.** Porto: Afrontamento, 1992.

CARVALHO, Maria do Rosário G. Lopes de. **A reconstrução da modernidade em John Dewey:** contingência, razão e democracia. 2000. (Tese de Doutoramento) – Universidade do Minho, Braga, 2000.

CUNHA, Marcus Vinicius da. We, John dewey's audience of today. **Journal of Curriculum Studies,** v. 48, n. 1, p. 23-35, 2016.

DEWEY, John. **A escola e a sociedade e a criança e o currículo.** Tradução de Paulo Faria, Maria João Alvarez e Isabel Sá. Lisboa: Relógio D'Água, 2002 [1937].

DEWEY, John. Creative democracy: the task before us. In: DEWEY, John. **The later works:** 1939-1941. v.

14. Ed. Jo Ann Boydson. Carbondale; Edwardsville: Southern Illinois University Press, 1988. p. 224-230.
DEWEY, John. **Democracia e educação.** Lisboa: Plátano, 2007.

DEWEY, John. **Democracy and education:** an introduction to the philosophy of education. New York: The Free Press, 1966 [1916].

DEWEY, John. Democracy and educational administration. In: DEWEY, John. **The later works:** 1935-1937. v. 11. Ed. Jo Ann Boydson. Carbondale; Edwardsville: Southern Illinois University Press, 1987. p. 217-225.

DEWEY, John. **Essays in experimental logic.** New York: Dover, [1916].

DEWEY, John. **Experience and education.** New York: Macmillan, 1963.

DEWEY, John. **Experience and nature.** New York: W.W. Norton, 1929.

DEWEY, John. **Freedom and culture.** London: George Allen and Unwin, 1939.

DEWEY, John. **How we think. Buffalo;** New York: Promatheus Books, 1991 [1910].

DEWEY, John. **Liberalismo y acción social y otros ensayos.** Selecção e tradução de Miguel Esteban Cloquell. València: Alfons El Magnànim, 1996 [1935].

DEWEY, John. **Logic, the theory of inquiry.** New York: Henry Holt, 1938.

DEWEY, John (Ed.). **Studies in logical theory.** Chicago: University of Chicago Press, 1903.

DEWEY, John. The democratic faith and education. In: DEWEY, John. **The later works:** 1942-1948. v. 15. Ed. Jo Ann Boydson. Carbondale; Edwardsville: Southern Illinois University Press, 1989. p. 251-260.

DEWEY, John. **The early works:** 1882-1898. v. 1. Ed. Jo Ann Boydson. Carbondale; Edwardsville: Southern Illinois University Press, 1969.

DEWEY, John. **The influence of Darwin on philosophy and other essays.** New York: Prometheus Books, 1997 [1910].

DEWEY, John. **The later works:** 1925-1927. v .2. Ed. Jo Ann Boydson. Carbondale: Edwardsville: Southern Illinois University Press, 1984.

DEWEY, John. **The later works:** 1933-1934. v. 9. Ed. Jo Ann Boydson. Carbondale; Edwardsville: Southern Illinois University Press, 1986.

DEWEY, John. **The middle works:** 1918-1919. v. 11. Ed. Jo Ann Boydson. Carbondale; Edwardsville: Southern Illinois University Press, 1982.

DEWEY, John. **The quest for certainty:** a study of the relation of knowledge and action. London: George Allen

& Unwin, 1930.
ESTEBAN, Miguel. Pragmatismo consequente: notas sobre el pensamiento político de John Dewey. In: DEWEY, John. **Liberalismo y acción social y otros ensayos.** Selecção e tradução de Miguel Esteban Cloquell. Valencia: Alfons El Magnànim, 1996 [1935]. p. 9-46.

FLEW, Antony. **Education for citizenship.** London: Institute of Economic Affairs, 2000.

FOTT, David. **John Dewey:** America's philosopher of democracy. Maryland: Rowman & Littlefield, 1998.
FRANKEL, Charles. John dewey's social philosophy. In: CAHN, Steven (Ed.). **New studies in the philosophy of John Dewey.** New Hampshire: University Press of New Englad, 1981.

GARRISON, Jim. Deweyan pragmatism and the epistemology of contemporary social constructivism. **American Educational Research Journal,** v. 32, n. 4, p. 716-740, 1995. Disponível em: <http://www.jstor.org/stable/1163332?seq=1#page_scan_tab_contents>. Acesso em: 11 ago. 2017.

GORDON, Mordechai; ENGLISH, Andrea. John dewey's Democracy and Education in the era of globalization. **Educational Philosophy and Theory,** v. 48, n. 10, p. 977-980, 2016. DOI:10.1080/00131857.2016.1204742.

HICKMAN, Larry A.; NEUBERT, Stefan; REICH, Kersten (Ed.). **John Dewey:** between pragmatism & constructivism. New York: Fordham University Press, 2009.

HOOK, Sidney. **John Dewey:** semblanza intelectual. Tradução de Luis Arenas. Barcelona: Paidós Educador, 2000.

KAMBOUCHNER, Denis. **L'école, question philosophique.** Paris: Fayard, 2013.

LONDON, Scott. **Organic democracy:** the political philosophy of John Dewey. 2000. Disponível em: <http://www.scottlondon.com/reports/dewey.html>. Acesso em: 20 jun. 2016.

MATOS FERNANDES, José Pedro. Creative ideas -a pragmatic approach. In: **ITINERÁRIOS de filosofia da educação.** v. 12. Porto: Gabinete de Filosofia da Educação/Instituto de Filosofia da Universidade do Porto, 2013. p. 99-106.

MATOS FERNANDES, José Pedro. Investigação e educação: a propósito de Dewey. In: DIAS, José Ribeiro; ARAÚJO, Alberto Filipe. **Filosofia da educação:** temas e problemas. Braga: Universidade do Minho, 1998. p. 125-141. Actas do I Encontro Nacional de Filosofia da Educação.

MATOS FERNANDES, José Pedro. **Racionalidade e educação:** entre Popper e Dewey. Porto: Afrontamento, 2008.

NODDINGS, Nel. **Education and democracy in the 21st century.** New York: Teachers College Press, 2013.

OELKERS, Jürgen. Democracy and education: about the future of a problem. **Studies in Philosophy and Education,** v. 19, n. 3, p. 3-19, 2000.

OLIVERIO, Stefano; STRIANO, Maura; WAKS Leonard J. Democracy and education and Europe: a century long exchange. **European Journal of Pragmatism and American Philosophy,** v. 8, n. 1, p. 6-22, 2016. Symposia. Dewey's Democracy and Education as a source of and a resource for European educational theory and practice: a retrospective-prospective View, Disponível em: <http://lnx.journalofpragmatism.eu/>. Acesso em: 8 ago. 2017.

PUTNAM, Ruth Anna. Democracy and value inquiry. In: SHOOK, John; MARGOLIS, Joseph. **A companion to pragmatism.** Maldon; Oxford: Wiley-Blackwell, 2009. p. 278-289.

PUTNAM, Hilary. **Renovar a filosofia.** Tradução de Carlota Andrade. Lisboa: Instituto Piaget, 1998.

QUAY, John. Not 'democratic' education but 'democracy and education': Reconsidering Dewey's oft misunderstood introduction to the philosophy of education. **Educational Philosophy and Theory,** v. 48, n. 10, p. 1013-1028, 2016.

ROCKEFELLER, Steven. **John Dewey:** religious faith and democratic humanism. New York: Columbia University Press, 1991.

RYLE, Gilbert. **The concept of mind.** Harmondsworth: Penguin Books, 1963.

SLEEPER, Ralph W. **The necessity of pragmatism:** John Dewey's conception of philosophy. New Haven; London: Yale University Press, 1986.

STONE, Lynda, Re-thinking Dewey's democracy: shifting from a process of participation to an institution of association. **Journal of Curriculum Studies,** Oxford, v. 48, n. 1, p. 77-93, 2016. DOI: http://dx.doi.org/10.1080/00220272.2015.1088068

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