

Out of Darkness there Comes the Light. Upbringing as a Process of “Fine Tuning” of an Individual

Aleksandra Golubović – Dajana Rakić

In this paper we will advocate the concept of upbringing as practical process (or even practical method), of the so-called “fine tuning” of a person (children and youth) done by their educators (whether it is about parents, kindergarten teachers, school teachers, or professors taking part in their educational process). It is a concept of which we have taken elements partly from contemporary science, more specifically, from the “fine tuning” argument of the world (cosmos), originating in philosophy of science. According to the argument, simply said, the whole universe was so finely tuned in order to enable life on Earth. Similar is here tried with those we upbringing – our efforts as educators are directed towards their *fine tuning*, to establish foundations for a successful and independent living. In the discussion, we will primarily refer to the contemporary authors from the philosophy of education – Dewey, Whitehead, and Peters.

Keywords: Upbringing, Education, “Fine tuning” in educational system, Dewey, Whitehead, Peters.

1. Introduction

We see the issue of upbringing and education to be a constant battle of the opposites in this regard, e.g. between morals and intellect, maturity and immaturity, etc. Depicting our argument through such an outlook, it colors the overall argument in a much intricate way, one that is neither too simple nor too complex to grasp. It may even be viewed as a fight between light and shadow, one that is ever-present in all matters.

Is upbringing truly made up of opposites in which intellectual and moral upbringing, freedom and discipline, and spontaneity and habit are opposed? In the collection of papers published in 1965, William Frankena had gathered and published essays of four contemporary philosophers of education: John Dewey, Alfred North Whitehead, Jacques Maritain, and Richard S. Peters¹, from which

¹ See W. K. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965.

we singled out the two essays to be discussed later on in this paper in greater detail. These two essays discuss the educational opposites, and those are: Alfred North Whitehead's – *The Rhythmic Claims of Freedom and Discipline* and Richard S. Peters' – *Reason and Habit: The Paradox of Moral Education*. Then we will continue our discussion with John Dewey's insights regarding education.

But, before entering into discussion about *educational fine tuning* we can see that fine tuning of the cosmological argument, generally speaking, claims that the universe was so finely and precisely tuned, i.e. its forces and constants were so nicely tuned to enable life on Earth, that every, even the most minimal intervention of any variable (among these forces and constants) would cause a collapse of the entire universe². Scientists have come to this discovery, yet they cannot explain why this is the case. Philosophers of religion have taken this argument as a sort of an argument in favor of God's existence (or at least the indication in favor of God's existence). Namely, they have offered a solution according to which everything was finely tuned, with all those forces, constants, and the like, functioning in such a way to enable life in the universe – because God had wanted it – and the reason was to vivify the said universe.

Similarly, we find it justified to talk about the fine tuning of children and youth, as an end result of all endeavors of upbringing and education, i.e. as a crown upon one's educational journey. This tuning primarily relates to intellectual and moral dimension towards which every educational system (at least in schools) is directed³.

2. About upbringing and education

Every parent undoubtedly wants to raise his child to be “fine tuned” in a practical aspect, primarily meaning he or she wants their child to grow up into a mature, independent, and successful individual. In other words, into an individual capable of having a quality life filled with happiness and achievement. What does that specifically mean? It means that every parent wants to have a

² See B. Berčić, *Filozofija*, sv. 2, Ibis grafika, Zagreb 2012, pp. 281-288.

³ Some ideas regarding fine tuning in traditional and contemporary system of education see in: S. M. Cahn, *Classic and Contemporary Readings in the Philosophy of Education*, McGraw-Hill, New York 1997. See also M. L. Peterson, *Philosophy of Education (Issues and Options)*, InterVarsity Press, Leicester 1986; L. Legrand, *Moralna izobrazba danas. Ima li to smisla?*, Educa, Zagreb 2001; E. Morin, *Odgovori za budućnost. Sedam temeljnih spoznaja u odgoju za budućnost*, Educa, Zagreb 2002.

child who is polite, well-behaved, and capable of applying apt moral decisions in its surroundings and society it lives in, a child who will acquire all the necessary character qualities (virtues such as: temperance, bravery, wisdom, righteousness, compassion, empathy, altruism, sensibility, generosity, veracity, kindness, resourcefulness, adaptability, responsibility, creativity, high level of critical, creative and innovative thinking, etc. – thus, all necessary intellectual and moral perfections). Parents want for their children to acquire good habits (especially the active ones), and develop all necessary competences and skills for leading a quality life, etc.

In this endeavor, surely exceptional attention should be given to the way the process of upbringing is done. What needs to be achieved is the transition from immaturity to maturity, i.e. from the lack of appropriate upbringing and education, to being well educated and well brought up. Fine tuning of children and youth is a task that poses much of a challenge, which can be witnessed by many a parent, but also teachers and educators in schools, especially in these contemporary times⁴. However, here we will not deal with educational endeavors done by the parents, although we do bear those in mind (knowing they could share quite a bit of their own experience on the matter). We will mostly address the educational workers as a necessary constituent of the educational system itself and what they do to make this system function as smoothly as possible. By the educational workers, we mean all the teachers on every level of education as such and their role of a *facilitator* and *moderator* (those who help and guide, i.e. overlook all the activities being carried out in the classes of the contemporary era). The process alone is in progress for many years, in which the teachers have to be careful about *what* and *how* they do, and what consequences their actions and influence would have. Not any less important aspect, one into which we cannot go in a greater detail, is the psychological one. Apart from that, it should be always kept in mind the fact that every upbringing is specific in many ways, especially in constant overcoming of both the work and materials being taught, and the methods by which the intellectual and moral improvement is achieved. All the while, an individual approach to every child is something that cannot be overlooked. In other words, this represents the core of a relationship between a teacher and a student. Upbringing and education, by their nature, are primarily concerned: (1) the matter, (2) the ways, and (3) relations between the two (but

⁴ See J. Juul, *Škola u infarktnom stanju*, Znanje, Zagreb 2013.

also between a teacher and a student)⁵. That which is old, such as the old patterns of behavior, approaching the problems and problem-solving, intellectual endeavors, and the like, are always being overcome and improved by that which is newly acquired, with more creative and effective ways, methods, processes, etc.

3. *Upbringing and education as a battle of opposites*

The process of upbringing and education is mostly done through almost poetic battle of opposites, which lies in the domain of philosophy of education, and is specific to all other philosophical disciplines. In the battle for supremacy in the process of upbringing and education, we are seeing immaturity with maturity, knowledge with the lack of it, theoretical knowledge with practical experience, theory with praxis, mere opinion with own understanding, intelligence with morality and so on⁶.

In the context of philosophy of education, this battle of opposites is specifically manifested among that which should be acquired and that which should be avoided (especially the prejudice and blind belief in unqualified and unverified authorities), and to some extent education is battling self-education (thus, what we were taught by others, with that which we acquired via our own critical and creative thinking), just as intelligence battles morale. Furthermore, on a collision course there are also that which is experienced with that which is taught, then interest with discipline, freedom with self-will. In this area, with all the named difficulties, it is sometimes difficult to discern the priority between what an individual espouses as an individual itself, and what he espouses as a social being; to balance the motivation with the requirements of the curriculum, the matter with the method, the relationship between encouraging the students and to give orders, etc. All of the above mentioned is a part of our moral and intellectual build-up, i.e. of what makes us human in the best possible way.

⁵ See J. Dewey, *Experience and Education*, Macmillan, New York 1952, p. 19. In this paper, we will use both physical and online versions of the work mentioned here, as well as Dewey's *Democracy and education*.

⁶ See W. K. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965.

4. *What kind of education do we need today?*

Going back to the *fine tuning* discussion in the domain of upbringing and education, the analogy between the scientific argument and ours in philosophy of education is the following. Upbringing in a practical way can be understood as a kind of fine tuning of the child which has for its purpose the build-up of a child's personality, its best possible realization. It is possible to even mention the personalized fine tuning in which special emphasis is placed on satisfying individual needs of children and youth, on respect, on their interests, desires, and needs. Apart from that, fine tuning can be seen as a process in which, through various stages of growing up, only particular educational influences are being made, those which can truly give the result that we could rightly call a fine tuned child (or a grown individual). This process enables the individual to become a mature, independent, and a fully accomplished person⁷. In this context, upbringing is done through methods which will guarantee the child and youth are given what they really need, in an amount they need, in a way that is appropriate and well-dosed with respect to their age, capabilities, skills, and competences, all the while performed in a gradual manner with optimally adapted ratios. In other words, we are talking about the process and methods of "fine tuning" of different dimensions, different virtues, knowledge, abilities, skills, and competences in children and youth. Of course, it is about a practical method by which a child is finely tuned, or at least it is tried to be done so, primarily by parents, educators, teachers, professors, and the society as a whole (with its rich tradition, heritage, moral and social patterns, etc.), and later on the child itself tries to implement it onto himself as he grows up into an adult – the self-upbringing action is at play here.

Namely, there are two fundamental perspectives through which upbringing is often described and defined. According to the first, upbringing should be understood as shaping or formation of the person (children and youth) done by grown-ups themselves, i.e. educators. As the child models various shapes with plasticine, so the educator models the child, shaping her personality (in a way he finds best). According to the second, upbringing is closer to giving of what, how and when needed, i.e. providing help and support in the right moment. It is often described with the visuals of a flower being watered by the owner, nurtured and replenished with fertilizers, put into the sun or in the shade when needed, in a given moment. The similar is done by the educator with those he educates – he

⁷ *Ibid.*

gives them exactly what they need, when they need it, and in the amount they need. Now, the depiction of the optimal upbringing is probably neither the first nor the second, but is surely a combination in which one or the other viewpoint prevails (our hopes lie with the second). Sometimes, these perspectives stand in opposition, so the final realization will come about once the balance between them is restored. However, it goes without saying one should not intervene nor too much nor too little, since then the whole educational influence is brought into question (as well as the balance between various elements which are being brought into balance)⁸.

It seems that the improvement in any field, aspect, or the like, is more often than not presupposed by the co-existence, or even the battle of the opposites. Sometimes it happens to be that balance wins, other times one element prevails, replacing the old with the new, etc. Regardless what is in a given moment at play, opposites surround us and follow through life. When it comes to upbringing, there is also the battle of upbringing and self-upbringing, i.e. the efforts done by others to bring us up, or to at least sensitize us for well-educated thinking and doing, are in opposition with our own efforts to do it ourselves (to bring ourselves up, i.e. to build our own selves into a mature, well-adapted, socialized person). The opposition stands for maturity with immaturity, knowledge and the lack of, incompetence with skillfulness, etc. It also does happen that the educator himself, while educating and bringing up a child, uses opposite ways of educating and opposite methods of teaching and upbringing, in order to create the best results possible (sometimes the child is encouraged by reward and at other times by punishment, sometimes the educator wants to achieve the child's obedience, while other times he wishes for the child to think critically and creatively, sometimes the educator can appear too strict and stringent, while at other times very lenient and mild, etc.). In this way, while discussing the approach to education, Nietzsche has advised that one child might be motivated by reward, while the other by punishment, since everyone is differently affected by various methods (some methods and approaches simply create a better result).

5. Alfred N. Whitehead's contribution to fine tuning discussion

Alfred N. Whitehead mentions in his essay that a man's upbringing happens in cycles, in which freedom and discipline are exchanged in such a way that in every

⁸ See D. Tomić, *Filozofija i odgoj*, Sveučilište u Zagrebu, Učiteljski fakultet, Zagreb 2020.

particular stage prevails one element or the other⁹. Both should always be present and both are fighting for prevalence, and the end goal is for the freedom to prevail since it should be more represented¹⁰. For the upbringing of children and youth, three phases are especially important, through which every generation of students must undergo, no exceptions. These stages are: stage of romance, stage of precision, and stage of generalization.

In the very beginning of his essay, Whitehead reflects on the change of learning and teaching paradigm, which especially comes to surface in the modern times of today and is in disaccord with those in the ancient era and the paradigm of 'the old'. Primarily, it is about the value of knowledge itself and its application. Whitehead noticed that, unlike today's partition into intellectual and moral education, in the ancient times the combination of both had been advocated, which amounted to wisdom. In Whitehead's words: «[...] though knowledge is one chief aim of intellectual education, there is another ingredient, vaguer but greater, and more dominating in its importance. The ancients called it 'wisdom'»¹¹. His viewpoint is that wisdom is much more than a mere (accumulated, pure, formal) knowledge, because it finds the application in the humans' daily actions and behavior in the best possible way, especially in ethical/moral domain. Wisdom in itself is a kind of tuning of everything that is necessary for a wise decision which will be followed by a wise action. If, for example, the focus is overly placed on the intellectual dimension, i.e. knowledge (especially knowledge of particular subjects), then, as we have witnessed many times over in everyday educational contexts, the students will learn only to gain high marks, to pass the exam and the course, to enter the next stage of their schooling system, etc. More often than not, the latter is colored with the feelings of dissatisfaction, incompleteness, lack of genuine interest, lack of motivation and purpose for what they are doing. In insisting on exclusively intellectual improvement, an inevitable disbalance occurs which reflects itself not just on a moral level or the level of upbringing, but also in an overall actions and behaviors of a student. Because:

⁹ See A. N. Whitehead, as found in W. K. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, pp. 76-87.

¹⁰ Of this Plato had also spoken in his *Republic*. He claimed that true upbringing is closely bound to freedom. See more in A. Golubović, *Učiteljski poziv i odgajanje: razmatranje iz perspektive filozofije odgoja*, *Odgojno-obrazovne teme*, 1, (2018), 1-2, pp. 141-163.

¹¹ A. Whitehead, as found in W. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, p. 76.

«Education is the guidance of the individual towards a comprehension of the art of life; and by the art of life I mean the most complete achievement of varied activity expressing the potentialities of that living creature in the face of its actual environment. This completeness of achievement involves an artistic sense, subordinating the lower to the higher possibilities of the invisible personality. Science, art, religion, morality, take their rise from this sense of values within the structure of being. Each individual embodies an adventure of existence. The art of life is the guidance of this adventure»¹².

It is obvious, then, that upbringing and education should be well tuned, and only this fine tune of intellectual and moral aspects guarantees the success of overall process of upbringing. Moreover, wisdom should be seasoned with a fundamental ingredient – freedom. «The only avenue towards wisdom is by freedom in the presence of knowledge. But the only avenue towards knowledge is by discipline in the acquirement of ordered fact. Freedom and discipline are the two essentials of education...»¹³.

Now the question arises as to what exactly freedom is, how it can be characterized and in which relation she is with knowledge.

«Now wisdom is the way in which knowledge is held. It concerns the handling of knowledge, its selection for the determination of relevant issues, its employment to add value to our immediate experience. This mastery of knowledge, which is wisdom, is the most intimate freedom obtainable»¹⁴.

Freedom and discipline are co-dependent and it is their balance itself that enables changes that are necessary in the rhythm of education. Intellectual development and improvement is done with the help from interest and motivation, thus it is of crucial importance that, at the earliest age possible, we allow for the interest to develop freely, and help maintain a high level of motivation in children. Only when we succeed at that, are we able to add the right amount of discipline.

«In a general way the whole period of education is dominated by this threefold rhythm. Till the age of thirteen or fourteen there is the romantic stage, from fourteen to eighteen the stage of precision, and from eighteen to two and twenty the stage of

¹² *Ibid.*, p. 83.

¹³ *Ibid.*, p. 76.

¹⁴ *Ibid.*

generalization. But these are only average characters, tinging the mode of development as a whole»¹⁵.

The first phase is more coated in freedom, as Whitehead claims that at the very beginning of the process of acquiring knowledge and development of fundamental abilities, which is the main task of schools as institutions, it is key to entice interest, motivation, and a man's natural desire for these. In other words, a desire for exploration and discovery. In the next phase, greater emphasis is put on discipline, however it does not entail the complete disappearance of interest and motivation. In all phases, including the third, is crucial for the teachers to encourage their students, to take care of their interest and satisfy it as best as they can, and to provide relentless support.

«The real point is to discover in practice that exact balance between freedom and discipline which will give the greatest rate of progress over the things to be known. I do not believe that there is any abstract formula which will give information applicable to all subjects, to all types of pupils, or to each individual pupil; except indeed the formula of rhythmic sway which I have been insisting on, namely, that in the earlier stage the progress requires that the emphasis be laid on freedom, and in that in the later middle stage the emphasis be laid on the definite acquirement of allotted tasks»¹⁶.

Thus, in the first phase in children there is a great interest, curiosity, and potential for acquiring knowledge and developing abilities, as well as acquiring necessary skills and competences, all of which the teacher should support wholeheartedly. In this phase, the teacher fine tunes as much as possible in the favor of the student and his freedom in research. The teacher's role should be most evident in monitoring the child and assisting whenever necessary. In this way, he is more of a discreet, silent back-up, than authority. His mildness, understanding, and empathy will be his strongest assets.

In the second phase, discipline should prevail. It is the phase in which students acquire formal, factual and objective knowledge, adopting theories, accuracy, systematizations and the like, which they will later implement in the practical domain, by solving problems and difficulties in their lives. During this phase, students are presented with various methods of learning which they are supposed to implement, as well as a whole strategy of learning that can take them to the most successful overcoming of challenges which they are facing in their everyday

¹⁵ *Ibid.*, p. 83.

¹⁶ *Ibid.*, pp. 80-81.

life. Their ability to self-discipline also surfaces, for which the teachers slowly lay the groundwork. The teacher and his ability to discipline the student also comes to light, and his authority is emphasized alongside the requirements which need fulfillment.

In the third phase, the peak of balance between freedom and discipline occurs. Now this interest and greater freedom from the first phase are being upgraded with the discipline and methods of successful learning from the second phase – thus creating a unity that represents the third phase of development and a student's build-up suitable for the society he or she lives in. All the above mentioned is activated and turned into action, which means there is an active and constructive application of what was acquired earlier. The activation of knowledge, and especially its implementation, happens here almost spontaneously, in the sense that students enter a routine of applying everything what they have acquired throughout prior phases. Thus, in the end we may conclude that:

«The two principles, freedom and discipline, are not antagonists, but should be so adjusted in the child's life that they correspond to a natural sway, to and fro, of the developing personality. It is this adaptation of freedom and discipline to the natural sway of development that I have elsewhere called the Rhythm of Education. I am convinced that much disappointing failure in the past has been due to neglect of attention to the importance of this rhythm»¹⁷.

Whitehead once again claims that: «education is not a process of packing articles in a trunk. [...] Its nearest analogue is the assimilation of food by a living organism ...»¹⁸. Education of children and the youth, according to him, should be done as naturally as possible (by following spontaneous development, as it was supposed throughout all three phases), but in order for that to be achieved, discipline is key¹⁹.

«In no part of education can you do without discipline or can you do without freedom; but in the stage of romance the emphasis must always be on freedom,

¹⁷ *Ibid.*, p. 77.

¹⁸ *Ibid.*, p. 79.

¹⁹ Spontaneous upbringing, but not in the same sense, was advocated by J. J. Rousseau. See more in: J. J. Rousseau, *Emilio*, Laterza, Bari 2003. See also A. Golubović, *Aktualnost Rousseauovih promišljanja filozofije odgoja s posebnim osvrtom na moralni odgoj*, Acta Iadertina, 10 (2013), pp. 25-36.

to allow the child to see for itself and to act for itself»²⁰. The question arises now as to what we imply by discipline. The notion itself evokes the images of order, routine, and habits. However, habits and routines do not sound as something that will exhibit much use in terms of education. Furthermore, this first association could be mistaken. Namely, habits can be both passive and active. Passive ones serve us to create automatism or routine, but active habits are the ones we try to achieve and the ones we always promote. For example, it is indeed desirable to create and have an active habit of critical thinking and judging. It is good to apply this active habit, whenever and wherever, thus every mind should train for creating such a habit²¹.

With all above mentioned, good foundations for building up self-discipline have been made. In Whitehead's words: «Furthermore, I hold that the only discipline, important for its own sake, is self-discipline, and that this can only be acquired by a wide use of freedom»²².

6. Richard S. Peters' contribution to fine tuning discussion

Richard S. Peters discusses the definition of virtue and the way we acquire one.²³ He is hesitant, when it comes to virtue, between the following opposing theses:

«Is it the 'correct opinion' and conventional behavior of well-brought-up people? Or is it conduct based on a grasp of fundamental principles? There is a corresponding difference in what is emphasized in moral education. On the one hand there is an emphasis on habit, tradition, and being properly brought up; on the other hand there is emphasis on intellectual training, and on the development of critical thought and choice»²⁴.

²⁰ A. Whitehead, as found in W. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, p. 79.

²¹ See S. M. Cahn, *Classic and Contemporary Readings in the Philosophy of Education*, McGraw-Hill, New York, 1997. See also M. L. Peterson, *Philosophy of Education (Issues and Options)*, InterVarsity Press, Leicester 1986.

²² A. Whitehead, as found in W. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, p. 81.

²³ See R. S. Peters, as found in W. K. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, pp. 102-115.

²⁴ *Ibid.*, p. 102.

It is obvious Peters begun this discussion bearing in mind the first of its kind, one which Socrates had led on the squares of Athens, and with which we are familiar from Plato's dialogues²⁵. Namely, Socrates²⁶ had held a twofold viewpoint regarding virtue. According to the first, virtue can be equalized with knowledge, as virtue is knowledge and knowledge is virtue. One who knows is able to be pursuant with the knowledge and in that way practices the virtue itself. On the other hand, Socrates had claimed virtue cannot be learned. In this sense, it is more similar to successful leading of life based on virtues, because an individual who possesses one virtue, possesses them all, in a sense. Thus, we may conclude that virtue is obviously acquired via both ways – one part by honoring the moral code of his surroundings, and in the other part by examining, analyzing, having dialogues, judging, and rising intellectually²⁷.

In the end, we ask ourselves whether the truth is someplace in the middle. Can virtue be learned, and then taught? Apparently, this leads us to a moral paradox. On one hand, virtue is interpreted in compliance with the cultural reach one lives in, as well as the tradition and morality that are in effect in that society. On the other hand, virtue is related to intellectual breakthroughs, with that which is developed by way of Socrates' maieutic method and Plato's dialectic. Thus, it is justified to claim that morality, at least the social one, is inherited from the society one lives in, but also that the individual himself can contribute to the development and improvement of his own (and others') morality via critical, creative, and innovative thinking. In this context, regarding the reflections of the virtue of an individual, it could be said that someone has a more discerning moral knack, while another has a lesser one²⁸. Peters thinks that first we need to acquire moral rules which will be applied by way of habit in various situations with a sufficient reflection. A man becomes moral in a way that he first follows the rules of his culture and his ancestors' traditions, thus a generational inheritance, just like their moral code of behavior. It is taught morality, moral rules and laws, and encouraged to follow them. In other words, he is encouraged to follow the rules of proper conduct. It is a desire of grown-ups for their children to be instilled with the habits of moral patterns. In a more mature age, it is

²⁵ See more about Socrates', Plato's and Aristotle's interpretations of virtue in: F. Cioffi et al., *Il testo filosofico* (vol. 1), Bruno Mondadori, Milano 1992.

²⁶ See more in: R. S. Peters, as found in W. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, pp. 102-103.

²⁷ *Ibid.*, p. 104.

²⁸ F. Savater, *Etika za Amadora*, Educa, Zagreb 1998, p. 96.

possible to be done in greater part by way of intellectual refinement, especially via critical thinking and reassessing one's own and others' actions.

It is interesting how Aristotle's philosophy²⁹ outlines the battle between one's reason and habits, i.e. reason and habit create a moral paradox. For a man should follow the external rules, thus the rules of the society he is a part of, while on the other hand, he should obey the intrinsic rules, which means he should rethink that which is imposed onto him by the society and the community from the outside. For a moral conduct to be possible, both of these are necessary – to act according to the habit acquired and to reassess well what will come about. In order to acquire appropriate patterns of behavior, we must repeat them (for example, that is the way by which one becomes a good, decent person – by repeating good, decent deeds, etc.). That is why practice and constant rehearsing is necessary, which will in the end turn into a habit (and an example of a good practice).

7. Dewey's insights regarding education

Considering John Dewey was a significant author, among else, in the field of education, i.e. pedagogy and philosophy of education, in this work we would like to dedicate ourselves to some of his fundamental ideas related to the given topic³⁰. But, before that we will display his observation related to the battle of opposites (between traditional and contemporary educational system), based on which we can discern the reasons for which Dewey calls on the reform of educational system. Namely, he notices:

«[...] to external discipline is opposed free activity; to learning from texts and teachers, learning through experience; to acquisition of isolated skills and techniques by drill, is opposed acquisition of them as means of attaining ends which make direct vital appeal; to preparation for a more or less remote future is opposed making the most of the opportunities of present life; to static aims and materials is opposed acquaintance with a changing world»³¹.

²⁹ See R. S. Peters, as found in W. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, p. 108.

³⁰ More about Dewey see in: D. Pejović, *Suvremena filozofija zapada*, Nakladni zavod Matice hrvatske, Zagreb, 1982, pp. 51-63. See also N. Abbagnano, *Storia della filosofia* (vol. 3), Utet, Torino, 1996, pp. 646-662; E. Anderson, (2018), Dewey's Moral Philosophy, *Stanford Encyclopedia of Philosophy*: <https://plato.stanford.edu/entries/dewey-moral/> (accessed on 25th May 2020).

³¹ J. Dewey, *Experience and Education*, Macmillan, New York, 1952, pp. 5-6.

All of the above mentioned is connected to significant social changes taking place in his time. That is why John Dewey (1859-1952) was famous for considering education as a key ingredient in creating a more democratic, humanistic-oriented society in general. He understood the need for the individual to be significant in the roles he plays in the society, and Dewey's philosophy of education was no less than a way of reforming the society as a whole, by means of reforming the individual himself first. Hence, in his philosophy of education the emphasis is placed on the importance of interaction between the society and the individual, which is especially related to the schooling system which should be organized in such a way that whatever pupils learn should be in a close relation to what they are experiencing outside from school (thus, that their lives in all aspects be that from which they will learn as well)³².

Even the titles of Dewey's works themselves, especially those in the field of philosophy of education, speak for the fact that he can be placed among those authors who will, so to speak, advocate a certain kind of fine tuning of children and youth through upbringing, although Dewey had not explicitly displayed or argued³³. We mean the titles such as: *The School and Society* (1899.); *Democracy and Education* (1916.); *Human Nature and Conduct* (1922.); *Experience and Nature* (1925.); *Experience and Education* (1952.), etc. In this paper, we are mostly referring to his 'introduction to philosophy of education' (the work titled *Democracy and Education*) and *Experience and Education*³⁴. Some of the leading ideas of his approach to education are related to: emphasizing the importance of experience, solving practical life problems, experimenting, testing, upbringing seen as growth and then as a process of constant modification, renewal, and changing of personality (and consequently, of the society), moral reflection that goes hand-in-hand with moral experience, judgment, valuing contextualism, the educator as the one who leads and guides the children and youth, etc.³⁵.

³² See more in A. Golubović, *Učiteljski poziv i odgajanje: razmatranje iz perspektive filozofije odgoja*, Odgojno-obrazovne teme, 1, (2018), 1-2, pp. 156-160.

³³ See N. Abbagnano, *Storia della Filosofia* (vol. 3) Utet, Torino 1996, pp. 646-662; here pp. 646-647.

³⁴ See J. Dewey, *Experience and Education*, Macmillan, New York 1952.

³⁵ See more in: E. Anderson, 2018, Dewey's Moral Philosophy, *Stanford Encyclopedia of Philosophy*: (<https://plato.stanford.edu/entries/dewey-moral/>) (accessed on 25th May 2020).

It was Dewey's viewpoint that, at the very core of the education itself was the child – his educational philosophy still resonates in many classrooms throughout the world of today, as it focuses itself on the very receiver of knowledge. He was also a fierce advocate of experiential learning (within schooling system, he advocates research, experimenting, testing/efficiency testing, solving practical life problems, etc.), since it provides the children of a hands-on, collaborative learning experience, usually through a method that is either project- or problem-based. A child is now viewed as an active doer, an engaged participant in its educative process, and no longer a vulnerable subject of imposing of knowledge down his throat. Children and youth are stimulated to solve practical life problems in which the obstacles represent constant challenges, new chances and opportunities, to test the efficiency of the existing solutions and to search for the new ones, and for the new ways of thinking and judging the problems themselves. New solutions and new ways of thinking only enrich their future experiences. Here, the intellectual is constantly intertwined with the moral, one leading to another, and vice versa³⁶. A child is a free, creative individual with his unique set of abilities and scopes of interest. Education is the one in charge of equipping the child with social, intellectual, moral, and other competences, and hence it should engage the child if the learning process is to take place. If there is no meaningful connection between a child and the competences it receives, which will later result in much more meaningful and educative experiences, then education is indeed in vain.

Dewey had been opposed to the traditional, i.e. conventional moral standards (and ethical approaches) which were mostly dogmatically oriented (the ones which placed obedience in the focus), and he advocated 'open' morality which will be seen in a constant search for new and better solutions, via testing the efficiency of the existing moral patterns and practices³⁷. At a more broader perspective, Dewey's educational philosophy aimed at a much higher goal, which was to emphasize the role education has onto creating a more humane, just, and egalitarian individual, which would eventually lead to having a more humane, just, and egalitarian society. Dewey's humanistic approach was greatly founded

³⁶ The obstacle "makes" us not only to think of new options, but also to test them, check their functionality in real-life, to check if they entice critical or creative thinking, if they contribute to judgments of values, etc. See E. Anderson, 2018, Dewey's Moral Philosophy, *Stanford Encyclopedia of Philosophy*: (<https://plato.stanford.edu/entries/dewey-moral/>) (accessed on 25th May 2020).

³⁷ *Ibid.*

in democracy, reflected in his everlasting quest for freedom, equity, and the value of a child's experiences³⁸. What Dewey finds to be the most significant is not the objective understanding of any given experience, at any given time in a child's life, but rather, it is the pragmatic value each experience has in creating more opportunities for even richer experiences in the future.

«It thus becomes the office of the educator to select those things within the range of existing experience that have the promise and potentiality of presenting new problems which by stimulating new ways of observation and judgement will expand the area of further experience»³⁹.

Of course, certain experiences will prove vain, futile, or even disconcerting for a child's growth, and will not lead to creation of any other rich, valuable experiences – here we will focus on the majority of those which actually do create newer, more valuable experiences, later in one's life. Dewey asserted that such growth, as mentioned earlier, happens through experiences which are properly educative in their nature.⁴⁰ If we colour this in more conventional terms, educative experiences would be those that allow the learner to keep on learning in the future, to become a more open and responsible individual throughout its process. In Dewey's words, «development means transformation, [...] that reconstruction or reorganization of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience»⁴¹.

As the 18th century educational climate looked in the direction of breaking away from the traditionally oriented system of education, to a more progressive, liberate one⁴², Dewey's emphasis on facilitating the intellectual growth of a child grew ever so stronger. As Dewey stated, teaching relies upon «the educational significance of social arrangements [as] means used to educate the young»⁴³. Where do teachers fit in, one might ask. Put simply, the job of a teacher is to aid the learner in the process of their growth, all the while progressing their development, urging their interests to bloom, and to expand and enrich their

³⁸ See J. Dewey, *Experience and Education*, Macmillan, New York, 1952, p. 17.

³⁹ *Ibid.*, p. 90.

⁴⁰ *Ibid.*, p. 35.

⁴¹ J. Dewey, *Democracy and education*, Echo Library, Teddington, 1916, p. 76.

⁴² See J. Dewey, *Experience and Education*, Macmillan, New York, 1952, pp. 18-19.

⁴³ J. Dewey, *Democracy and education: An introduction to the philosophy of education*, The Free Press, New York, 1997, p. 89.

experiences. Dewey nicely summed up the teacher's role by saying: «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»⁴⁴. This is where the teacher comes to realize and discern the experiences which will bear fruit and from those which will not, in terms of a child's education and progressive development in both intellectual and moral domains. These are the moments of fine tuning that obviously take place, we might argue. As the paradigm shift was under way with regards to the role of a child/learner, the roles of a teacher took on a whole new note; Dewey expected no less from the teachers than to have gigantic and profound knowledge of subject-matter. Merely, an expertise of it. Once they did, the teachers could manage identifying the child's hidden potentials easily and correctly, they could also aptly realize his tendencies, but also spark the intellectual and moral development further. In such an environment, a teacher is no shorter than a miracle worker – a fine tuner, if you wish. A fine tuner, playing and discovering, leashing and unleashing the child's inner abilities, all in the efforts of developing its knowledge, skill, and character. "A dance" of the opposites indeed.

Nonetheless, teachers play a crucial role when it comes to helping learners select, organize, and choose among different aspects of the environment surrounding them, aspects that would later increase and broaden their educative aims. Teachers, viewed in this way, are a mere force of suggestion, with their power residing in their ability to suggest both strictly, yet tactfully and fruitfully. As Dewey stated: «it thus becomes the office of the educator to select those things within the range of existing experience that have the promise and potentiality of presenting new problems» – new problems that can lead the learner to new ways of looking, new ways of thinking, and new ways of acting»⁴⁵. Again, this could be argued as another example of fine tuning that is at play here, especially in terms of choosing and encouraging those experiences, in those contexts, which will be fruitful for the learner himself.

As we have mentioned earlier in the paper, freedom is one of the key ingredients in making this possible; freedom of one's mind to create conclusions of its own and on its own, but also to make way for creativity to flourish⁴⁶. Dewey considered the purpose of education to be making the child's imagination strong,

⁴⁴ J. Dewey, *Experience and education*, Simon & Schuster Inc., New York 1997, p. 28.

⁴⁵ *Ibid.*, p. 75.

⁴⁶ See J. Dewey, *Experience and Education*, Macmillan, New York 1952, pp. 69-77.

and he regarded it an important goal of education⁴⁷. The role of the teacher is to merely guide her students, especially immature youth on the verge of adulthood, in order to «make choices among desirable alternatives, [which] is vitally important in the building of character»⁴⁸, the one who encourages development and growth⁴⁹. Moreover, Dewey defines growth as an improvement of living experience, by way of putting critical thinking into practice and having reflective thoughts of one's actions. For Dewey, such growth is continuous so long as life (of a child/learner) endures⁵⁰.

However, Dewey was critical on the reliance of those progressive schooling systems that freedom alone was not a solution to a much greater issue. In order for learning to be done successfully, there must be a clear structure, order, and discipline, and those should have their foundations in experience. In Dewey's philosophy of education, one might argue there is a certain link between a child's life and the experiences it gains, in a continuous process, which Dewey regards as the aim of education⁵¹. In this way, one of the scopes of education should be enabling a child to grow into a fully competent part of his society, able to tend for himself in all aspects. If this link is not balanced, or even established, education loses its significance, becoming a useless, meaningless burden. According to Dewey, there is a strong correlation between a child's interaction (with the society and its members, some of whom are also teachers) and the continuity of his or her experiences. By having interactions with the society and its various members, a child creates her own experiences, furthering and strengthening that bond she has with society as such. Moreover, these interactions, since they are so varied and multifaceted, are practically never-ending, and create a continuity of interactions and experiences⁵². In this way, we may argue this, in itself, shows an example of fine tuning that arises from such interactions and from having continuous experiences with the outside world, the society, its members, and education as such.

⁴⁷ See C. A. Cunningham, *Unique potential: A metaphor for John Dewey's later conception of the self-educational theory*, 1994. (Retrieved from http://www.ed.uiuc.edu/EPS/Educational-Theory/Contents/44_2_Cunningham.asp)

⁴⁸ *Ibid.*, p. 12.

⁴⁹ See J. Dewey, *Experience and Education*, Macmillan, New York 1952, pp. 28-29.

⁵⁰ *Ibid.*, p. 42.

⁵¹ *Ibid.*, p. 17.

⁵² *Ibid.*, pp. 38-39.

To summarize, for Dewey, education-as-growth is continuous throughout one's lifespan, and there is no absolute guarantee as to which degree, amount, or sense anyone ever becomes fully educated. Therefore, Dewey was opposed to absolute distinctions between teachers and students and viewing children somewhat lesser adults.

8. *Some more about critical thinking in interaction with moral education*

Critical, creative and innovative thinking are goals of every endeavor of upbringing and education. One's knowledge shapes him and thus critical thinking is of extreme importance and should be nurtured since early age. What is meant by that we will see in the following paragraphs – which point to the inseparability of intellectual from moral sphere.

«To hold a rational code a man must subscribe to some higher-order principles which will enable him both to apply rules intelligently in the light of relevant differences in circumstances and to revise rules from time to time in the light of changes in circumstances and in empirical knowledge about the conditions and consequences of their application. The higher-order principles which in my view, are capable of some sort of rational justification are those of impartiality, truth-telling, liberty, and the consideration of interests»⁵³.

Moral improvement and development also cannot be done without development and improvement of rationality:

«Moral education is usually associated with the transmission of such rules, but it is important to note that 'all' education is necessarily a moral business; for, logically speaking, it must involve the transmission of what is worth-while. It would be a logical contradiction to say that a man had been educated but that he had changed in no way for the better»⁵⁴.

Conclusion

It is obvious that the intellectual and the moral are intertwined to such an extent it is sometimes near impossible to clearly outline one from the other. The battle of opposites, or the overcoming of opposites, are obviously a part of the

⁵³ R. S. Peters, as found in W. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, p. 104.

⁵⁴ *Ibid.*, p. 105.

process of fine tuning within the domain of upbringing and education.⁵⁵ Where does Peters' paradox of moral upbringing lie, then?

«What then is the paradox of moral education as I conceive it? It is this: given that it is desirable to develop people who conduct themselves rationally, intelligently and with a fair degree of spontaneity, the brute facts of child development reveal that at the most formative years of a child's development he is incapable of this form of life and impervious to the proper manner of passing it on»⁵⁶.

That is why in that age the guidance by the teacher/educator is key, who try to fine tune their students in a way that they are not taught that which is unsuitable for their age, and who always entice them to be responsible for learning and accepting the new. An educator has: «...a much more difficult task to work out the kinds of materials, of methods, and of social relationships that are appropriate to the new education...»⁵⁷. For the time will come when pupils will be ready for further advancement. Until then, one of the main values to be built and strengthened is sensibility itself⁵⁸. Onto that value everything else will be added, for the teachers will do everything in their power to have students open towards different kinds of learning. Dewey had, for example, emphasized the importance of so-called collateral learning.

«Collateral learning in the way of formation of enduring attitudes, of likes and dislikes, may be and often is much more important than the spelling lesson or lesson in geography or history that is learned. For these attitudes are fundamentally what count in the future. The most important attitude that can be formed is that of desire to go on learning»⁵⁹.

⁵⁵ Good discussions on this topic see in L. Legrand, *Moralna izobrazba danas. Ima li to smisla?*, Educa, Zagreb 2001; E. Morin, *Odgoj za budućnost. Sedam temeljnih spoznaja u odgoju za budućnost*, Educa, Zagreb 2002.

⁵⁶ R. S. Peters, as found in W. Frankena, *Philosophy of Education*, Macmillan, Toronto 1965, p. 107.

⁵⁷ J. Dewey, *Experience and Education*, Macmillan, New York 1952, p. 19.

⁵⁸ I. Scheffler, as found in S. M. Cahn, *Classic and Contemporary Readings in the Philosophy of Education*, McGraw-Hill, New York 1997, p. 441.

⁵⁹ J. Dewey, *Experience and Education*, Macmillan, New York 1952, p. 49.