CREATIVITY AND EDUCATION

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ABSTRACT

Creativity is identified as a major aim of education throughout the world. Dewey identified the development of the skill to form proper judgments as a major aim of education, thus, though indirectly, clubbing the two aims. This aim, however, cannot be achieved without a proper organization of educational experience. In traditional schooling- prevailing throughout the developing world, and also in developed countries to a certain extent- educational experience is planned under the sway of behaviorism. Dewey reckons such an organization of experience as defective and insufficient to achieve proper educational aims. This article argues that the development of creativity is closely related to the development of the skill to form proper judgments in different situations. The article also argues that behaviorism, as the philosophy underlying traditional schooling(though it might appear to a few as an anachronism), develops responses in learners through a process that does not significantly improve creative powers. The article also reviews Dewey's position on different relevant issues and concludes, through a discussion on how educational experience should be planned, that Dewey's ideas are really helpful in developing creativity in learners.

INTRODUCTION

"...I dislike that array of instruments and apparatus. The scientific atmosphere kills science. Either all these instruments frighten the child, or their shapes divide and distract his attention, which should be focused on their effects." Rousseau (Emile, Book 3)

A five year old girl, who has never seen a school before, its physical organization and its staff, and has never come across this 'pattern of organization sharply marked off from any other form of social organization' (using Dewey's words), how should she have behaved when called for an entry test there? In the school, strangely furnished for administrative purposes, she stayed for some time, observed the way people were dealing with each other, looked at the way things were placed within the rooms, with a feeling of alienation. Estranged feelings ruled her interaction with the school that day, increasing estrangement in her encounters with the staff, while the school staff was telling her to behave towards objects in a strange manner, or ignoring her altogether.

They called her for a test, and she found the environment in the room, though there were other children as well, quite strange. They asked her to answer questions. But she refrained, and they insisted the child to become more disturbed; worsened the situation, and left a bad impression on her mind, may be forever. For the strange way of organizing things in the school she found school entirely different from her home and the places she had visited before, and found it difficult to interact with the people and respond to the situation for the dissimilarity of this experience with her past experiences.

From above example, it is clear that educational experience in traditional schools, at whatever level it is provided to learners, when a learner is exposed to it, it does not act as an interactive plan in continuation with learner's everyday social life, and renders a learner ill disposed towards learning. From Dewey's perspective, there is no doubt that traditional organization of school, whether it is seen in its emphasis on overt behavior, or on testing and external discipline, when employed to develop good disposition towards learning, appears to be highly destructive to this cause.

Moreover, in present day situation, the old values of having a vast body of knowledge, skills and a set of socially approved responses, are losing importance. Owing to the perpetual change that we witness in the modern world, one should not have a doubt that those who are not creative enough to construct values and judgments in this world of change are misfit to enjoy and lead their lives in the fullest sense.

One aim Dewy has marked, the most important among all the aims of education; he placed the aim to equip learners with the skill to form proper judgments, far above the aims to acculturate learners and to bestow them with a vast body of knowledge meant to be used in a different cultural setup. The skills to reflect on experiences and to construct values and judgments appear very important, when one thinks about creatively dealing with today's rapidly changing world.

Creativity develops through proper organization of educational experience and developing the skill to form proper judgments. The traditional organization of educational experience that surely renders children unmotivated and ill-disposed towards learning is but a hindrance in the path of goal achievement, when seen as a means to achieve creativity through education. Moreover, through this kind of bad organization, alien for children, who cannot connect their previous learning from the experiences they have in the school, one cannot even think of developing the skill of judgment making in learners. This skill is closely associated with the development of creativity, it develops-and becomes a ground for creativity; the road to this skill, is also the road to creativity-a clue to creativity, that should be followed, but that one can understand, wherever one looks, the failure of this aim, comes into sight-to show that this aim is not properly followed, notwithstanding the fact that in almost all curriculuma of the world, this one aim of creativity dominates. A lack of understanding of the aims of education, of proper values and of proper organization of educational experience, united to cause this situation, like multiple causes of a disease.

Dewey, describing progressive educational philosophy as a reaction to and critic on traditional education, considers that towards the aim of having practical principles of education, on which educational practice must be based, progressive critic approaches with no apparent success, being impractical and abstract. This type of abstract criticism is insufficient to change educational theory and practice. For him the question, that surely be emphasized, is, how the criticism employed in the progressive theory can be converted into active principles that can be practiced. Let us have an overview of what Dewey says about these issues.

Dewey's Ideas: A Balance between Progressive and Traditional Education

Dewey's educational theory is a synthesis, whose contents, prevailing over the opposition between traditional and progressive education, make this theory practical and applicable, while practically working this theory establishes a true nexus between notion and praxis.

Dewey, in his famous work 'Experience and Education' points out that in the sphere of educational theory, people think in *Either Or* *terms, in terms of opposite values in their misunderstanding, and in different gradations of the same thing, people find it easy and logical to see binary oppositions; but in fact they commit a mistake, their attitude is rooted in an error and surely harms the development of a proper educational philosophy. He explains the attitude that pervades the debate between traditional and progressive educational theories. Dewey describes progressive education as an expression of Rousseau's idea of negative education. With a strong conviction progressive education imposes restriction on traditional educational aims of transmission of information, behaviors, skills and values developed in past. Moreover, progressive theory also denies the idea of establishing school as an organization that is different from the rest of social organizations and the believe that the development of a child results from external controls, and from a subordination of internal, or psychological dimension to external social conditions. According to progressive view, thus undermining the psychological dimension traditional theory emphasizes the sociological dimension alone, and it

^{*} Dewey, John, Experience and Education, CollierBooks, 1970-pg1-2

imposes adult standards and experiences on immature learners for whom these things are far remote entities.

Dewey further writes that through outlining the traditional education thus, from the view point of progressive education, he does not mean to criticize the underlying theory, but he in fact mentions these points to reveal the origins of new education; and he thinks that, as a product of discontent with traditional education, new education rose[‡]. However, according to Dewey, upon a mere criticism of traditional education, one cannot fancy to rest the foundations of new education. So, when he criticizes traditional education, he does not attempt its whole sale condemnation; for example, says Dewey, unless one affirms the fact that the absence of experience is not the problem with traditional education, one cannot properly identify the defective and wrong character of experiences offered through it.

Dewey presented, one can identify, a close ally, in fact a practical version of behaviorist education in his description of traditional education.** As far as Dewey's account of progressive education is concerned, that is but a criticism of the traditional theory. Right from its birth, progressive education, according to Dewey, though not negative in spirit, yet formulated its principles in negative terms, and practicality being always lacking in such abstract principles, had, owing to its absence, become a problem in itself. That though, the general philosophy of progressive education may be sound, yet still the rejection or sheer opposition of a philosophy is not sufficient; and when, the criticism succeeds in rejecting the existing practice, and leaves nothing in its place, the claims of new education become null and void; and education will suffer, lose direction, and become aimless. Dewey describes progressive theory holds:

- Development proceeds from within(it emphasizes the psychological dimension alone, thus committing the mistake of denying the importance of outside factors in human development)
- 2. Traditional subject matter, the adult experience, is completely alien to children.
- 3. Traditional school discipline is to be replaced by freedom for performing activities.

For Dewey practicality of principles is the most important thing, but that is what progressive theory, owing to its overdue emphasis on criticizing traditional education, almost overlooked, and Dewey arrives at his practical principles, through creating a balance between the two. Thus, Dewey's philosophy of experience that provides with the principles of practical import is but a balance between traditional and progressive theories. ††

While Dewey accepts the recommendation of progressive theory that child's experience should be emphasized in education, the need to develop a theory of experience, to know the nature of experience and to develop principles, on which theory is to be based, attracts him. Dewey, in his discussion on a theory of experience seems to restrict his argument move around two principles of continuity and interaction, with eloquence, logic and clarity. While he pursues this logical clarity throughout his discussion on the issue in his Experience and Education, the two principles of continuity and interaction, having gained a full coverage in the argument, clarify the theory of experience.

Principle of continuity, as the name suggests, is essential to guide educational experience, with a sense of continuity and perpetuation; it recommends an experience that lives in future experiences, increases the possibilities for more and more experience in that direction, as if their own continuity is the aim of educational experiences, and experiences were designed to achieve this aim, as a sign of their own importance. Educational experience plays its part in education, as a whole, as a means and as an end, as a process and a product, as an interaction between individual and society, as an interaction between psychology and sociology, placed between child and curriculum, with the power to dispose learners towards learning, with the possibilities of furthering or suffocating experience.

[†] Dewey, John, Experience and Education –pg1-2

[§] Dewey, John, Experience and Education, pg-26

^{**} Stuart Cohen and Richard Hirsch, Behaviorism and Humanism: A Synthesis for Teacher Education, published in: Journal of Teacher Education, Vol.23, No.2, 172-176 (1972)

^{††} Dewey, John. Experience and Education,pg-26-27

Guided by pragmatic needs, thinking about educational aims in terms of natural interests, not at all arbitrary or unmotivated, Dewey conceives daily life as the content of an educational experience. He, in his essay 'My Pedagogic Creed', writes:

"I believe that the school must represent present life - life as real and vital to the child as that which he carries on in the home, in the neighborhood, or on the play-ground."

Dewey does not conceive the principle of continuity as an opposite to traditional educational tenets, for example consider the compartmentalization of subjects, in it Dewey finds nothing against the new education, if a subject is presented the way it is experienced in the community life. §§ But, for the experiences provided in traditional education in general, Dewey retains his critical stance and asks how an experience that arrests growth of further experiences, lands a person in a rut, creates senselessness, callousness, and slackness in one's behavior towards learning, how such an experience can be considered as educative?-for, educational experience must result in creating a good disposition towards learning.***

Thus speaking about the importance of good disposition towards learning, Dewey describes the other principle; the principle of interaction. Proper educative experience is an interaction between inner dispositions or inclinations with objective conditions, and this interaction gives birth to what Dewey calls situation. The trouble with traditional education lies in its emphasis on external factors, in its negligence of inner dispositions- as it does not take into account child psychology, and gives sole importance to social factors. The principle of interaction is described in 'My Pedagogic Creed' as follows:

"I believe that this educational process has two sides - one psychological and one sociological; and that neither can be subordinated to the other nor neglected without evil results following. Of these two sides, the psychological is the basis. The child's own instincts and powers furnish the material and give the starting point for all education."

The edifice of educative experience rests on the basis of these two principles - as it is evident, from Dewey's discussion, employed to increase growth from within and without, as an interaction between social and psychological dimensions^{‡‡‡}. One has the ability to speak, but that ability cannot be developed without a language- a social factor.

The ability to make proper judgments makes up for the most significant aim of education; its selection as a proper aim ensures the presence of the principles of continuity and interaction; And who would lose path in education, if, the aims and ends are so closely related in theory and practice, so much in sight of each other, so much intertwined with each other, that they can hardly be separated from each other. As a matter of rule a proper follow up of the principles of continuity and interaction, leads education towards better results; and yet, to ensure success, "the aim of developing skill to make proper judgment must replace the aim to accumulate information and skills related to specialized branches.^{§§§§}"

This ability that complies with the principles of continuity and interaction, even if it is viewed in the context of compartmentalized subject matter, can show obvious link with the two principles, and grows with each new experience without losing instrumentality in any possible situation. However, the principle of interaction is properly observed if the ability to make proper judgments is developed in the context of a child's social experience; not through exposing children to compartmentalized subjects.

*** Dewey, Experience and Education, pg-26

^{‡‡} Dewey, John., My Pedagogic Creed: available Online: http://dewey.pragmatism.org/creed.htm

^{§§} ibid

^{†††} Dewey, My Pedagogic Creed

^{‡‡‡} Dewey, Experience and Education-pg-42-43

^{§§§} Dewey, John. How we think: Available Online: http://www.brocku.ca/MeadProject/Dewey/Dewey_1910a/Dewey_1910_a.html

However, Dewey notes, there is no importance of judgment making in traditional theory (which according to our estimation is based on behaviorist principles)-it is sacrificed to favor the pre manufactured judgments-restricting intellectual freedom! To Dewey intellectual freedom appeared to have no significance in traditional theory.

Let us have an overview of how behaviorism (since it is the philosophy behind traditional schooling) considers learning and how it is contrasted with Dewey's thought. Research is showing signs of change in this traditional culture, and now people are planning education through putting in practice the principles of new education, as conceived by Dewey.

However, these attempts to change the culture, necessary and inevitable for the improvement of education, are suffering from an undue criticism of traditional behaviorist method of education. Insufficient in achieving this aim as it is, behaviorist education also has certain useful principles whose value in education cannot be denied. So, one should also address, as the situation demands, the need to rectify any undue criticism of behaviorism. This situation asks us in what way behaviorism can be both properly criticized and properly acknowledged? This question demands a review of the basic beliefs underlying behaviorism.

Behaviorism and Education

Human society, according to behaviorism, can be considered as a collection of various stimuli randomly spread in the environment; an individual's responses to these stimuli result from learning, reflexively, so that there is a one is to one correspondence between the members of the sets of stimuli and behaviors, and learners responses are modified in a culturally defined direction to form strong stimulus—response associations.

It is not to be thought of that these responses, notwithstanding all their social value and desirability, should be imposed; and for good or bad be accepted for all eternity. A learner must form a response after knowing its grounds and consequences; after knowing the grounds and consequences of the believe underlying the response.

However, in behaviorism responses are taught and strengthened through different patterns of reinforcement; this allows us to define the learning process as the strengthening of the habit of selecting a response from a culturally defined set of responses. The acquisition of cultural knowledge, in this case means to have a store of responses that are to be stimulated by some fact that a person comes across. Behaviorists pay more emphasis on overt behavioral changes.

On the other hand, Dewey values human responses when they result from reflection; he does not recommend suppression of cognitive process that precedes decision making, nor he advocates the usurpation of intellectual freedom; but he clearly differentiates the two types of belief. In his famous work, *How We Think*, while differentiating two types of beliefs that underlie our behaviors, Dewey writes:

"Some beliefs are accepted when their grounds have not themselves been considered; others are accepted because their grounds have been examined."****

Dewey Further Writes

"Thinking in its best sense is that which considers the basis and consequences of belief." "####

Clearly, Dewey appreciates those beliefs, and consequently behaviors, that result from a process of reflection that logically outlines the ground and the consequences of a belief. These two complementary to each other statements provide us with an spectacle that allows us to see the behaviorist learning as the one in which beliefs and their consequences are not properly judged .The learner does not think to judge the grounds and the consequences of a belief; rather the authority to give a judgment lies beyond the learner.

^{***** .}Dewy , John, How We Think, Chapter 1: Available Online: http://www.brocku.ca/MeadProject/Dewey/Dewey_1910a/Dewey_1910_a.html †††† ibid

While Dewey considers the skill of judgment making important, a question comes to our mind, the question of how the allowance or non allowance of judgment making influences the creative powers of a child. To answer this very important question that appears so much to us now, the question that asks us about the importance of judgment making in learners' lives, about how freedom to form judgment is important for the development of creativity, to answer this question we should now move towards a greater understanding of social experience and the way behaviorism works in this context.

Human experience in a cultural context has three dimensions three are:

- 1. The objects of human consciousness in different situations.
- 2. The interpretation of the meaning of these objects and of human relationship with them. §§§§§
- 3. A value system in which each of these objects enjoys a certain value.

When we thus come across a thing belonging to the category of objects, there come meaning and significance of it in our minds, and we also prefer one thing over the other in case the situation demands this evaluation. These objects towards which our consciousness is directed are termed here as social stimuli. A society is a collection of such stimuli******. For example a bus a person is waiting for is but an object that stimulates a behavior in the person. In case the bus arrives, it becomes a stimulus physically presented to the consciousness of the person. However, when the person was waiting for it when the bus was not there, it was an idea that allowed the person to pass through the experience of waiting. Objects whether they are ideas or mental images or real beings, have the power to stimulate responses in us. It is for this reason that we call them social stimuli.

When something enters our consciousness in a particular manner, through a particular modality like perception, imagination, etc., creating in our consciousness feelings like liking, clarity, confusion, anger, hatred, love, or jealousy towards the object, we thus assigning a meaning to the object, become aware of it. The feeling that accompanies our awareness of some stimulus depends on two things. First, what type of relationship we have with that particular object or stimulus. Second, in what manner our cultural experience determines our feelings towards that object.

In case our personal relationship with a particular object of consciousness allows us to like it and our social learning tells us to dislike it, then we have a feeling of ambivalence towards that stimulus. So, our feelings about different things heavily rely on our cultural learning and our personal preoccupations and dispositions. In case our existing situation demands something different from our cultural learning then we might feel differently about that thing. Behaviorism, since it demands a permanent change in the behavior in a desired direction, allows little room for the differences. From a behaviorist perspective stimuli have permanent meanings and values the session of the differences is stimuli should remain self-same.

The value and the meaning of different realities, in the case of behaviorism, have very long life spans. They are regarded as having eternal meanings and values. The meaning of any social stimulus is derived from past cultural experience. These meanings, along with the present interpretation, include both past possibilities and future possibilities of the stimulus; such that, when we experience a computer, we can anticipate its behavior. A person whose wits are working will not fear that a desktop computer can slap him. For, from our past experience, we know what possibilities are related to a desk-top computer. We know that it cannot move without the application of an external force, for, we know well that physical objects follow the law of inertia. The number of possibilities is limited. The

^{‡‡‡‡} Jon M. Shepard, Sociology, January , 1990

^{§§§§} This idea is taken from Husserl's work *Ideas*. The notion of horizonal intentionality lies beneath this description. For further details and explanation see:

Walter Hopp, Husserl on Sensation, Perception, and Interpretation

Canadian Journal of Philosophy - Volume 38, Number 2, June 2008, pp. 219-245

^{*****} When we know something we actually interpret that thing according to our socially shared understanding. This leads us to the conclusion that stimuli, in most of the instances are socially defined and understood.

^{†††††} Peter S. Hlebowitsh, John Dewey and the Idea of Experimentalism, available online: http://muse.jhu.edu/journals/education_and_culture/v022/22.1hlebowitsh.html

present, the past and the future of a particular object have limited possibilities, and we believe that nothing beyond those possibilities happens. ******

Our cultural experiences allow us to determine the past and future possibilities of an object. We know that people in different social roles can possibly behave in specified number of manners. This set of behaviors shows conformity to the norms of society. Societies have different mechanisms of disapproving different levels of deviance from the norms. People laugh at a person who deviates mildly and penalize those who deviate strongly. Societies offer rewards and punishments for different behaviors to reinforce or discourage them. In most of the cases, socialization process creates conformity between individual behavior and social norms. **S\$\$\frac{\$\\$}{2}\$\$ An individual's memory associates members of the set of behaviors with the members of the set of social stimuli, and individual possesses a set of possible behaviors corresponding to a set of social stimuli. A particular behavior is associated with one stimulus or many stimuli depending upon the pattern of association in an individual's memory. Both these sets are finite, and the number of their members depends upon the collective social experience. More conservative cultures do not approve any addition to these sets, and they strictly observe that individual complies with the limits imposed on behavior-stimulus relationships by a culture.

A conservative society does not change the meaning and value of a stimulus and do not accept any contradiction, and the law of such a society treats each and every individual on equal basis *******-there are no exceptions. This type of conservatism is regarded as necessary for the perpetuation of society, giving absolute permanence to social meaning and values. Education in a conservative culture largely relies on establishing permanent associations between behavior and stimulus, and learning means the ability to show a socially desired behavior towards a stimulus. This sense of permanence is emphasized in the case of behaviorism.

DEWEY'S FORMULATION OF BEHAVIOR AND CREATIVITY

However, from Dewey's perspective the meaning of education moves from a mere display of learned behaviors, towards the process of judgment formation. For Dewey, behavior is not reflexively displayed as a learned response (selected from a store house of responses) towards a stimulus; rather, a response is constructed after a cognitive process is followed (formation of good judgment). Such a response is bound to be creative, for it is a result of an individual's intellectual freedom to form his or her own ideas.

It will not be inexpedient if , just for the sake of clarification, we consider a habitual response(the behaviorist sort of thing) and creative response(Dewey's preferred response) not as opposites to each other but as gradations of the same specie; response. The task here is to know what characterizes a response as merely habitual or creative, and what is the value that each of these categories of responses enjoy in present day's social context. Dewey writes:

"A thinking being can, accordingly, act on the basis of the absent and the future. Instead of being pushed into a mode of action by the sheer urgency of forces, whether instincts or habits, of which he is not aware, a reflective agent is drawn (to some extent at least) to action by some remote object of which he is indirectly aware."

A thinking being resolves the issue in his imagination, where as this prized ability is contrasted with the responses that are habitual or are testimony to one's captivity to the natural factors like instincts.

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‡‡‡‡‡ Walter Hopp, Husserl on Sensation, Perception, and Interpretation
Canadian Journal of Philosophy - Volume 38, Number 2, June 2008, pp. 219-245
§§§§§ Jon M. Shepard , Sociology, published in 1990
******** Here the idea of social justice is taken as having within it the idea that individuals do not have psychological differences either.
†††††† Dewey, John , How We Think
‡‡‡‡‡‡ ibid
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Behaviorist education, which for obvious reasons, is akin to what Dewey has described as traditional education, fashions human behavior, and converts those behaviors into habits through drill, memorization and practice. This indicates that the development of reflective thought, the ability to calculate and surmise what possibilities are there and the inquiry into the grounds of a belief are missing in behaviorist model.

In a behaviorist learning environment, the level of achievement is not determined by the thought process that mediates between stimulus and response; rather it is determined by the alacrity with which a person is able to respond towards the situation in a socially approved manner. On the other hand, a person who deliberates before responding towards stimuli is considered as a low achiever.

In a pragmatic sense the timeliness of the response is important. §§§§§§§ For if a decision is taken so late that the need to make the decision has already been passed, it will not be worthwhile. Behaviorism is good in as much as it allows people to save time through training them to make quick decisions without reflection or thinking. But, this training is effective only in a social environment which remains self same for a very long period of time. In a perpetually changing social environment, behaviorism fails, for, things change their meaning and value.

In a behaviorist educational environment a learner uses his habits to respond in different situations, remembers the standards of the culture in which he is socialized, however, this happens without a significant improvement of the cognitive level, thus, there are certain problems that a learner can possibly face in his life. Dewey described this issue when he talked about moral reasoning.

Dewey, in his description of moral reasoning describes the process of inquiry involved in making moral decisions** From Dewey a person is led to act in a situation due to the emergence of a certain impulse. A person feels that he has to respond towards the situation in a particular manner to achieve a certain aim. The person does this through applying the knowledge that he has learned or gained from his social experience. Knowledge in this case has already taken the form of a habit and the person is likely to respond towards the stimulus in a habitual manner. The problem occurs when this person finds that the habitual action is no longer instrumental or effective in addressing the situation. In case, the person merely relies on habit and previous learning, he will stop here, whereas, on the other hand, if this person is creative, he will try to discover some alternate strategy through intelligently reflecting upon the situation.

The range of behaviors is fixed and the learning is limited. A person in possession of habitual responses cannot transcend his learning to deal with the situation in a creative manner. ****** A base ball player who has received extensive coaching can use this learning to respond to a ball thrown at him by a pitcher. Despite the fact that the player knows a number of ways to play a number of deliveries, the strategies in his mind are applicable to a limited number of situations, and if an unprecedented situation arises he cannot synthesize a novel solution to deal with it. Through practice, the response towards a delivery becomes almost habitual. However, if the pitcher throws a ball that asks too many questions, the learning of this trained player can easily be defeated. Similarly, in unprecedented situations, a person who is socialized to respond towards various stimuli in socially accepted manners has no ready at hand tool to deal with the situations. A mere learned person can only

James Britton, Vygotsky's, Contribution to Pedagogical Theory, June, 28, 2008, Volume 21 Issue 3, Pages 22 - 26

^{§§§§§} Nietzsche, Friedrich, Beyond Good and Evil, Section: Free Spirit: Available Online: http://www.geocities.com/thenietzschechannel/bgept2.htm

Nietzsche's comments in this section suggest that the pragmatic importance of knowledge remains there even if it comprises a wrong belief, an error. For, at times it is an erroneous judgment or belief that allows survival. However, a wrong belief is not to be though as an opposite of the right belief, for, in nature there are no opposites; there are only gradations. Both Dewey and Nietzsche seem to support this opinion. Thus nothing (neither truth nor lie) is denied in an absolute sense, though

^{*******} Zhuran You, A G. Rud, A Model of Dewey's Moral Imagination for Service Learning: Theoretical Explorations and Implications for Practices in Higher Education, Published in , Education and Culture, 2010, 26(2) pg-36-51

^{†††††††} Dewey, in the first chapter of his work How We Think, attributes this property to brutes, that nothing mediates the stimulus and response. In Vygotsky's view, animals are captives of their nature. They are not able to invent tools to facilitate the achievement of their aims. For further explanation see:

respond conventionally towards various situations and has no capacity to create a new solution on his own.

A creative person is essentially a person who is able to form socially acceptable judgments in an unprecedented situation. Though a creative person has habits to deal with the situation, he can see beyond those habits to form proper judgments, when a habit is no longer instrumental in dealing with a problematic situation and creates a problem. A creative person is the one who actually knows and practices the art of forming judgments. A creative person achieves this end through the ability to analyze the situation in an appropriate manner. This proper analysis leads him to the recognition of the nature of conflicts involved in the situation, and leads him to separate the essential facts from the accidental ones on the basis of the knowledge of the extent to which certain relevant facts are capable of influencing the situation. A creative person, on the basis of this analysis can form a proper judgment regarding the situation and can create a novel solution in an unprecedented or ordinary situation. Through more and more practice, a person can master the above mentioned method of judgment formation. ******** Through practicing this art frequently, a person can master it to an extent where he or she has more time at his or her disposal, as compared to the alacrity with which a high achiever in a behaviorist system makes decisions. An intelligent person always has more time to take decisions in any situation, and this is the trait that distinguishes a genius from an ordinary performer in all spheres of life. For Dewey the principle of continuity can be observed through repeated application of the method of inquiry that leads to the formation of judgments. The principle of interaction is observed when a learner interacts with his or her natural situation.

EDUCATIONAL REFORMS

Dewey does not deny the traditional approach altogether; he criticizes the tradition when it attempts to deny a reality, when it attempts to deny the avenues of growth and development, when it tries to suppress a reality. He admits the role that traditional education plays in the formation of habits and transmission of culture, though, he has certain differences regarding the methods implied in this pursuit. Ideally speaking, a person socialized in traditional manner remains a captive of his or her learning. The very idea that education is a reconstruction of experience on the part of learner is not cherished at all in what Dewey described as traditional education.

There is ample proof that the kind of educational methods and values that Dewey criticized are still in practice in schools. The matter is self evident. In this situation Dewey's ideas for the development of a creative individual have a real significance. As far as creativity is concerned, in almost all curriculums, its development appears as a major educational aim to be achieved through schooling, but, in many cultures creativity is not *de facto* emphasized; in some cultures it is rather suppressed. Thus, it is important to understand the process and meaning of the development of creativity.

^{‡‡‡‡‡‡‡} Dewey, John, How We Think: Available online

^{§§§§§§§} Frank M. Flanagan, The Greatest Educators Ever: available online:

http://books.google.com.pk/books?id=tnIEhq7l0nUC

^{*********} Dewey, John. Experience and Education, p-1-2

CONCLUSION

Dewey in his essay on judgment making described this process of judgment formation. He describes a three-step procedure to make a proper judgment. The procedure follows the following sequence:

- i. A controversy, consisting of opposite claims regarding the same objective situation
- ii. A process of defining and elaborating these claims and of sifting the facts adduced to the situation
- iii. A final decision, or sentence, closing the particular matter in dispute and also serving as a rule or principle for deciding future cases

Thus, the development of reason reaches a noticeable growth level, if the above mentioned method along with other methods proposed by Dewey, like problem solving for instance, are followed in their true spirit. This perhaps is the way towards creativity. This creativity does not develop without an educational plan, and one cannot expect that creativity can develop like a wild flower, left to the forces of nature. However, if from the infancy till the maturity of reason, one keeps one's focus on providing proper experiences to a child, one can then assume that one will achieve the goal of developing creativity; however, in such a task certain problems can also hurdle one. But, thanks to the vast literature that we have on childhood education, in which the problem of deciding for the proper experiences for education has resolved itself.

Childhood, during which the ability of abstract thinking may have developed or is in the process of development, has been the common focus in educational philosophy. Of all that is important for childhood education-according to Dewey, presents itself in the idea of freedom; learning of things through interaction, use of senses through observation, physical growth through movement, cognitive skill development through inquiry, and many more things necessary for childhood development; areas which traditional imposition and restriction on freedom are unworthy of producing.

Freedom, then, in early childhood and infancy does possess a real importance. A child who is often stopped by his parents from performing different activities, losing interest in self-initiated activities, starts asking for things that he cannot get through his own efforts This abandonment of freedom, that leads a child to develop such desires which he cannot fulfill on his own, finally leaves a child weak and miserable in the later stages of his life.

Education during the earlier stage of life, it is true, surly be harmed if two guiding principles-learning through senses and freedom to act-are not incorporated and observed in it. Education, during the earlier part of life does not need imposition of ideas that a child cannot understand; a child learns more through interaction with physical environment. And then, for the development of reasoning and higher cognitive skills, no imposition of ideas from outside is required, to acquaint them with the ideas; the abstract faculty of reason develops more successfully in a child who has been involved with the physical objects during the earlier part of life.

In most of the cultures schooling starts at the age of 5 or 6. Thus, from the age of 5 till 12, children should be given more opportunity to learn from their senses. Plato in his public education model conceived music as a medium to provide instruction during this age. The reason is that during this period a child cannot understand abstract ideas, though, for Plato, the real content of education are ideas, and Plato dislikes representation, even then he suggests a concrete sort of education during childhood. Thus, Plato emphasizes the use of senses in early education, though, for him the reception of ideas is more significant. On the other hand, for Dewey ideas are both constructed and received. However, he pays much more emphasis on the ability to construct ideas through a process of inquiry. Dewey criticized Plato for committing the philosopher's error. According to him Plato gave ideas precedence over the experience the philosopher's criticism, yet still this will not have any major impact on the way Plato described the process of knowledge acquisition during the childhood.

^{†††††††} Dewey, John, Experience and Education, pg-37

^{‡‡‡‡‡‡‡‡} Dewey, John, Experience and Nature, in Vol-1 of The Later Works, ed. by JoAnn Boydston, Carbondale: Southern Illinois University Press, 1981-1990, p-102: Also compare with Nietzsche's ideas in section on philosophical errors in the Twilight of Idols.

For Plato, the world we live in is a copy of an ideal world, and children, since they cannot follow discursive reasoning, should be allowed to appreciate ideas in their concrete manifestations through the use of senses. That is the reason why Plato chose music as a medium to present ideas:

"Can we find a better than the traditional sort? -- and this has two divisions, gymnastics for the body, and music for the soul." \$\$\$\$\$\$\$\$

The content of education should not comprise signs and ideas which children cannot understand. During this period sense experience should be emphasized. And if we consider that ideas are reflections of experience, then, it becomes necessary to provide a variety of experiences to the children.

Senses are to be trained to analyze, compare, synthesize, evaluate, know and comprehend the concrete reality. Higher mental functions emerge from the experiences of childhood. If we allow the senses experience to perform all of the above mentioned functions, the likelihood of having proper judgments will increase at a later age. The basic ideas related to the sense of sight are size, length, width, depth, proximity, perspective, color, shade and dimension. Many more ideas can be added to this list. If children are allowed to circumspect an object under review with much detail, if they are allowed to view an object from various angles and then asked to form a judgment about that concrete object, they will learn, at a later stage to do all these operation on ideas in their imagination. If children are asked to break things into parts and to join the parts to form new shapes and things, they will learn how to synthesize and analyze the situation in abstraction. Thus a training of senses will enhance their power to make proper judgments. On the other hand if we give them ideas and judgments as finished products they will not learn the art of thinking. What they learn is to give hasty judgments and assign traditional meanings to the things.

In the beginning of this article it was claimed that a creative person is the one who is able to form proper judgments through converting facts into ideas and then through sifting and elaborating the ideas. A child cannot learn this art unless it is taught, unless a child is allowed to pass through this process time and again. Traditional approach towards education, whether it is being practiced somewhere or not, does not allow a child to develop this most essential virtue. In traditional schooling, children are praised if they quickly respond to the questions asked to them. They are praised if they are able to give correct answer. No room is left for thinking; they are not told that they have to think about the question before they answer it. They are not asked to think.

Thus, the traditional approach used in schools in which a very short time is given to the students to respond to a question correctly, does not allow them to grow their thinking power. Traditional education makes a person learned. For it transmits knowledge. However, it does not enhance the

^{§§§§§§§§} Plato, Republic:Tr. By. Benjamin Jowett Revised and Edited by Michael S. Russo; Available online: http://www.molloy.edu/sophia/plato/republic/rep2c_txt.htm

^{†††††††} Plato, Republic, the Allegory of Cave. Plato described education as the preparation for the knowledge of metaphysics

ability to think and understand. Thus, till the age of 12 children should be provided with things on which they can perform various functions.

Reading and writing are skills that are difficult to acquire. Dewey suggests that instead of writing words, children should be asked to draw pictures of the objects they see. This perhaps should begin at the age of three years. Though at that time a child will not be able to draw a picture, he will learn the idea that things can be imitated in symbols. A picture is not the thing itself; it is a copy or a symbol of the thing. However, at a later stage, children through their habit of drawing pictures will learn to circumspect things in details. So, this approach towards writing will also enhance the use of their senses. The more they will learn to see the details, the more, at a later stage they will be able to visualize and comprehend the details of situations. Thus, they will become intelligent. As far as reading and writing of words is concerned, it can be carried out through at a stage when they can memorize the alphabet with ease. Reading should not be taught without first motivating the child for reading. Rousseau says that no method can prove helpful in teaching if the learner is not properly motivated to learn. Furthermore, according to Rousseau, during childhood it is better to lose time than to save it. For, children can learn a very few things and they have ample to learn those few things. Thus there is no harm in it if we start teaching reading and writing with convenience.

According to Piaget and Rousseau reason appears at the age of 12. Thus we can assume that at the age of twelve children are able to perceive ideas and they can imagine situations. At this age children are able to perform logical operations. They should be given tasks in which they have to apply their reason to solve problems. Dewey's problem solving method can be a good choice for this stage. Since, the major aim in this period is to teach how to use imagination to reflect upon different situations, therefore, the problem solving method appears to be the best choice.

During the period before 12 years of age, the education was solely based on aesthetics. Now the education is based on reflection to form ideas. Thus the major aim here is to teach reflection and to produce ideas. Reflection is not a part of the common experience. It begins when a person finds himself in a problem. Thus it is through the problem solving method of Dewey that children can learn how to reflect and then form proper ideas and find solutions to the problem. Thus, by the age of 15 they will be trained to follow the process of inquiry and master this art.