

# John Dewey's Experimentalism Philosophy and its Claim to the Kenyan Education System

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## ABSTRACT

Dewey as a philosopher of education remains a landmark both in his ideas and teachings about education and philosophy in general. The inquiry into Dewey's pragmatic approach in education is gradually justified by profound interest regarding the type of education that is offered currently in Kenya. This study sought to establish whether Kenyan education system is governed by the attributes of John Dewey's pragmatic philosophy, and, if such attributes indeed exists, whether they have been implemented in the education curriculum. The study was triggered by the tendency of the Kenyan education system to dissociate academic from practical skills. Dewey main reiteration was that a good education involves the acquisition of both theoretical knowledge and practical skills. The findings of the study have shown that Kenya has tried to integrate the Dewey pragmatic approach especially in the socialization and democratization of the education system. However, the pedagogical approaches proposed by Dewey have not been fully integrated in the Kenyan classrooms especially in the early childhood, primary and secondary education stages. Hence, the study has proposed areas that need to be fostered so as to achieve an integral education based on the Dewey's pragmatic approach which is able to respond to the present society.

**Keywords:** Education, Dewey, Pragmatism, Curriculum, Democratisation.

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## 1. INTRODUCTION

The main goal of this paper is to discuss the common philosophies laid down by John Dewey and show how they are relevant to the current education system in Kenya. The centrality of this discursive essay is to compare and contrast the common notions about education, their strength and weaknesses, the main features of education in Kenya before and after independence. This is done alongside the chief tenets of Dewey's understanding of education. His pragmatic criterion that identifies education with experience was explored. Within this context, the paper investigated and made a brief analysis of how far Dewey's education has been applied to Kenyan system of education.

The overriding theme of Dewey's works was his profound belief in democracy, be it in politics, education or communication and journalism. Known for his advocacy of democracy, Dewey considered two fundamental elements; schools and civil society to be major topics needing attention and reconstruction to encourage experimental intelligence and plurality. Dewey asserted that complete democracy was to be obtained not just by extending voting rights but also by ensuring that there exists a fully formed public opinion, accomplished by communication among citizens, experts, and politicians, with the latter being accountable for the policies they adopt. He suggests that as much as we educate for democracy, we should democratize for education.

### 1.1. Dewey's Instrumentalism/Pragmatism Philosophy

Dewey's prominent philosophy, known as experimentalism or instrumentalism is largely centered on human experience (White, 1964)(White, 1964)(White, 1964)(White, 1964)(White, 1964)(White, 1964)(White, 1964). Dewey was a practitioner of instrumentalism who, while fearing that the name was easily misunderstood, adopted it for his modernization of tools of induction and his denial of reality behind experience. Popper was a critic who judged its insistence on induction and its denial of reality behind experience to be hopelessly flawed.

In 1925, John Dewey published an article entitled "The Development of American Pragmatism," in which he The main goal of this paper is to discuss the common philosophies laid down by John Dewey and show how they are relevant to the current education system in Kenya. The centrality of this discursive essay is to compare and contrast the common notions about education, their strength and weaknesses, the main features of education in Kenya before and after independence. This will be done alongside the chief tenets of Dewey's understanding of education. His pragmatic criterion that identifies education with experience was explored. Within this context, the paper investigated and made a brief analysis of how far Dewey's education has been applied to Kenyan system of education.

John Dewey was an American philosopher, psychologist, and educational reformer whose philosophies have been influential in education and social reform. Dewey is the key figure concomitant with the philosophy of pragmatism and is considered one of the founders of functional psychology. Additionally, he was a well-known public intellectual, a major voice of progressive education and liberalism. Although Dewey is known best for his publications about education, he also wrote about many other topics, including epistemology, metaphysics, aesthetics, art, logic, social theory, and ethics.

The overriding theme of Dewey's works was his profound belief in democracy, be it in politics, education or communication and journalism. Known for his advocacy of democracy, Dewey considered two fundamental elements; schools and civil society to be major topics needing attention and reconstruction to encourage experimental intelligence and plurality. Dewey asserted that complete democracy was to be obtained not just by extending voting rights but also by ensuring that there exists a fully formed public defined instrumentalism to distinguish it from schools known as "pragmatism" and "experimentalism." Experimentalism touts that learning

should be done through problem solving, that education should be related to the interests of the student, and that students should be taught how to think and make conclusions based on evidence so they can best adapt to the needs of an ever-changing world. According to Dewey (2007) one must learn from their experiences and mistakes, so they can make informed decisions down the road so that they do not repeat these mistakes. Therefore, the process of learning is lifelong, as we continue to experience things and learn from them. In distinguishing good or educative experiences from bad or miss-educative experiences, Dewey suggests that a good experience is characterized by both interaction and continuity. An educative experience is one which an active mind interacts with a wide open world to solve genuine problems that are continuous with, yet different from, previous experiences.

Given that the basis for Dewey's philosophy is focused on social reform (Dewey, 2007) this philosophy of learning makes sense, as it contextualizes problems into opportunities for learning and growth. Such knowledge is conceptualized by the changes in one's behavior, rather than the knowledge in one's mind. This knowledge can be understood as knowledge in ones actions (one understands the risk and acts accordingly) – which is experimentalist, or as mindful knowledge, where one understands the risk but chooses to engage in such behavior anyway (Dewey, 2007). In other words, students are not being taught what to think, but how to think. Therefore, there are not absolute truths (contrary to perennialism), as all truths are constantly being re-examined and evaluated based on individual experience and reality. This is very similar to the process of the scientific method.

Dewey's philosophy also claimed that man behaved out of habit and that change often led to unexpected outcomes (Dewey *et al.*, 1988). As man struggles to understand the results of change, he is forced to think creatively in order to resume control of his shifting environment. For Dewey, thought was the means through which man came to understand and connect with the world around him. A universal education was the key to teaching people how to abandon their habits and think creatively. The basis for authority in a democracy is experience.

### 1.2. Benefits of Dewey's Experimentalism Philosophy

- i. All "truths" are held up to ongoing inspection (counter to perennialism where truths are absolute).
- ii. Responsive to existing conditions as well as changes in conditions, enabling students to adapt to an ever-changing society
- iii. Teaches reflective thinking and inquiry skills, giving students the opportunity to draw their own conclusions after gathering all available evidence
- iv. Encourages peer learning and provides exposure to different viewpoints
- v. Can be applicable for all types of learners

### 1.3. Drawbacks of Dewey's Experimentalism Philosophy

- i. Lack of structure can be frustrating for both the student and the instructor
- ii. Emphasis on group collaboration can be alienating to those who prefer to work alone
- iii. Can be limiting in teaching foundational knowledge
- iv. May be best suited for social science subjects

### 1.4. Other Dewey's Basic Educational Theories

It is estimated that Dewey wrote upwards of 4,000,000 words on the subject of educational theory and practice. His first two articles in pedagogy dealt with "The Education and Health of Women" and "Health and Sex in Higher Education" and are symbolic of his concern with the relation — in fact, identification — of science and education.

Whatever changes Dewey was willing to admit in the development of his philosophy, his pedagogy remained fairly constant over the years, and in spite of the obscurity for which he is famous, we can trace the roots and general outline of his principles of education.

Dewey prided himself on being revolutionary. Anything traditional or conservative was *ipso facto* anathematized. In one short article which he published not long before his death, he literally exhausted the English vocabulary with disparaging terms for those who disagreed with his radical schemes. "Antiquarian, remote, abstract, isolated, reactionary, dead-bones, feudal-medievalism, served their time, cleric, supernatural, scholastic reaction, provincial, pre-scientific, systematic fixation, sterility and stagnation, rigidity" is a partial list of such labels in a few pages of print. His critics have observed that this was a favorite method of argumentation with Dewey, to make dogmatic statements without proof and then tear down the opposition by calling them names.

The radical theories of education which Dewey proposed are not arbitrary but they are radical changes which have occurred in every other field of human thought and endeavor. And all that he was doing was bringing education into step with the progress of the times.

According to him, there have been three great revolutions in modern life of which the traditional school has taken little or no account: (1) the intellectual revolution, brought about by the discoveries of modern science; (2) the industrial revolution, consequent upon the invention and development of modern machinery; and (3) the social revolution, resulting from the growth of modern democracy.

Referring to the above triad of changes *in globo*, Dewey said that one could hardly believe there has been a revolution in all history so rapid, so extensive, and so complete. He further posits that the fact that this revolution should not affect education in other than formal and superficial fashion is inconceivable. And again, since it they are radical conditions [in the world] which have changed; only equally radical changes in education suffice. According to basic Hegelianism, a change in one phase of reality calls for a corresponding change in every other. The obvious fact is that our social life has undergone a thorough and radical change. If our education is to have any meaning for life, it must pass through an equally complete transformation.

However, the step from revolutionary change to a theory of education is not immediate. It must first pass through the medium of philosophy, which formulates the problems created by each revolution, and then pedagogy proposes a solution for the problems which are found. The whole process is strictly "scientific," proceeding from experimental facts to their theoretical interpretation. "Philosophy of education," according to Dewey, "is not an external application of ready-made ideas to a system of practice.... It is only an explicit formulation of the problems . . . in respect to the difficulties of contemporary social life."

Put in the form of a schema, the following three sets of correlatives: revolution, philosophy, and pedagogy, as conceived by Dewey:

- i. Science Experimentalism Scientific Method
- ii. Industry Pragmatism
  - Industrial subjects
  - Learning by doing
  - Active school
- iii. Democracy Socialism
  - Socialization of school organization
  - Social formation is morality.

## **2. APPLICABILITY OF THE JOHN DEWEY'S EXPERIMENTALISM PHILOSOPHY TO KENYAN EDUCATION SYSTEM**

### **2.1. Application to Life Skills Education**

Experimentalism would most successfully be applied in sexuality lessons in the Kenyan education system where the foundations (reproductive anatomy, birth control methods, and STIs) have already been taught to primary and secondary school students via subjects such as Science, Christian Religious Studies and other religious subjects. The aim in this is for the students to apply these foundations to their own experience (so later in the curriculum or with late middle school/high school/college if in a school setting, but could also be used in workshops teaching adults), or where in lessons students utilize and share their own subsisted experience (Dewey *et al.*, 1988). Further to curriculum issues, a lesson on media literacy could have various notices placed around the classroom and ask students to stand next to the notice they like the most. Within the groups, students are to brainstorm things they like about the notice and then share with the rest of the class. Students then are to brainstorm things they do not like about the notices and again share with the rest of the class.

This pedagogical approach could also be adopted in classroom discussion on race, gender, violence, and various other subjects and could be tailored according to the goals and objectives of the specific lesson or educational level. Another example could be a lesson on birth control, providing students with various scenarios and them having to find the best birth control method for each. Though this method would rely on foundational knowledge on the different types of birth control methods, it would illustrate decision-making when it comes to choosing a birth control method, and would provide students with another context to understand the different methods of birth control, making it relevant to their experience.

### **2.2. Applicability in Early Childhood Education**

John Dewey was enough of a psychologist to know that the most formative years of a person's life are his childhood. In many of his writings, therefore, he was especially concerned with using experience as the medium of education for children, from kindergarten through grammar school.

Assuming that perception from within and not indoctrination from without is the secret of true education, nothing, in Dewey's theory, should be allowed to interfere with the childish instinct for learning by experience.

Children in their early years are neither moral nor immoral, but simply unmoral; their sense of right and wrong has not yet begun to develop. Therefore, they should be allowed as much freedom as possible; prohibitions and commands, the result of which either upon themselves or their companions they cannot understand are bound to be meaningless; their tendency is to make the child secretive and deceitful. The conclusion is that a child must not be authoritatively told beforehand what is good or evil but should discover these opposite realities for himself.

The knowledge base for instructors of early childhood education centers is typically deemed to be inextricably linked with the learning outcomes in terms of child development, pedagogy and assessment (Allen and Cowdery, 2014). This is because the knowledge base predominantly determines the instructor's expertise and appliance of appropriate instructional strategies in teaching the children for positive outcomes. Young children are regarded as 'natural scientists' curious, experimental, explorative, and persistent in their desire to understand the world they observe around them and thus the instructional strategies appropriate in teaching them are very different from those applicable in teaching other age groups. In the Kenyan context, instruction in the ECDE stage is purely lecture-based and little play. This is in contrast to Dewey's assertion that the learning strategies must be able to foster learning environments that encourage children's critical thinking, creativity, problem-solving, communication, collaboration, global awareness, and social responsibility. In such, instructional strategies in early

childhood education must feature Integrated Technology (IT), cooperative learning structures, differentiated instruction, play activities, goal setting, cross-curriculum teaching and finally assessment for learning.

To bring about educational improvement in the Kenyan ECDE centers, reform in instructional strategies and curriculum must be complemented with appropriate assessment reform. In Kenya, intelligence in the ECE arena is thought of in a narrow academic sense. It is assessed in the same way as other learning levels using standardized tests, mainly composed of multiple choices, right and wrong-answers. The holistic approach suggested by Dewey however is crucial in shifting the foci from an emphasis on academics, to a balance between academics and social/emotional and physical activities (Hyson *et al.*, 2009). Assessment of young children must be very different than that of older students. Assessing children's development in ECE centers needs to reflect this holistic philosophy so that attention is given to all domains of learning. Young children are learning how to communicate and are able to show what they have learned by doing, rather than by taking a pencil-and-paper test. This thus implies that assessment of young children needs to include developmentally appropriate and experimental activities. It should not include a multiple-choice test, or other formal assessments. It should include assessing the child in natural settings doing the day-to-day activities they normally do (Wortham and Hardin, 2015). The Dewey's assessment guidelines stated that "in early childhood programs, assessment should provide basis for: 1) planning instruction and communicating with parents; 2) identifying children with special needs; and 3) evaluating programs and demonstrating accountability". This multidimensional assessment approach means that evaluation of students will be based on a broader concept of intelligence, ability, and learning.

### 2.3. Applicability in Socialization and Democratization of Education in Kenya

According to Dewey, the fundamental concepts of instruction and education are summed up in the one word "socialization." The school and school organization, including curriculum, methods, discipline, and ideals, should be socialized because "the moral responsibility of the school and of those who conduct it is to society (Dewey, 1909)" So that "apart from participation in social life, the school has no moral end or aim (Dewey, 1937)" In religious terminology, "the moral trinity of the school [is] the demand for social intelligence, social power, and social interests (Dewey, 1900)."

However, it was not merely participation in social life in general which prompted Dewey to identify the aim of modern pedagogy with the good of society. It is social participation in a democratic society which demands a socialized form of education in modern times.

In the Kenyan context, correlative to the scientific and industrial revolutions in the fields of knowledge and economy, there has been a democratic revolution political structure of government. And the democratic revolution means nothing, in Dewey's hypothesis, if not the destruction of barriers between different strata of the population. And since education is a participation in social life, it must correspond to and promote the society in which it shares. "For education," also, therefore, "the distinction of classes must be definitely done away with. Such is the principle, the law, which dominates the whole social conception of education (Dewey, 1937)."

This Dewey philosophy can be seen in Kenya's commitment to achieve education for all as outlined in the Kenyan constitution. It entails reaching out to disadvantaged and vulnerable children and those in marginalized areas. They include orphans, school dropouts, and children with special needs, street children and refugees. This is done in order to improve the living conditions of the entire populace and remove the existing social classes.

An immediate corollary to this socialistic ideal is to give all the citizens of democracy equal and unlimited educational opportunities. For this reason, "the devotion of democracy to education is a familiar fact."The introduction of a system, which abolished fees, charged at public primary schools created learning opportunities for

many poor children. The curriculum has been reviewed to make it more manageable and less expensive to the families and the society as such. For the youth who cannot fit in the regular schools, the informal sector popularly known as *Jua Kali* Sector provides skills training for them. Finally, the government has to come with the policy framework to ensure that all children act of (2001) that provides education, as a right to all children regardless of their circumstances be it gender parity. Via these endeavors, the Kenyan education system has worked in line with the Dewey's philosophy.

But Dewey is not satisfied with "the superficial explanation that a government resting upon popular suffrage cannot be successful unless those who elect and who obey their governors are educated." The real reason why education in a democracy is of its very essence is that "a democratic society repudiates the principle of external authority [and] must find a substitute in voluntary disposition and interest; these can be created only by education."

#### **2.4. Criticism of Dewey's Pragmatic Approach**

Dewey has been referred to as a totalitarian socialist who envisioned total government control over all education through the agency of public schools. Dewey's book, *Democracy and Education*, was listed by *Human Events* magazine as fifth in a list of the ten most harmful books of the 19th and 20th centuries behind *The Communist Manifesto* by Karl Marx, *Mein Kampf* by Adolf Hitler, *Quotations from Chairman Mao* by Mao Zedong, and the *Kinsey Report* by Alfred Kinsey (Ryan, 1997).

Despite the adoption of Dewey's experimentalism approach, the current education system in Kenya has come under constant criticism from parents, teachers and politicians. The contention is basically that the current curriculum is a burden to the pupil and teachers in terms of scope, integration and articulation, flexibility and evaluation. Firstly, it engages the learner very much such that he/she does not have time for engagement in psychomotor development. Additionally, it requires a lot of books and physical facilities, which the teachers and even parents are not prepared for. These challenges reveal that the government of Kenya has to face substantial challenges in her endeavor to the streamline education system in accord with her status. These intricacies tend to imply that Dewey's approaches should be adopted progressively and not spontaneously as asserted by Dewey. The Ministry of Education on realizing this scenario has in the past one year been spearheading rapid changes in the education sector which will see a near total overhaul of the curriculum and possibly goals. The key question is: will the envisioned changes appreciate Dewey's philosophy of pragmatism?

### **3. CONCLUSION**

This paper has attempted to show how Dewey's ideas and teaching about education can be applied in the current education state in Kenya. The review has shown that most of his declarations have already been implemented in the Kenya educational sector. The study has also proposed areas that need to be fostered so as to achieve an integral education based on the Dewey's pragmatic approach which is able to respond to the present society. Dewey as a philosopher of education remains a landmark both in his ideas and teachings about education and philosophy in general.

#### **TIME LINE FOR DEWEY**

- 1859** Is born October 20 in Burlington, Vermont
- 1875** Enters the University of Vermont.
- 1879** Receives bachelor's degree.

- 1879-1881** Teaches high school at Oil city, Pennsylvania.
- 1882- 1881** Studies philosophy at Johns Hopkins University  
Enters graduate school
- 1884** Receives PhD. From John Hopkins
- 1884-1894** Teaches aught philosophy at the University of Michigan.
- 1886** Marries Alice Chipman.
- 1894** Is appointed chairman of the Department of Philosophy, Psychology and Pedagogy at The University of Chicago.  
Starts Lab School at University of Chicago
- 1895** Suffers loss of son Morris and later returns to Italy and adopts an orphan boy Sabino
- 1897** Publishes "My pedagogic creed".
- 1900** Publishes "The school and society.
- 1902** Publishes "The child and the curriculum.
- 1904** Is appointed professor of philosophy at Columbia University.  
Suffers the loss of son, Gordon.
- 1910** Publishes "How We Think"
- 1915** Establishes and is the first president of the American Association of University Professors
- 1916** Publishes Democracy and Education
- 1919-1928** Gives lectures in Japan, China, Turkey, Mexico and Russia
- 1920** Publishes Reconstruction of Philosophy.
- 1922** Publishes Human Nature and Conduct
- 1925** Publishes Experience and Nature
- 1927** Suffers loss of his wife, Alice
- 1930** Is named professor emeritus at Columbia University
- 1934** Publishes Art as Experience and Common faith
- 1937** Serves as chairman of the commission of inquiry into the charges made against Leon Trotsky (Mexico City)
- 1938** Publishes Experience and Education
- 1939** Publishes Freedom and Culture
- 1946** Marries Roberta Lowitz Grant. Adopts two children and publishes "Problems of men"
- 1949** Publishes with Arthur Bentley, "Knowing and the Known".
- 1952** Dies June 1 in New York City.

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