

ASPECTS OF JOHN DEWEY'S EDUCATIONAL PHILOSOPHY
IN THE PRIMARY CYCLE OF THE 8:4:4 SYSTEM OF
EDUCATION IN KENYA.

BY

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Lusweti.B.M.
*Aspect of John
Dewey's educational*



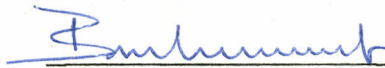
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DECLARATION

This project report is my original work and has not been presented for the award of a degree in any other university.

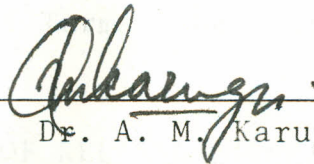


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This project report has been presented for examination with our approval as university supervisors.



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DEDICATION

This project report is humbly dedicated to my wife, Mary, and my children Joyce, Mike, Pamela, Connie, Irene, Caroline, Pauline, George and Geoffrey without whose love I would not have undertaken the M.Ed. course at my advanced age. The project is also devoted to my grandfather, the late Walela Kokeli.

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ABSTRACT

This study was conducted to investigate the question of whether there are aspects of John Dewey's educational philosophy in the primary cycle of the 8:4:4 System of Education in Kenya. The works of the famous American educator were scrupulously analysed to reveal the salient features of his philosophy. Similarly, the documents were scrutinized to determine the rationale, the objectives, the curriculum and the implementation procedures of the system.

To find out how the 8:4:4 system is functioning, data was obtained from a sample of eight primary schools in Lugari Division of Kakamega District. Two instruments were used to collect data, namely a questionnaire and an observation schedule. The exercise took five days during which the researcher administered questionnaires to 48 teachers in the eight schools. He also observed 40 lessons in progress. The observation schedule involved the use of a modified Mehan's (1979) observation techniques. The data so collected were analysed using statistical tables and frequency graphs. The results indicate that although a few of John Dewey's principal theses, viz: learning through co-operation rather than competition, learning through manipulation of resources

and the teacher acting as a guide rather than a leader, were envisaged by the architects of the 8:4:4 System of Education, in practice these ideals do not seem to operate. Even the practical activities advocated by John Dewey are poorly organized in schools as the schools lack pre-requisite facilities and resources.

These findings are discussed and recommendations are made for critical changes in the curriculum, with a view to changing the current policy so that instead of a vocationalised curriculum, basic literacy and numeracy skills can be emphasised in primary schools.

CHAPTER ONE

INTRODUCTION

1.1. Background to the Problem

Since the achievement of independence in 1963, Kenya has been preoccupied with the search for a relevant type of education for the nation. During this period the government has regularly reviewed the educational system so as to ensure that it serves the aspirations and needs of the country's people as well as cater for the wider interests of national development. At the time of independence, the main educational thrust was to develop an educational system that would serve the country's manpower needs. Thus in December 1963, the Minister for Education appointed an Education Commission under the Chairmanship of Prof. S.H. Ominde to survey the existing educational resources and to advise the government on the formulation and implementation of national policies for education.

The Kenya Education Commission (1964), popularly known as the Ominde Commission, released two reports, Part 1 (1964) and Part II (1965). The Commission was influenced by both the internal, political and economic pressures and the current international trends in education, and so it gave priority to secondary, technical, commercial

and higher education (Sifuna and Karugu, 1988:22). The Commission thus gave little emphasis to primary education. Other than the manpower needs, however, the Ominde Commission also considered matters related to the curriculum, racial and religious segregation in schools, the medium of instruction and the state of the teaching profession. Apart from endorsing the provision of free primary education as promised in the KANU Election Manifesto of 1963, the Commission recommended, inter alia, reacial integration and government control of education, the unification of the teaching service, the introduction of the English medium at all levels of the school system, and the restructuring of the curriculum to reflect the goals and aspirations of the independent state (Ominde Report, 1964).

Although the government policy remained geared towards manpower development, by 1966 it had become apparent that this objective was being achieved. The Africanisation of the civil service was almost completed, and opportunities for employment were beginning to diminish. Sifuna (1990:167) notes that by 1967 it had become difficult for secondary school education and university graduates of arts, humanities and social science, to find jobs. Government attempts to create job opportunities, such as the famous Tripartite Agreement of 1970, did not help much as unemployment among school-leavers rose to up to 20%.

The school-leaver unemployment problems led to the realisation that there was an urgent need to restructure the school curriculum to include technical and vocational subjects so that students would be enabled to acquire useful skills for self-employment and for salaried employment in various sectors of the economy. Thus the Kericho Conference of 1966 called for the introduction of technical and vocational subjects in the school curriculum. In response, the government and various organizations and development agencies began to establish schools and non-formal institutions with a strong vocational bias, such as the National Youth Service (NYS), and the village polytechnics (now known as youth polytechnics).

The 1970s saw a shift in Kenya's education development priorities. Prompted by the United Nations resolution on the strategies of the Second Development Decade, universal or basic education assumed major importance in Kenya's educational policy although the manpower needs continued to be catered for. The UNESCO report, Learning To Be, also influenced new developments in Kenya's education system (Sifuna, 1990:169). It was assumed that basic education would provide a functional literacy for those whom the formal system would not reach. This policy was also emphasized by the ILO report of 1972

During the 17 years of independence prior to 1981, the government had embarked on an ambitious programme to expand technical education at the secondary and tertiary levels. This programme was supported by the Swedish International Development Agency (SIDA), the International Development Agency (IDA) of the United Nations and the Canadian International Development Agency (CIDA) which gave financial assistance to projects involving workshops, equipment, support services, laboratories and dormitories in technical and industrial secondary schools (Sifuna, 1990:170). Through these programmes Nairobi and Mombasa Polytechnics were expanded and the Kenya Science Teachers College and the Kenya Technical Teachers College were established, in 1968 and 1977 respectively. There was also a massive expansion of Egerton College through American aid, and the Japanese government started the Jomo Kenyatta College of Agriculture and Technology to offer three-year diploma courses. This latter college became operational in 1981.

The expansion of technical education which was regarded as a sure way of alleviating the problems of unemployment by secondary school leavers was taken up by the public in the 1970s, and through harambee fund-raising campaigns all over the country, self-help institutes of technology were built. The first of these

institutes was Kiambu which became fully operational in 1975, but by 1984 there were 15 such colleges operating in 6 of the 8 provinces of Kenya. The basic aim of these institutes was to equip students with the skills required in the labour market, particularly in the area of science and technology (Kenya, Ministry of Education, 1987:50).

The search for a relevant and meaningful system of educational has also been expressed lucidly in government development plans. The African Socialism and its Application to Planning in Kenya and the Development Plan 1964-1970, the Development Plan 1973-1978, and the Development Plan 1979-1983, all stressed the fact that Kenya was committed to the provision of good quality education to all citizens. In particular, these documents pointed to the relationship between education and economic development. The assumption was that education would produce the requisite manpower so desperately needed by all sectors of the economy, and in turn this would accelerate economic development and hence the creation of employment opportunities.

Problems besetting educational development in Kenya are by no means confined to this country. Elsewhere in Africa, similar concerns were being expressed by educational planners in different countries.

In Tanzania, Nyerere (1967) argued that the main goal of education was to foster the social objectives of living together for the common good. In his view, the purpose of education was to prepare young people to play a dynamic and constructive part in the development of society in which all members shared fairly the fortunes or misfortunes of the group. In his book, Education for Self-Reliance, he contended that education must inculcate a sense of commitment to society by marrying educational principles to the practical matrices of life. He thus advocated the introduction of vocational and technical subjects in the school curriculum to make primary education terminal as well as discourage the fostering of the 'white-collar-job' syndrome among school leavers.

Following the Saunders Report of November 1967, the Zambian government formally decided to establish a technical education system aimed at providing comprehensive training programmes (Cameroon and Hurst, 1983:491). The system of apprenticeship based on sponsorship was discarded.

In Botswana, the main thrust has been in a great variety of such vocational courses, many on less orthodox lines, especially by means of the Brigade Movement initiated

in 1965 by Patrick Van Rensburge in an attempt, firstly, to introduce a more practical component into the curriculum and, secondly, to solve the primary school-leaver unemployment problem by combining productive work and the sale of its products with on-the-job training (Cameron and Hurst, 1983:26).

The school reform movement has been a world-wide phenomenon since World War II. In China, during the Cultural Revolution period (1966-1976) great attention was given to adapting the curriculum to local needs and involving the children in productive labour through the development of small school farms and participation in simple factory work, often done on school premises (Cowen and Mclean, 1984:112). In Latin America, Peru is one such country that undertook to reform her education system. The reformed curriculum comprises language, mathematics, social science, natural sciences, art, physical education, vocational education and religion in the primary cycle (Cowen and Mclean, 1984:770). In Europe, under the law of 11 July 1975 (the 'Haby reform'), France embarked on the principle that the education system should be planned as a continuous whole, the objectives of each stage being coordinated (Holmes, 1983:312). The curriculum of primary (Ecoles Elementaires) education includes French, mathematics, history, geography, moral education, observation projects, handwork, modelling,

music, physical education and sport.

Educational reforms have also been undertaken in Britain with emphasis being put on vocational and technical subjects. In England and Wales, many experiments in vocational preparation and changes in the structure of education have been introduced, culminating in major proposals by the Manpower Services Commission (formed after the Industrial Training Act of 1964) for a New Training Initiative (NTI). This has extended training opportunities to all young people for the first time, with special implications for curriculum design. Recent developments in vocational preparation and qualifications suggest the need for new modes of learning and trends which link school and college more closely with the world of work (Longden, 1987: 41).

The education reforms in Kenya that led to the introduction of the 8:4:4 system of education in 1984 must therefore be seen in the context of these world-wide reforms. The general trend in all the reforms is the tendency to make the curriculum more comprehensive than had hitherto been, and to introduce some vocational and technical subjects in the primary cycle of education.

In 1981 the Presidential Working Party on the Second University in Kenya, whose terms of reference were to examine the possibility of establishing a Second University, addressed itself to the need to restructure the whole education system in the country. The Party accepted the proposals of the Gachathi Report of 1976 regarding the introduction of a system of basic education that would take longer than seven years. It recommended that the primary school segment be extended to last 8 years, and that the primary curriculum be restructured to offer numeracy and literacy skills in the first six years, and a basic education with practical orientation in the last two years (Kenya, 1981).

In launching the 8:4:4 system of education the Ministry of Education outlined the rationale as follows: that, firstly, the new system aimed at responding to the challenge of national development and participation of youth in development; secondly, that there was a need to provide a practical oriented curriculum that would offer a wide range of employment opportunities; thirdly, that the new system of education would ensure equal opportunities for all students regardless of their place of origin, creed or race by providing equitable distribution of educational resources; and, finally, that, with its emphasis on technical and vocational education, the

8:4:4 system would ensure that the students graduating at every level have some scientific and practical knowledge that could be utilised for self-employment, salaried employment or further training.

The primary school curriculum of the 8:4:4 system was made much broader with a view to; firstly, improving its quality, content and relevance to cater for the majority of the children for whom primary education is terminal; secondly, making the eight-year primary education available to all primary school age children; and, thirdly, diversifying primary education in order to enhance competence in a variety of development tasks. Thus the curriculum included general subjects like English, Kiswahili, mathematics, science, music, history, civics, geography and religious education, and vocational subjects among which are arts, crafts, agriculture and home science.

In all appearances, the principal aims of the 8:4:4 system of education are similar to those advocated by John Dewey, the great American philosopher and educator, who advocated for a philosophy of an education system in which the curriculum was made more relevant and meaningful by being not only child-centred but also embracing vocational subjects. His educational philosophy is expressed in his monumental work, The School and

Society (1900), The Child and The Curriculum (1902), How We Think (1909), Democracy and Education (1916), Education and Experience (1938), and Freedom and Culture (1940). The main theses of Dewey's educational philosophy have been summarised by George Kneller (1964) as follows:

- (i) Education should be life itself, not a preparation for living.
- (ii) Learning should be directly related to the interests of the child.
- (iii) Learning through problem solving should take precedence over the inculcating of subject matter.
- (iv) The teacher's role in the classroom is not to direct but to advise.
- (v) The school should encourage cooperation rather than competition, hence rigid examinations should be discouraged.
- (vi) Only democracy permits and encourages the free interplay of ideas and personalities that is a necessary condition for true growth.

Although these ideas are based on American conditions some of them are closely related to the main principles of the 8:4:4 system of education in Kenya.

1.2. Statement of the Problem

The educational philosophy of John Dewey posits a fascinating view of how education should operate in society. He emphasised, inter alia, the importance of society for the individual and the need to learn through communication with other people. It concerned him that schools often failed to provide children with knowledge of essential skills which formerly they would have learned in their home surroundings, the skills of producing food, clothing, and warmth. Hence his Laboratory School in Chicago in the last decade of the 19th century gave children the chance to acquire these skills; and indeed, since Dewey also held the view that most human beings are 'hand-minded' i.e. interested in learning through practical activities rather than through words or books, his ideas appeared very promising.

Similarly, the rationale for the introduction of the 8:4:4 system of education in Kenya was that the new system would be more relevant and amenable to the needs of the nation. It is the primary objective of this study, therefore, to find out the relationship between John Dewey's ideas and those of the 8:4:4 system, and to make explicit the general

points out, the school is an artificial learning situation beset with restrictions and prohibitions different from those encountered in life as a whole. This study may as well reveal more of these untested theories in the 8:4:4 system of education.

John Dewey (1938) advocated the use of a variety of resources in the classroom to facilitate learning. In his view, the search for abstract knowledge must be translated into an active educational experience. This experience involves the provision of resources in the classroom for the learners to experiment with. Dewey maintained that learning through problem solving was superior to the mere inculcating of subject matter. In his own words, problem solving must be seen not as the search for merely functional knowledge, but as a perpetual grappling with subject matter (Kneller, 1964:50). This study will reveal the instructional situation in the 8:4:4 classroom. In short, already serious doubts have been cast on the effectiveness of the programme, especially with regard to the adequacy of instructional resources. The study will therefore ascertain or disprove these doubts.

1.4. Objectives of the Study

Basically the aim of the study is to trace aspects of the educational philosophy of John Dewey in the primary cycle

of the 8:4:4 system of education in Kenya. More specifically, the study has the following objectives:

- (i) To identify the salient features of John Dewey's educational philosophy if there are any in the 8:4:4 system of education.
- (ii) To determine the divergent points between John Dewey's ideas and those of the 8:4:4 system of education.
- (iii) To find out which aspects of John Dewey's educational philosophy as reflected in the 8:4:4 system of education are operating today in Kenya.

1.5. The Basic Assumptions of the Study

The researcher's main assumptions are that:

- (i) aspects of John Dewey's educational philosophy can be traced in the 8:4:4 system of education, and
- (ii) John Dewey's educational ideas are relevant to the Kenyan society today.

1.6. Scope and Limitations

This study was based on two sources:

- (i) Books and documents on John Dewey and on the 8:4:4 system of education.

- (ii) A random sample of primary schools from Lugari Division of Kakamega District to identify aspects of John Dewey's philosophy of education in schools.

A study of this kind requires time and money so that a reasonable sample chosen from a large area of the country can be used. Such a sample would be ideal for enhancing the validity and reliability of the information gathered. However, the three months during which the data was collected, analysed and compiled into a project report were far from being enough. This therefore limited our sample to about 8 schools and 48 classrooms within one administrative division.

1.7. Definition of Terms used in this Study

The following terms are used from time to time in this study. In any case, each word is used in the sense held by John Dewey, except the term 8:4:4 system of education. Where the word is used with a different meaning other than that given here, a new definition is promptly given.

1.70. Education: is the process by which an individual gains knowledge or insight or develops attitudes or skills. Formal education is acquired through organized study or

instruction, as in a school or college. Informal education arises from day-to-day experiences or through relatively unplanned or undirected contacts with communications media, such as books, periodicals, motion pictures, radio, or televisions. The function of education is both social and individual. Its social function is to help each individual become a more effective member of society by passing along to him the collective experience of the past and present. Its individual function is to enable him to lead a more satisfying and productive life by preparing him to handle new experiences successfully.

1.71. Educational Philosophy: a field of study concerned with thinking about education. There are two related activities (a) ascertaining the meaning of a proposition or concept, and (b) considering the nature of the evidence which is offered in support of a particular proposition. Briefly stated, the educational philosopher asks 'What do you mean?' and 'How do you know?'

1.72. 8:4:4: System of Education: an educational system launched in Kenya following the recommendation of Mackay Report of 1981. The system has eight years of primary, four of secondary and four of minimum university education. The major goal of the new system was to make education meaningful and relevant to the needs of the nation.

1.73. Experience: is used in an active sense to mean 'trying' and in a passive sense to mean 'understanding'. In learning, experience means being in contact with methods, materials, and people involved.

1.74. Experimental Method: is a learning device in which knowledge activity is created to produce physical changes in things to confirm the conception entertained. The assumption is that knowledge can only be gained through manipulation of the real world. Experimental method thus shows that all ideas, conceptions, theories, however extensive and self consistent, and aesthetically attractive they may be, are to be entertained provisionally until they have been tested by acting upon them.

1.75. Growth: the dominant characteristic or vocation of all human beings at all times. It means living and gaining both physically and intellectually as well as morally. Since growth is the characteristic of life, education is all one with growing. The criterion or the value of school education is the extent to which it creates a desire for continued growth and supplies means for making the desire effective.

1.76. Instrumentalism: a brand of John Dewey's philosophy of pragmatism which takes a more concrete and definite character in the form of the thesis that the materials of belief, the concepts in which beliefs are formulated, are human constructions and not imposed on men by the nature of things. Instrumental values are those we attach to experiences that serve as means of some desired end other than themselves.

1.77. Pragmatism: the philosophical belief that an idea is true only if it has satisfactory consequences when objectively and if possible scientifically tested. It was initiated by Charles Saunders Pierce (1839-1914) and popularised by William James (1842-1910) in a book of the same title, Pragmatism, published posthumously in 1922. For the typical pragmatist, the truth of an idea depends on the consequences that are observed objectively when the idea is put into operation.

1.78. Progressivism: a branch of the pragmatist philosophy which holds the view that education is reconstruction that adds fullness and distinctiveness of meaning to natural phenomena. The progressivists, among whom was John Dewey, believe that education is that reconstruction or reorganization of experience which adds to the meaning of experience, and which increases the ability to direct the course of subsequent experience.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter we make a survey of the literature related to this study. Generally this literature falls into two broad categories: those books and articles concerning the educational philosophy of John Dewey on the one hand, and the documents, books and articles on the 8:4:4 system of education on the other. This chapter will be divided into three main parts. The first part will address itself to the literature on John Dewey's educational philosophy, the second part will deal with the literature on the 8:4:4 system of education; and, the third part will summarise what emerges from the literature review.

2.1. Literature on John Dewey's Educational Philosophy

Literature on John Dewey's educational philosophy falls into three categories, viz:

- (i) John Dewey's books,
- (ii) Books by John Dewey's protagonists, and
- (iii) Books and articles by John Dewey's critics.

Let us briefly look at each of these categories, the ideas expressed in them and issues raised.

2.10. The Literature by John Dewey

John Dewey was undoubtedly among the leading and most prolific writers of his time. His books on education include My Pedagogic Creed (1897), The School and Society (1899), The Child and the Curriculum (1902), Moral Principles in Education (1909), How We Think (1910) Interest and Effort in Education (1913), Democracy and Education (1916), Human Nature and Conduct (1922), Experience and Education (1938) and Knowing and the Known (1949).

My Pedagogic Creed carries the earliest statement of John Dewey's philosophical position in education, and The School and Society and The Child and the Curriculum were lectures which he delivered to raise money for the Laboratory School in Chicago. Although these books were brief, they were clear and direct statements of the basic elements of Dewey's educational philosophy and his psychology of learning. The latter two works especially stressed the functional relationship between classroom learning activities and real life experiences and analyzed the social and psychological nature of the learning process.

The most important works of John Dewey, however, are the monumental Democracy and Education and Experience and

Education. In the former, his educational philosophy is given shape. The book is an inquiry into the nature of the democratic society and a discussion of the kind of public education suited to such a society. The first six chapters are devoted to the nature of education in general, followed by a statement of the democratic concept in education and an extended development of consonant objectives and procedures. The two final chapters present a critical examination of what the author regards as outmoded theories of knowledge and of right and wrong, theories which linger on as harmful anachronisms in societies presumed to be democratic. From the outset, the importance to democracy and to education of the scientific method, the evolutionary hypothesis, and the industrial revolution, is assumed.

As the work of one of America's foremost philosophers, particularly in the educational field, Democracy and Education reflects John Dewey's well-known liberalism and his pragmatic approach to educational issues. The argument is systematically conducted, each chapter being furnished with a descriptive title and final summary, and the language is not unduly technical. The title is but one of a number from the same pen which have strongly influenced educational theory and practice not only in America but the world all over for a period

of nearly 80 years.

In his educational philosophy, Dewey had a characteristic fondness for dualisms and their unity as the titles of his books indicate: The Child and the Curriculum, The School and the Society, Interest and Effort in Education, Experience and Education, Knowing and the Known, and Human Nature and Conduct. In all these books, Dewey's basic concern is with the unity of two phenomena. This quest for unity led him to write Experience and Education with some bitterness against the excesses of some of his followers.

In Experience and Education, Dewey clearly restated his basic philosophy of education and recognised and rebuked the many excesses he thought the progressive education movement in America had committed. He chastised the progressives for casting traditional educational practices and content without offering something positive and worthwhile to take their place. He offered a reformulation of his views on the ultimate connection between learning and experience and challenged those who would call themselves progressives to work toward the realisation of the educational programme he had carefully outlined before.

Dewey, as a pragmatist, was also interested in what he called 'the other side of an educative experience' which is the 'added power of direction or control'. He contrasted this with aimless activity, on the one hand, and he singled out acting under external direction as a classic example of this, and routine activity on the other hand, which only increases skill in doing a particular thing. Thus in Experience and Education he reiterated the use of activity method in education.

In Chapter 5 of Experience and Education he does extol the virtue of 'freedom' understood as self-control whilst pointing out that too much freedom understood negatively as the absence of social constraints may be destructive of shared cooperative activities. Regarding the role of the teacher, he was at pains to point out that he was not suggesting a passive or spectatorial role for the teacher when he suggested that the teacher should take on the role of a guide. Indeed, he argued that 'basing education upon personal experience may mean more multiplied and more intimate contacts between the mature and the immature than ever existed in the traditional school, and consequently more than less guidance by others, (Dewey, 1916:21)'. So 'guidance' by the teacher was substituted for the 'external direction' of traditional methods, and because interests arose from the child,

deriving from his 'impulses' of investigation and experimentation, constructiveness, expressiveness, and the social impulse, the approach could claim to be child-centred.

In The Child and the Curriculum, Dewey stressed, first of all, the importance of practical activities such as sewing, cooking, weaving, carpentry and metalwork. These conformed to the sociological principle because they were basic to life, being concerned with food, clothing, etc., and thus part of the cultural heritage. They also conformed to the psychological principle because children were interested in them and they embodied motor activities which Dewey considered to be closely connected with mental development as a whole.

John Dewey too included traditional subjects in the curriculum with the proviso that they should be related to his concept of man as a problem-solving animal concerned with control over his environment - but as a way of gaining in power to perceive the spatial, the natural connections of an ordinary act. History was accepted, too, as a way of recognizing human connections or ordinary acts. Science was, of course, included to be taught as the agency of progress in action. Finally, the curriculum was to include communication skills such as

reading, writing, mathematics, and foreign languages.

In The School and Society John Dewey attempted to resolve the dualism between the school and the society. On the relationship of the school to the home and surrounding community, Dewey was greatly impressed by the informal type of learning that went on in the home and in small rural communities that were passing. He paid glowing tribute to the natural way of learning in which there was no separation between learning and life. His plea was that there should be an indissoluble link between learning in school and at home. He insisted that the school itself should be a real community, exhibiting numerous shared interests and open communication; that the school should be a miniature democracy. Regarding the introduction of vocational subjects into schools, he argued that if more practical activities were introduced into schools, education should be through occupation and not for occupation (the researcher's emphasis).

In conclusion, it can be pointed out that Dewey's revolt against the formalism and irrelevance of much that went on in schools is still pertinent, so is his plea for 'shared experiences' and development of practical intelligence.

2.11. The Literature of John Dewey's Protagonists

Daniel Sifuna (1986) ranks high among the protagonists of John Dewey's educational philosophy. In his History of Primary Education he contends that Dewey's contribution to modern education cannot be shaken. On American education, Sifuna argues, Dewey's impact has been immense - 'he more than any other writer has been responsible for educational changes in modern America (p. 142)'. In Sifuna's view, Dewey's educational philosophy has guided practice away from formality and authoritative instruction towards more humane conception of learning as centred in the child and proceeding from experience. Sifuna points out further that Dewey's influences have become international.

Jonas F. Soltis (1971) regards John Dewey as the father of the progressive movement in education. He asserts that throughout the United States and the world at large, the name of John Dewey has become synonymous with the progressive education movement. Dewey has been generally recognized as the most renowned and influential American philosopher of education. Margaret Sutherland (1988) takes up this view and singles out John Dewey's striking contributions in the area of education and society. She cites Dewey's contention that traditional schools failed to provide children with knowledge of some essential

skills which formerly they would have learned in their home surroundings, the skills of producing food, clothing and warmth. Her view is that Dewey's Laboratory School in Chicago in the last decade of the nineteenth century gave children the chance to acquire these skills. She is full of praise for Dewey's thesis that most human beings are 'hand-minded', interested in learning through practical activities rather than through words or books.

Recalling all the five recent philosophic movements together, Theodore Brameld (1971) makes the principal conclusion that progressivism, with minor exceptions, has largely circumvented these movements such as Neo-Marxism, Neo-Freudianism, Zen Buddhism, Existentialism and Philosophic Analysis because these are considered ostensibly irrelevant. The consequence is that we can scarcely afford to be astonished if the direct impact of progressivism upon education has comparably diminished. One crucial problem that remains then is whether, strengthened by critiques and amendments from contemporary philosophic developments, progressivism may now begin to evolve toward newly potent and relevant levels of theory and practice not only in America but in world culture.

On the question of the curriculum John Brubacher (1962) is full of praise for John Dewey's progressivist theory. In his view, the pragmatist knowledge is something which

is wrought out in action. Before it is used, it is merely information. Information becomes knowledge when it is judged to be relevant to the solution of a particular problem, and that judgement is tested in the crucible of experience. It is for reasons such as these that the progressive educator tends to distinguish between the curriculum drawn up in advance and the curriculum which the child actually learns in action. For him, knowledge does not antedate learning but is forged as the pupil and teacher adapt means to ends as their project develops.

Bowen and Hobson (1974) view Dewey's experimental approach as essential to constructive solutions and that Dewey was responsible for initiating it into educational thought. They argue that true laboratory science often has to reconstruct hypotheses many times, before final solutions come, and this is equally true of human life in general.

2.12. The Literature of John Dewey's Critics

Critics of John Dewey's educational philosophy are as many as his protagonists, but their attacks are a lot more ferocious. George Kneller (1964) writes of the much criticized 'child activity movement' and laments that self-activity may well lead to individual improvement but if the child is to be permitted freedom for self-activity, this may as well lead to anarchy and

chaos; and he finds it difficult to see how the school could be a replica of life, even if it tried, since the school is an artificial learning situation, beset with restrictions and prohibitions different from those encountered in life as a whole.

The British Philosopher, R.S. Peters (1977), contends that John Dewey's ideal of the technological man is too limited and culture-bound; that it ignores whole dimensions of the human condition - especially the predicaments of man, his irrationality, and his emotional sensitivities and susceptibilities. Peters argues that the cult of co-operative action is a welcome antidote to the lonely quest for salvation or for private profit, but human beings inhabit a personal as well as a public world, and so they are circumscribed by a Nature that has to be accepted as well as transformed, that should be an object of enjoyment, of wonder and of awe as well as material to be mastered for human purposes. Therefore a balance has to be struck between personal preoccupations and public policies, between servile humility and masterful pride. Peters maintains that these dualisms were not resolved by John Dewey.

Robert Rusk (1965) contends that John Dewey's - and indeed the pragmatists' - exaltation of practice over theory, of experimental inquiry over speculation, of

action over contemplation, is historically untenable. In Rusk's view, ideas are more powerful and lasting than actions, the influence of which is limited to a particular time and place. This is so because ideas have the capacity of perpetual self-reproduction which Plato's Symposium declared was the characteristic of immortality. Rusk feels Dewey's view that practice inspires theory, that educational practices and direct experience in the field originate and determine educational ends and theories is contradicted by the history of education. Rusk further argues that almost all the great educators have been philosophers, and have not been renowned for their skill in practical teaching - in fact, some of them take an impish delight in confessing their failure as practitioners.

Rusk concludes by asserting that John Dewey has suffered the customary fate of daring innovators to become the idol of later theorists who mistake rashness for daring, embrace change for its own sake, and regress from innovation into bizarreness and absurdity. His solid influence has been felt in the establishment of education as a university study, in the acceptance of the need for schools to respond to social change, in a continuing faith in the power of rational inquiry, in emphasis on the child's contribution to his own growth. In short,

Rusk argues, Dewey's philosophy does not immediately appeal in an age in which events often appear to be directed by ponderous forces far beyond human control.

Dearden (1968) advises that the only way to confirm or refute some of the ideas advocated by John Dewey is to test them using his proposed criteria, and only if they stand up to such testing may we have any justified confidence in them. Nakosteen (1965), however, argues that it is in the continuity of experience reconstructing, remodelling, and reconstituting itself for itself that the meaning of education lies, and so Dewey's ideas are, in Nakosteen's view, too idealistic.

2.2. Literature on the 8:4:4 System of Education

Literature on the 8:4:4 system of education divides itself into three categories, i.e. primary documents - the Mackay Report and the 8:4:4 System of Education booklet; articles and papers from the protagonists of the 8:4:4 system; and articles and papers from critics of the system. We shall first look at the primary documents, and then briefly analyse the views of the protagonists and, finally, those of the critics.

2.21. The Mackay Report and 8:4:4 System of Education

The 8:4:4 System of Education in Kenya was launched following the recommendation of the report of the Presidential Working Party on the Second University in Kenya. The Party, whose terms of reference were to examine the feasibility of setting up a second university, saw it fit to assume for itself the responsibility of revisiting the whole education system in the country and recommending sweeping changes. In a report entitled Second University in Kenya: Report of the Working Party - now commonly known as the Mackay Report after the party's chairman, Dr. Mackay - the Party recommended changes in the area of structure which would have 8 years of primary, 4 years of secondary and 4 years minimum university education, and in the area of curriculum content with greater orientation towards technical and vocational education and the movement away from education being examination-centred. These recommendations had earlier been made by the National Committee on Educational Objectives and Policies, the rationale being that the primary school-leaver should acquire some basic education in addition to numeracy and literacy skills.

Although the benefits of these recommendations cannot be doubted, two issues remain tantalizing with regard to the Mackay Report: One, and probably the more important

of the two, concerns the terms of reference. Why did the Working Party disregard its terms of reference and assume the responsibility of recommending changes in the system of education as a whole? Two, why did the Kenya Government accept this recommendation which was outside the Working Party's terms of reference? The answer to these questions lies in the fact that educational reforms in the country were long overdue, and so the government found this recommendation quite welcome. It was also hoped that changes at the university level also necessitated changes at the lower levels of education.

In 1984 the Ministry of Education, Science and Technology issued a document entitled 8:4:4 System of Education.

Today this booklet remains the main official policy document concerning the 8:4:4 System of Education. The booklet has six chapters; the first chapter outlines the rationale for the new system of education; the second chapter describes the curriculum; the third chapter deals with the nature and role of examinations and assessment; the fourth chapter concentrates on the area of technical and vocational training; chapter five concerns aspects of the implementation of the new system; and the sixth chapter gives the calendar and projected schedule of implementation.

Following the calendar set in the 8:4:4 System of Education, the new system was to be launched in January 1985 and

would be completed by 1990 when the first graduates of the secondary cycle of the system would be admitted to university. A seven-point rationale justifies the introduction of the new system and points out the shortcomings of the old system. The document points out further that the main aim in changing Kenya's system to 8:4:4 is to improve the quality of education at all levels. The primary cycle of the new system has eleven objectives, a large number of which are child - or society - centred.

Outlining the primary education curriculum, the 8:4:4 System of Education booklet reiterates that the ~~basic objective of the curriculum is to provide the learners with adequate intellectual and practical skills useful for living in both urban and rural areas.~~ The curriculum design is based on the following three principles: firstly, improving its quality, content and relevance to cater for the majority of the children for whom primary education is terminal; secondly, making the eight-year primary education available to all primary school age children; and, thirdly, diversifying primary education in order to enhance competence in a variety of development tasks. The document gives subjects in the primary curriculum as follows:

Table 2.1: Subjects in the Primary Curriculum

English	Geography
Kiswahili	History and Civics
Mathematics	Religious Education
Science (including Agriculture)	Physical Education
Music	

Since 1984 when the document was released, a few changes and readjustments have been made in the curriculum as follows: Business Education has been introduced to be learned in classes 6, 7, and 8, and Geography has been combined with History and Civics to become GHC (a combined course).

Regarding examinations and assessment in the primary school cycle, the 8:4:4 System of Education document says the terminal examination would be the Kenya Certificate of Primary Education (K.C.P.E.), but continuous assessment would be gradually introduced and eventually become part of the examination and assessment system. K.C.P.E. will consist of six papers (This has since been increased to seven by the introduction of Business Education). The subject results would be indicated by letter grades from A to E, A being the highest and E being the lowest on a 12-point scale that runs as follows:

Table 2.2: K.C.P.E. Grading System

A	B+	C+	D+	
Very good	B Good	C Average	D Poor	E- Very poor
A-	B-	C-	D-	

Besides the final K.C.P.E. examination that pupils would sit at the end of Standard Eight, the 8:4:4: System of Education would have built into it a plan for continuous assessment of each child's progress right through his/her school career in every subject and every learning activity which could be assessed. With this plan teachers and heads of schools would be required to provide reliable reports on each pupil's overall progress from one term to another.

On the question of programme implementation, the 8:4:4 system document envisaged that with the introduction of eight classes in 1985 an additional number of 11,500 teachers would be required. Also required would be the administrative and curriculum support personnel, and so the government had embarked on the establishment of educational zones to be manned by Assistant Education Officers and Assistant Primary School Inspectors. These officers would help in the implementation and administration of the programmes. With regard to

physical facilities in the primary schools, the government estimated that 13,370 classroom units would be required, and in addition, every school would require a workshop and a home science room for more effective teaching of practical subjects. The responsibility for the construction of these buildings was placed in the hands of local communities who would handle the construction programmes through harambee efforts. At the Ministry headquarters, a nucleus 8:4:4 Bureau was formed to coordinate the implementation efforts.

2.22. Literature by the Promoters of the 8:4:4 System of Education

Protagonists of the 8:4:4 System of Education, at least from the evidence available, have been mainly government officials and leaders of quasi-governmental organizations and KANU officers. But so far there has been no single study published with the sole purpose of appraising the system. Most of the literature on the system can be categorized as conference and seminar papers as well as articles and letters in the mass media.

The Kenya Times (15 February 1987) reported the Minister of Education Mr. Peter Oloo Aringo as saying that the curriculum diversification as given in the 8:4:4 system calls for the introduction of practical and vocational

subjects to make primary (as well as secondary) segment terminal. In his argument for the system, the Minister is quoted to have argued that those pupils who failed to find a place for further schooling, as was often the case, would be equipped with knowledge, skills and attitudes for vocational training or direct involvement in the world of work. Similar sentiments were echoed by a Daily Nation reporter in the issue of 22nd July 1987 who said 'the aims of the 8:4:4 System of Education include improving the quality of education at all levels, democratising the system, and vocationalising the curriculum to bring in work orientation'.

The idea of work orientation is reiterated in a paper presented to the Tenth Conference of Commonwealth Education Ministers which was held in Nairobi from 20th to 24th July 1987. In the paper, the Minister argued that the target group for vocational and technical education was the 65% of primary school leavers who could not get places in secondary schools after sitting the K.C.P.E. examination. The Minister had this to say:

With the new approach of 8:4:4 system, the target group for vocational education is the entire student population at primary ... level, especially the 65% who cannot secure places in

secondary schools after completing Standard Eight. The courses are basically compulsory to all students. The programme is open to boys and girls.

The Minister, however, admitted that there were constraints with regard to the development of schools-based vocational education. He cited among other things lack of qualified teachers, client interests, equipment and consumable teaching materials for the practical training aspects, as well as problems related to the maintenance of equipment and the great expense involved. He nevertheless said a number of these problems had been overcome in Kenya. Karani (1988) argued that vocational curriculum at the primary school level is crucial in preparing the youth for self employment especially for the low achievers who do not proceed to high school. She was, however, sceptical about the viability of the programme considering the broad coverage, the limited eight years duration, the tender age of the majority of these youths and related constraints which make it difficult to produce school leavers who possess the maturity, skills, understanding, attitudes, knowledge and information needed for successful entry into self-employment.

Owigar (1988) wrote that the new 8:4:4 system had allowed

curriculum diversification at both primary and secondary levels; and, in his view, the inclusion of vocational curriculum in the school system would help pupils who do not find places in the next ladder of the system to choose direct lines of involvement in the world of work. The view was supported by the speech of the Minister for Technical Training and Applied Technology Professor S.K. Ongeru when opening the National Seminar on Transitional Education in Kenya. In his speech, Professor Ongeru had this to say:

The 8:4:4 system of education has a strong technical education component which is geared towards vocationalisation and preparation of youths to readily acquire skills tailored towards the support of the growth and expansion of our economy.

2.23. The Views of the Critics

The 8:4:4 system was launched without much debate as initial reactions to the change were obliterated by a Presidential decree banning the debate. Sifuna (1990:186) points out that the most critical constraint to the introduction of the new system is the enormous cost involved. In his view, the construction of workshops and extra classrooms which have been left in the hands of parents and school communities is a heavy burden, and this would engender

disparities in the provision of educational facilities among different regions.

Other problems with the 8:4:4 system which Sifuna cites concern the assumption that pre-vocational skills taught at primary level would improve the employability of school-leavers. He argues that if the experience in technical secondary schools in the country is anything to go by, the investment in vocational curriculum may as well turn out to be unproductive since the teaching of these skills does not improve the employability of the school leavers. Further still, Sifuna cautions that the amount of time spent on practical subjects, coupled with the crowding of the curriculum at the primary level, is likely to impair the quality of education at this level. Equally important is the fact that the new programme is likely to have an adverse effect on the attainment of universal free primary education since most of the country's resources will be channelled towards the building and equipping of workshops and classrooms.

Sifuna contends that the 8:4:4 system would have worked if only certain conditions had been observed. In the first place, the country should have attained free and universal primary education before embarking on the vocationalisation of the curriculum. Secondly, the new

curriculum should have been gradually introduced in phases as recommended by the Gachathi Report of 1976. Thirdly, the government needed to have directed its efforts at restructuring the present economy which is largely oriented towards capital-intensive as opposed to labour-intensive modes of production. He argues that as a result of the state of the economy, it would not be possible for graduates with vocational skills to find employment or to be self-employed in urban or rural areas.

In a paper he presented at the National Seminar on Transitional Education in Nairobi, Sifuna (1988) argued that in order to prepare young people for life it does not suffice to let them work in a carpenter's shop or let them harvest corn. He said it was also necessary to familiarise the learners with the grammar of their language, the science and others, with a view to making them understand the elements of these fields in a systematic way. He emphasised that schools should be geared towards cultivating positive attitudes towards work-oriented curricula but not to provide vocational training, for this is sufficiently carried out in the existing vocational training institutions.

Mauri Yambo (1988) argues that one finds little in the 8:4:4 system to suggest that self-employment will take

centre stage. His contention is that if what is happening with graduates of the youth polytechnics and harambee institutes of technology is anything to go by, it all boils down to the question of demand relative to supply, and to the social and economic handicaps with which school leavers must contend. This argument is further advanced by Thomas Nzioki Kibua (1984) who says that the recommendations for the curriculum to emphasise science subjects and the syllabus to provide more functional skills to assist the majority of school leavers obtain self-employment in the economy seem to be very promising; but it is difficult to assess their impact in terms of unemployment reduction because insurmountable bottlenecks appear to crop up during their implementation.

There has also been a spate of criticisms against the 8:4:4 system in Kenya's mass media. The Daily Nation (18th November, 1987) quoted Professor J.S. Maranga as telling a national seminar on education that the curriculum has too many subjects to be covered within the limited school time, and this forced pupils to spend their weekends and holidays in schools when they are supposed to relax. Similarly, a reporter of the same paper (11th June, 1988) quoted a participant in a National Seminar on Transitional Education as arguing that there was a great danger that the 8:4:4 Education of System

might water down the course content particularly at primary school level, and students who do not get an opportunity to further their education may slip back into illiteracy.

2.3. Issues raised in the Review of Literature

The issues raised by the various authors and educationists encompass a whole range of principles from curriculum design to pedagogic procedures. With regard to John Dewey's educational philosophy six major philosophical principles have been identified and discussed.

The first of Dewey's philosophical principle is that education should be life itself, not a preparation for living. Most educationists agree that education should be related to life, but their views are at variance as to whether education, surely, should not also prepare its recipients for some future life. The argument here is that if children are merely allowed to enjoy life in school without being given an inkling of what the future holds for them, then that kind of education is not fully pertinent to the needs of society.

With regard to the Dewey hypothesis that learning should be directly related to the interests of the child, again

there is some agreement among educationists that to some extent this ought to be the case especially in a democratic society like that of America. However, child-centred learning is seen to have some constraints in that the learners need some guidance, and, in any case, the interests of children in a classroom may be many and varied. It would indeed be difficult to find aggregate interests in a given classroom.

The third principle of John Dewey's educational philosophy is that problem solving should take precedence over the inculcating of subject matter. As a method, this is quite promising especially in science-oriented subjects; but many scholars have expressed doubts as to the viability of this method in subjects like music, art, language and literature where learning is largely based on the principle of 'art for its own sake'. Surely problem-solving method is only one of the many learning methods that can be found in an instructional design, but it is not the only method.

On John Dewey's argument that the teacher's role in the classroom is not to direct but to advise, there is some agreement among scholars, but only to some extent. In a democratic classroom the teacher should indeed serve as a guide. However, the teacher should also act as a

leader in the search of knowledge so that he or she can help the learners to acquire knowledge.

The fifth principle of John Dewey's educational philosophy is that the school should encourage cooperation rather than competition, and hence rigid examinations should be discouraged. Most educationists find this principle rather idealistic and divorced from the reality of the educational process. The core of contention is that examination is also a fair means of selection, and probably the only means available in most educational systems; so it is one thing to talk against it and yet another thing altogether to do away with it.

Finally on the question of democracy in the classroom, it is agreed that some form of democracy is indeed necessary. This can operate in such variables as pupils' elected government, participation in the learning process, and the like. But when it comes to the real choice of what to learn, it would be topsy-turvy to allow each child to choose his or her own curriculum.

The general argument of most scholars, therefore, is that good as John Dewey's principles may sound to be, they are too idealistic to be realistic, and it is difficult to have them practised in schools.

Literature on the 8:4:4 system of education also shows that scholars do agree on certain principles, namely, that there is need for a relevant system of education in Kenya which will meet the demands of rapidly changing circumstances, that the aims and the curriculum of the education system should reflect the needs of the learners, and that there should be equality in the distribution of educational opportunities. It is further agreed that education should offer some skills which will be useful for the majority of school leavers who have no chance to continue with education.

However, there is a host of disagreements on certain curriculum issues that casts doubts on the viability of the whole programme. In the first place, the cost involved is enormous and this may hamper the country's declared intention to achieve universal primary education. Secondly, the curriculum is too crowded and so many subjects are required to be learned. Even the Kamunge Report (1988) was compelled to react to this overcrowding and recommended that students be given an option to drop some subjects both in the primary and secondary schools. It has also been argued that it seems strange that the government should make major policy decisions, such as the decision to launch the 8:4:4 system, at harambee meetings without proper debate.

✓ Perhaps the most striking observation with regard to the curriculum of the 8:4:4 system is that made by Professor Daniel Sifuna at the National Seminar on Transitional Education. In a paper he presented at the seminar, Sifuna dismissed as fallacious the view that vocational education would help school leavers to engage in gainful employment. He pointed out that what was required to make learning functional was to base education on everyday life, then the laws of nature inherent in technology and economic process can be made clear through manual training with the aid of simple tools and through productive work in the community.

✓ The concern of this study is, therefore, to establish, through textual and statistical analysis, the relationship between John Dewey's rather novel ideas and the cardinal principles underlying the 8:4:4 System of Education as it is presently operating in Kenya. From the analysis, the study makes appropriate recommendations concerning the curriculum and instructional procedures in schools.

METHODOLOGY OF THE STUDY

To show the relationship between the main features of John Dewey's educational philosophy and the principles underlying the 8:4:4 System of Education, two approaches are adopted: textual analysis of the books on John Dewey's educational philosophy and the 8:4:4 System of Education, and a field research to find out how the ideas advocated by John Dewey are operating in the primary schools in Kenya.

3.1. Textual Analysis

The assumption is that the principal ideas of John Dewey's educational philosophy can be traced in the 8:4:4 System of Education. In the first place, books on John Dewey's educational philosophy, such as Democracy and Education and Experience and Education, and others by prominent scholars, are analysed with a view to identifying the salient features of John Dewey's educational philosophy.

The study also carries out a textual analysis of 8:4:4 System of Education, currently the only official blueprint of the system. The analysis identifies the main principles of the 8:4:4 system. These principles are derived from three broad areas, namely:

- (i) The aims of education

- (ii) The Curriculum
- (iii) The pedagogic principles or instructional methods.

The principles identified in John Dewey's philosophy of education are then compared with those found in the 8:4:4 System of Education to reveal:

- (a) Convergent, and
- (b) Divergent views.

3.2. Methods of Data Collection

To confirm the practical aspects of John Dewey's ideas about learning, the researcher has designed and used observation and questionnaire instruments. The questionnaire containing 25 items aims at gathering background information concerning the school plant in general and the in-school resources, including material equipment, teaching personnel, et cetera. The questionnaire was completed by teachers of the participating schools.

Similarly, the researcher used an observation schedule to record classroom organization and interaction with regard to the presence or absence of:

- (i) Learning through problem solving or lecture?
- (ii) The teacher's role: a guide or an initiator?

- (iii) Pupil participation in the learning process
- (iv) The learning process: Cooperation or competition?
- (v) Democracy in the classroom
- (vi) The use of instructional media

The information collected through this observation schedule also helps to verify the argument that principles of democracy in education as advocated by John Dewey are found in the primary cycle of the 8:4:4 System of Education.

3.3. Sampling Procedure

The researcher was interested in rural schools since the majority of Kenya's children are found in these schools. Moreover, urban schools largely cater for the children of working middle-class people, and so they are relatively better managed and better equipped than the average primary schools in Kenya.

A random selection of 8 schools from about 50 primary schools in Lugari division of Kakamega District was selected to give the researcher an overview of what is happening in schools. To achieve random selection the researcher wrote the

names of all the schools in the division on pieces of paper. The pieces of paper were then folded and mixed up. The researcher picked the number of schools required for the study from the randomly mingled papers.

3.4. Administration of the Questionnaire

The questionnaire was issued to the individual teacher who was instructed to complete it and hand it back to the researcher. As the information required did not demand the creation of controlled examinations, the teachers were allowed to fill in the questionnaire at their leisure, consulting their colleagues and other people where necessary.

3.5. Observation Schedules

In each school in the research sample, the researcher sat in and observed at random some lessons in progress. An average of five lessons per school were observed by the researcher, and this brought to a total of about 48 lessons observed in all. The goal of these lesson observations was for the researcher to see, first hand, the nature of classroom organization, the instructional procedures and methods, the role of the teacher, the role of the learners and the

availability and use of instructional resources.

The lessons observed were unrehearsed since the teacher was not cautioned in advance. However, the teacher was requested for permission to have his or her lesson observed. The teacher was not told in advance what exactly the researcher was interested in. The researcher sat in the classroom for the full length of each lesson and entered whatever he observed into the observation schedule.

3.6. Data Analysis

The data collected through the observation schedules and questionnaires was described using frequency distribution tables and percentages. The facts were then presented as collected without any attempt to evaluate their viability against the researcher's prejudices or preconceived knowledge.

CHAPTER FOUR

JOHN DEWEY'S PHILOSOPHY OF EDUCATION

The chapter on related literature review has given us some idea of John Dewey's contribution to the philosophy of education. This contribution will now be spelled out in greater detail in this chapter where the views of his educational philosophy are examined. We shall see how Dewey deals with issues specific to the actual practice of education. In particular, we shall look at the biography of Dewey before giving a descriptive survey of his philosophy and, finally, analysing critically the application of his educational philosophy to the practice of education.

4.1. The Biography of John Dewey

The name of John Dewey in America, and indeed in the field of education, has become synonymous with the progressive education movement. Dewey is generally recognized as the most renowned and influential American philosopher of education.

John Dewey was born in 1859 in Burlington, Vermont, in the United States, and he died in New York City in 1952. According to Jonas F. Soltis, Dewey's biographer, during Dewey's lifetime the United States developed from a simple frontier-agricultural society

to a complex urban-industrial nation (Soltis, 1971:81), and Dewey developed his educational ideas largely in response to this rapid period of cultural and economic change. His father was the proprietor of Burlington's general store, and his mother was the daughter of a local judge. John, the third of their four sons, was a shy boy and an average student. He delivered newspapers, did his chores, and enjoyed exploring the woodlands and waterways around Burlington. He graduated first in a class of 18 at the University of Vermont in 1879.

After graduation, John Dewey taught in a high school for two years. With the encouragement of his former philosophy professor at the University of Vermont, Dewey wrote three philosophical essays which were accepted for publication in the Journal of Speculative Philosophy. They were hailed as the products of a first-rate philosophical mind. With this taste of success, Dewey left teaching to do graduate work at John Hopkins University where he studied philosophy and wrote his dissertation on the psychology of Kant.

In 1884, Dewey received his doctorate and was employed to teach philosophy and psychology at the University of Michigan where he wrote his first major book, Psychology, in 1887. While there, he married

Alice Chipman. In 1894 the University of Chicago offered him the chairmanship of the department of philosophy, psychology, and pedagogy. At Chicago he established the famous Laboratory School where he scientifically tested, modified, and developed his psychological and educational ideas.

While at Chicago, he wrote My Pedagogic Creed in 1897 in which he gave an early statement of his philosophical position in education. Four other major educational writings came out of Dewey's Chicago experience. These were The School and Society (1899), The Child and the Curriculum (1902), How We Think (1910) and Democracy and Education (1916).

Dewey resigned his job at Chicago University when he disagreed with the President of the University for merging the Laboratory School with the University training school for teachers. The merger not only took control of the school from John Dewey's hands but changed it from an experimental laboratory to an institution for teacher training. Dewey was employed by Columbia University where he taught for the next 26 years and witnessed the dispersion of his educational ideas throughout the world. He retired in 1930, but was immediately appointed professor emeritus of philosophy in residence at Columbia

and held that post until 1939. While there, he wrote his last major educational work, Experience and Education in 1938.

At the age of 90 he published his last large scale, original philosophical work, Knowing and the Known (1949), in collaboration with Arthur F. Bentley. He died in 1952 at the advanced age of 93.

4.2. John Dewey's Philosophy of Education: A Description

Bowen and Hobson (1974:165) trace the origin of John Dewey's initial philosophical thinking to the ideas of the German philosopher, Georg Wilhelm Friedrich Hegel (1770-1831). Hegel's philosophy was used to explain the progress of civilization via the unit of the state, and it argued that the rise and fall of various states was due to the working out of an inevitable historical dialectic. (A dialectic was defined by Hegel as the unity of opposites). Built upon the earlier monumental work of Immanuel Kant in the late eighteenth century, this Hegelian philosophy - known as absolute idealism - dominated nineteenth century thought. One of the more influential outcomes of this theory was its incorporation by Karl Marx into his view of history.

Dewey himself studied this philosophy for his doctorate and it influenced his thought profoundly, although he later tried to eradicate it in favour of pragmatism. Charles Sanders Pierce (1839-1914) took the Greek word pragma, meaning a deed or act, and gave the world of philosophy the new concept of 'pragmatism'. The pragmatists believed that knowledge is produced by 'transaction' between man and his environment, and truth is a property of knowledge (Kneller, 1964:25). In their view, an idea is true if it works. Dewey modified this thesis and wrote that an idea is true only if it has satisfactory consequences when objectively and if possible scientifically tested (Kneller, Ibid. 25). Thus, for the typical pragmatist, the truth of an idea depends on the consequences that are observed objectively when the idea is put into operation.

With regard to education, the pragmatists maintained that the teacher should construct learning situations around particular problems whose solutions will lead his pupils to a better understanding of their social and physical environment. Instead of following the traditional structure of subject matter, both teacher and class should draw on whatever knowledge

proves useful in solving the particular problem with which they are engaged. The same procedure should be followed in learning the skills of reading, writing, and arithmetic. All subjects, said the pragmatists, become more meaningful to the student and so more easily mastered when the student can use them as means for satisfying needs and interests of his own.

John Dewey, like Hegel, could not tolerate dualisms. He had a passion for unifying doctrines that, on the surface, seemed irreconcilable (Peters, 1981:72). Pragmatism, and especially its emphasis on scientific method, together with categories of thought extrapolated from biology, seemed to him the key to unification. It also seemed a natural extension of his early experiences of problem-solving.

But Dewey did not embrace pragmatism in its classic form as advocated by William James and Charles Sanders Pierce. He modified it into what came to be known as instrumentalism or experimentalism. Instrumentalism takes on a more concrete and definite character in the form of the thesis that the materials of belief, the concepts in which beliefs are formulated, are human

constructions and not imposed on men by the nature of things (Antony Quiton, 1977:9). This thesis was directed against the intellectualism of the platonists. He took intellectualism to be the attitude to knowledge appropriate to a slave-owning society in which true rational men did not soil their hands with the work of the world.

Dewey's instrumentalism led him to rebel against the excessive formalism of traditional education, with its emphasis on strict discipline, passive learning, and pointless detail (Kneller, 1964:47). In his books, Schools of Tomorrow (1915), he advocated school reforms to make education more progressive than it was. He was behind the founding of the Progressive Education Association in America in 1919. Taking the pragmatist view that change, not permanence, is the essence of reality, progressivism in its pure form declares that education is always in the process of development. Educators must be ready to modify methods and policies in the light of new knowledge and changes in the environment. The special quality of education is not to be determined by applying perennial standards of goodness, truth, and beauty, but by construing education as a continual reconstruction of experience. In his book,

Democracy and Education (p. 89) he wrote:

We thus reach a technical definition of education: it is that reconstruction or reorganization of experience which adds the meaning of experience, and which increases the ability to direct the course of subsequent experience.

Dewey's educational philosophy can be properly discussed with regard to (a) his treatment of the teaching situation, and (b) his view of the content of education and the role of the school. Let us now focus our discussion on these issues.

4.21. The Aims of Education

With regard to the aims of education, Dewey attacked the false dichotomy between means and ends. He insisted on the intrinsic value of educational activities, arguing that good aims arise from what is going on, from the purposes of the pupil. They must not be externally imposed. He, however, did not advocate a free for all situation in which any aims are accepted if they arise in this way. They must be capable of translation into a method of co-operating with those undergoing instruction, and they should be moulded by what he called 'the social medium'. He resisted external direction and imposition,

and in this way he found a middle-ground between the progressive and traditional methods of teaching.

4.22. Teaching Methods

In his Experience and Education, Dewey was at pains to point out that by suggesting the teacher's role as that of a guide he was not advocating a passive or spectatorial role for the teacher. His argument was that 'basing education upon personal experience may mean more multiplied and more intimate contacts between the mature and the immature than ever existed in the traditional school, and consequently more rather than less guidance by others (Dewey's 1916:21)'. He insisted that those planning the activities in the classroom must see each child as an ever changing person, and must carefully select and grade the materials used, altering such selection as is necessary in all experimentation.

The method of learning which conformed to these criteria of 'educative experiences' was that of problem-solving. Dewey's stress on

problem-solving as a method was later taken up by Kilpatrick and formalized into the project method.

4.23. Social Control and the Role of the Teacher

Dewey tried to play down the dichotomy between the 'keeping order' view of the traditional school and the self-imposed discipline advocated by the progressives. His argument was that children in a classroom were like those participating in a game. Games involve rules and children do not feel that they are submitting to external imposition in obeying them. The control of the actions of the participating individuals is affected by the whole situation in which individuals are involved, and in which they share and of which they are interacting parts.

In such a situation as the one described above, the teacher exercises authority as the representative of the interests of the group as a whole. If he has to take a firm action it is done on behalf of the interests of the group, not as an exhibition of personal will. In the progressive school, the teacher's main job is to think and plan ahead so that knowledge of individuals may be married with knowledge of subject matter that will enable activities to be selected which lend themselves

to social organization. By so doing, Dewey said, 'the teacher loses the position of external boss or dictator but takes on that of leader of group activities (Dewey, 1938:59)'. .

4.24. The Child and the Curriculum

Dewey strove to remove the dichotomy between the child and the curriculum. He stressed the importance of practical activities such as sewing, cooking, weaving, carpentry and metalwork. These conformed to what he called the sociological principle because they were basic to life, being concerned with food, clothing and shelter, and thus part of the cultural heritage. They also conformed to the psychological principle because children were interested in them, and also because they embody motor activities which Dewey considered to be closely connected with mental development as a whole.

Apart from the practical activities, Dewey included some traditional subjects in the curriculum with the proviso that they should be related to his concept of man as a problem-solving animal concerned with control over his environment. Thus he regarded geography as important for gaining in power to perceive the spatial and the natural connections of an ordinary act.

Science was included with the proviso that it should be taught with the psychological principle in mind starting from the everyday experience of the learner. Finally, the curriculum included communication skills such as reading, writing, mathematics, and foreign languages. These, Dewey argued, appealed to the child's impulses to express himself and to share his experiences with others. So the best time to teach him the techniques of communication is when the need to communicate is vitally important to him.

4.25. The School and Society

Dewey also tried to remove the dichotomy between the school and society. In the first place, he dealt with the relationship of the school to the home and surrounding community. Dewey was greatly impressed by the informal type of learning that went on in the home and in the small rural communities that were passing. He fondly contrasted this natural way of learning, in which there was no separation between learning and life, with the artificial drills and recitations of formal schooling. He called for an indissoluble link between learning in school and learning out of school (Dewey, 1963:91).

Secondly, Dewey dealt with the relationship of the school to the wider society which the pupil would enter on leaving school. His plea was that the school should itself be a miniature community, exhibiting numerous shared interests and open communication. The school, he maintained, must be an epitome of democracy. He took a prominent part in the controversy about trade schools and vocational education (Dykhuisen, 1973: 141). He deprecated the dichotomy between the practical and the liberal which reflected an undesirable type of class-structure. He argued that if more practical activities were introduced into schools, education would be through occupations and not for occupations. He, therefore, advocated the introduction of processes involved in industrial life to make school life more active, more impregnated with science, and more in touch with the world.

4.26. Democracy and Education

Dewey called for a true interplay of ideas and personalities that is a necessary condition of true growth. Ideally democracy in Dewey's view, is a shared experience, not a mere form of

government. He defined democracy as primarily a mode of associated living, of conjoint communicated experience. Democracy, growth, and education are thus interrelated. In order to teach democracy, the school itself must be democratic (Kneller, 1964:53). It should promote student government, the free discussion of ideas, joint-pupil-staff planning, and the full participation of all in the educative experience.

The first three, i.e. the aim of education, the teaching methods and social control and the role of the teacher, were what John Dewey himself saw as falling under the realm of individual interest and external direction. The other three, i.e. the child and the curriculum, the school and the society, and democracy and education, were what in John Dewey's view constituted the content of education and the role of the school.

4.3. John Dewey's Philosophy of Education: A critique

Having briefly described the educational philosophy of John Dewey, it behoves us to evaluate its viability in the modern educational setting. Peters (1977) writes that Dewey's intellectual

edifice engenders very varied opinions. In his view, Dewey's philosophy provides a middle-ground between supporters of the traditional school model and advocates of revolutionary changes in the school system. 'I agree with Sidney Hook that such a middle road is necessary', wrote Peters (1977:133), 'but I do not find the one signposted by Dewey particularly convincing or congenial; for his way of resolving various dualisms by his account of "growth" of the problem-solving man has the character of a panacea' which involves both distortion and idealization.

In this critique we shall first address ourselves to the criticisms before giving a detailed estimate of Dewey's unifying ideal in the area of dualisms such as the child and the curriculum, democracy and education, the school and the society, and social control and the role of the teacher.

4.31. The Sociological Principle

Dewey was aware of the importance of culture for the child and so he advocated for the introduction of practical activities such as sewing, cooking, weaving, carpentry and metalwork. These conformed to the sociological principle because they were basic to life,