

Subject Matter and Method: What a Pedagogic Dialectic in Dewey's Democracy and Education?

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Abstract

The dialectic between the subject matter and method is prominent in Dewey's educational thought. Dewey defines subject matter as the facts and materials observed, recalled, read, and talked about in the curriculum. He refers to method as the techniques, strategies and logical processes and procedures put in place to facilitate learning. This paper discusses two important aspects; Firstly, mastery of the subject matter is necessary for good teaching and secondly, the dialectic between subject matter and method. From the Aristotelian theory of hylemorphism, the subject matter is perceived as matter and method is form. With the argument that matter cannot be conceived without form, this article argues that mastery of the subject matter and methodology of teaching are inseparable values in any pedagogic process. On the basis of the subject matter, the argument goes that "you cannot give what you do not have" (Nemo dat quod non habet). However, every subject matter requires a "modus operandi", which refers to the techniques of teaching and the skills of facilitating learning. Consequently, mastery of the subject matter is not sufficient for good teaching. Every teacher requires skills and techniques of teaching and these values have implications in the training and recruitment of teachers.

Keywords: Dialectic; Subject matter; Method; Teaching, Pedagogy and John Dewey.

Introduction

The controversy related to the inseparability and separation of subject matter and method remain pertinent to educational theory and practice. John Dewey is one of the educational philosophers who probe into this problem. He does this within the framework of his pedagogy of interest. This paper sets out to study the dialectic between the subject matter and method in the teaching-learning process. The main question to be examined is whether it is the separation or the unity of subject matter and method that ensures an appropriate pedagogic process. This question is provoked by the fact that some schools of thought in training schools or colleges tend to emphasize one of these aspects to the relative neglect of the other in pedagogy. Most often, teachers of the main discipline argue that the trainees simply need knowledge of the subject matter they will graduate to teach. The student teachers have to master courses in Biology, Physics, Chemistry, History and English Literature very well because these are the disciplines they will teach in secondary schools. The advocacy to master the subject matter of the courses in the sampled disciplines is emphasized to the relative neglect to the study of courses that are principally meant to enhance methods of teaching and evaluation. The argument goes that students will not graduate to teach Philosophy of education, General pedagogy, Psychology of learning, measurement and evaluation, counselling, Educational Administration and Planning and Educational Technology. The divergences of opinions in pedagogy in teacher training colleges lead to the analysis of the main question in the following sub-questions. Are there pedagogic implications in separating or uniting the subject matter from the method of teaching? Does mastery of the subject matter ascertain appropriate teaching-learning transaction? Should training colleges emphasize mastery of the subject matter or methodology of teaching? The responses to these questions help us examine the necessary dialectic between subject matter and method in the training of teachers.

Definitions of Concepts

In order to dabble into the dialectic in question, it is imperative to analyse concepts relevant to the study in question. The operational definitions of some of these concepts will be examined in the subsequent sub-sections of our study. The term dialectic traces its origin in the history of thought. Dating back to Socrates and Plato, one identifies two ancient authors for whom knowledge could only be attained through the process of the dialectic (Plato, *The Republic*, in Copleston, 1993). As presented in *The Republic* for instance, several people bring points of views in the course of discussion. At the end, there is a fusion. The philosopher who comes closest to this meaning of the term is Hegel. Etymologically, this term derives from the Greek verb *dialegein* meaning to argue or to dialogue. The Greek noun *dialektikos* means dialogue or discussion. This refers to the process of bringing together contradictions or opposed points of view leading to a reconciliation, which is a higher point

of view. This reconciliation incorporates what is true in each of the opposed statements. The confrontation of ideas in order to attain a reconciliation or unity is what dialectic is all about.

Dialectical opposition is characteristic of all valid thinking about reality. Every thesis as Kant saw generates its own contradictory antithesis. What Kant did not see is that the thesis and anti-thesis may both be regarded as true if both are understood in the new light as imperfect expressions of a higher more inclusive proposition which contains what is significant in both of them. Such a proposition, Hegel calls a synthesis (Honderich, 2005, p. 212).

Dialectic so understood is characteristic of not only all valid thinking of reality but it is characteristic of reality itself. Hegel puts forth a fundamental rational process of reality. In other words, this view was anticipated by the Heraclitean contention that conflict and opposition is in the very nature of things but there is also a movement towards a unity of these opposites, an ultimate identity beyond the differences in these things. If both parties are genuinely seeking the truth, no conflict will remain insoluble (Honderich, 2005).

The word pedagogy in the context of this paper is used in the sense employed by Jean Houssaye. He defines pedagogy as a *praxiological* science. *Praxiological* here refers to a blend between theory and practice. The foundation of theory here is reason or *logos* that proposes the ideas to be put into practice (Bertrand, 1999). *Praxis* refers to the execution of the proposed ideas in the educational set-up. When the theory and principles have been conceived and mastered, there is a need for the appropriate means or *modus operandi* to enhance learning in context thus transforming ideas into action.

Mastery of Subject matter As Imperative for Pedagogic Process

In education, the subject matter refers to “the ideas or information set in the curriculum” with the aim of teaching (Schofield, 1972 p.122). Dewey defines subject matter as the facts and materials observed, recalled, read, and talked about. These are suggested ideas and facts of studies, which make up the curriculum (Dewey, 1966). This section examines two important aspects: The dialectic between the subject matter and interest and the fact that subject matter comprises the needs and experiences of life. Dewey therefore proposes the place of the child’s interest in setting up the subject matter of the curriculum. (Dewey, 1966 p.182).

In the first place, the subject matter must serve the purpose of enhancing the child’s capacities and interests to self-realization. He proposes the relation that ought to exist between the subject matter of the curriculum and the interest of the learner. Given that interest refers to the needs, desires, preferences and aptitude of the child, he contends that it is important to place this programme of studies in the context of the child’s life in order to enhance his social integration.

The material of school studies translates into concrete and detailed terms the meanings of current social life which it is desirable to transmit. It puts before the instructor the essential ingredients of the culture to be perpetuated, in such an organized form as to protect him from the haphazard efforts he would be likely to indulge in if the meanings had not been standardized (Dewey, 1966 p.182).

The subject matter in school therefore constitutes the basis of societal integration. The subject matter has to enhance the child’s foundational interest of social integration. Dewey conceives the school as an embryonic society, which evolves alongside the changes in mainstream society. The values of the child’s environment constitute his/her interest and must permeate the school circles in order to instil in him/her the spirit of service. The valuable result is the provision of the necessary instruments of self-direction in the society in which he lives (Forbi, 2004 p.71).

In the second place, the choice of the subject matter in the curriculum should comprise the needs and challenges in real life. The subject matter is not meant to prepare the child for a future profession in society. Instead, the studies in

school must constitute real life because education is co-extensive with living and growing. The child learns at the same time as he grows. What is taught should be directed towards solving real life problems.

From the standpoint of the child, the great waste in the school comes from his inability to utilize the experiences he gets outside the school in any complete and freeway within the school itself; while, on the other hand, he is unable to apply in daily life what he is learning at school. That is the isolation of school from life. When the child gets into the schoolroom, he has to put out of his mind a large part of the ideas, interests and activities that predominate in his home and neighbourhood. So the school being unable to utilize this everyday experience sets painfully to work (Dewey, 1907 p.89).

The experiences of the child in the process of learning should not be separated from his experiences back home. The school studies should agree with the interest of the individuals concerned taking into consideration their background. Why should one learn only what falls within one's experience? The fact is that what the child learns should be meaningful to him. How can one compose the subject matter to make studies meaningful? What the child already knows or experiences should constitute the facts and ideas to be studied. In this case, learning ceases from being an abstract enterprise without concrete bearing in real life. For instance, for meaningful learning of Arithmetic, Dewey observes:

The Child should study commercial arithmetic and geography not as isolated things by themselves, but in their reference to his social environment. The youth needs to become acquainted with the bank as a factor of modern life, with what it does, and how it does it; and then relevant arithmetical processes would have some meaning- quite in contradiction to the time absorbing and mind-killing examples in percentage, partial payments etc., found in all our Arithmetics (Dewey, 1907 p.92).

In the above analysis, Dewey presents the fact that the subject matter of the curriculum forms the basis of the child's foundation interest and social integration. He therefore reveals the relation that exists between the school culture and the societal needs. This leads to the conclusion that the subject matter comprises the needs and experiences of real life.

Method as Indispensable for Pedagogy

Method refers to the techniques, strategies and logic, processes and procedures put in place to do something (Hornby, 2000). In the context of education, it refers to the strategies put in place by the educator to facilitate the learning processes and procedures of his/her pupils. In a bid to diagnose the interest of the child, an educator uses a method of approach that will direct the experiences of the learner to the objective of his/her lesson. We will examine the place of method in teaching and its inseparability from the subject matter. Also, we shall note that Dewey proposes a flexible approach to the method of teaching.

The question repeatedly asked is whether mastery of the subject matter guarantees good teaching. This question presupposes the invaluable role of method in the pedagogic process. Mastery of the subject matter is important, but does not suffice. What is the appropriate *modus operandi* to communicate a given subject matter? Given that the needs and aptitudes of individuals vary according to the programme of study, how does the educator connect the diverse interests of the learners and the remote objectives of the subject matter? These questions suggest the inseparability of the subject matter and method. The former is matter and the latter is form. The subject matter is meaningful to the learners when a method that enhances their learning is employed. What particular method can a teacher use to satisfy the needs of all learners in the classroom? With democratic education where all persons have equal chances, what method should be employed that ensures no-child-left behind pedagogy?

Also, Dewey defines method as a means through which the subject matter of one's experience develops effectively and fruitfully. The educator does not present his/her matter at random, but follows a certain logic and technique in doing his/her work. Method is therefore an effective way of employing some material for an end. Can teaching be done without a method? To separate the subject matter from teaching is to separate the mind from the self in the world. What is the appropriate method of teaching according to Dewey?

In the first place, Dewey's thought recognises the place of diverse methods given particular cases or circumstances of learning. The prescription of a uniform method is dangerous and inadequate in learning. The uniform method is an educational generalization that Dewey objects because it presumes that all persons are the same. When the American Declaration of Independence acclaimed that all persons are equal, does it mean we are the same? Ontologically speaking, we are the same, but given our diverse cultures, aptitudes, needs and desires we are different. According to Dewey, every individual is unique and is endowed with potentials regardless of any given physiological or psychological inequality.

Education should provide an adequate method that will help every individual to achieve his or her potential thus contributing to the well-being of the society (Dewey, 1966). The tendency of a uniform method minimizes critical teaching where the diversity of methods entertains different uses of suitable means to attain the same objective. Dewey's refusal of a prescribed method apparently makes him self-contradictory. He denies "fixity" of method and at the same time recognises the importance of a problem-solving approach. Can a science like education function without a prescribed method?

In the Second place, Dewey argues that where the teacher's approach to teaching is not flexible, he has to recur to "soup kitchen theory of education". He/she sugar-coats the subject matter to make it interesting because it is abstract to the child and he/she wants to appeal to the child's concentration and attention in the classroom. In this case, the educator uses extrinsic stimuli like excitement, shock of pleasure and punishment. Dewey does not consider these artificial means of arousing the child's interest as important to education. Can all external stimulants be rejected from the teaching-learning transaction? Where is the place of reinforcement as emphasized by stimulus models of learning? Bertrand's analysis of the pedagogic strategies is contrary to Dewey's refusal of reinforcement or rewards to ensure the probability of an increase in the required response. Although it is important to rely on the learner's aptitude and preferences, it is also important to use reinforcements and punishment to stimulate good response and restrain bad ones respectively (Bertrand, 1993 p.116). The point is that Dewey condemns the use of stereotyped methods. The prescribed methods have to simply serve as pedagogic directives rather than definite generalisations for teaching. Also, stern discipline means restoring order in classrooms during lessons. In the same context, he emphasizes the need for order with the child's attention and concentration on the subject matter.

Lastly, the separation of the subject matter from method degenerates learning into a routine. The method in question follows mechanically set steps like the traditional burdensome verbal formulae in Arithmetic or Grammar. A typical example is the emphasis on mental Arithmetic in the early hours of the day in schools. Dewey condemns this approach for assuming a fixed method of learning, where the pupils are subjected to recitations and rote. Does Dewey undermine the place of practice in education? Schofield holds that learning is facilitated and promoted when the child engages in the specific method of practice (Schofield, 1972). Does rote learning totally preclude intelligent thought and application of knowledge? Is there no limitation of method in Dewey's denial of recitations, which is a common practice of learning certain concepts?

Dewey contends that the educator falsely thinks that with continuous recitations, the "mental habits" of the learners will develop according to the objectives. Is memorization necessarily an inappropriate means of learning? Are there no stages of education where it is important to commit facts to memory? He shows contempt for fixed models of teaching when he argues:

Nothing has brought pedagogical theory into greater disrepute than the belief that it is identified with handing out to teachers' recipes and models to be followed in teaching. Flexibility and initiative in dealing with problems are characteristic of any conception to which method is a way of managing material to develop a conclusion Mechanical rigid woodenness is an inevitable corollary of any theory, which separates mind from activity motivated by a purpose (Dewey, 1966 p.170).

In spite of Dewey's contempt for fixed and definite methods in teaching, he recognizes the place of general methods, which serve as a guide to the educational activity. He insists that these general methods are indirect means of enlightenment, which do not exclude individual initiative and creativity in a given lesson. For instance, critical teaching implies that the educator teaches the same subject matter using alternative approaches that depend on the lesson and its objectives. Critical teaching in general discourages conformity to externally imposed orders that do not consider the uniqueness and interest of each person at a given situation and time. The educator in question has his/her own personal

attitudes and preferences and it must be noted that his/her method is not subordinate to the general principles of procedure, but facilitated and directed by them:

The specific elements of an individual's method or way of attack upon a problem are found ultimately in his native tendencies and his acquired habits and interests. The method of one will vary from that of another...as his original instinctive capacities vary, as his past experiences and his preferences vary (Dewey, 1966 p.173).

There is a possibility for a harmonious interrelation between the general method and the individual methods of teaching. In order to maintain the dialogue between the general and the individual methods, Dewey proposes some indispensable characteristics that serve as guiding principles to the determination of good methods.

The first characteristic is straightforwardness where the educator masters the subject matter and applies alternative methods to respond to the learner's needs without distracting him:

Whatever methods of a teacher call a pupil's attention off from what he has to do and transfer it to his own attitude towards what he is doing impair directness of concern and action. Persisted in, the pupil acquires a permanent tendency to fumble, gaze about aimlessly, to look for some clew of action beside that which the subject matter supplies (Dewey, 1966 p.174).

In the second characteristic, a flexible intellectual interest or open mindedness is required for an appropriate process of learning. An open spirit is one that is tolerant and gives room for new stimuli and an opening to learn in a child-like attitude without prejudices. Dewey therefore proposes a scientific method to truth. There are no pre-established truths and every situation is unique. In order to teach, the teacher must have a critical approach without preconceived notions and prejudices about the learners as well as the subject matter. Bertrand maintains this position and insists on the fact that differences in people require diversity in method (1993).

On the contrary, is Dewey's problem-solving approach not a prescribed method, which narrows the learning process? In any learning process, is one obliged to resolve all problems? Again, Dewey holds that the predilection for a rigid method arises from its apparent advantages to teaching like speed, accuracy, measurability and the provision of correct results. These mechanical and dictated methods are perpetuated by zeal for answers. According to Dewey, learning is a long-term enterprise. There is no need for haste without efficiency in the educational practice. *"Were all instructors to realize that the quality of mental process, not the production of correct answers, is the measure of educative growth, something hardly less than a revolution in teaching will be worked"* (Dewey, 1966 p.175).

Dewey aims at correcting the tendency of academic success at all costs. In formal education, examinations determine the whole learning process. Since the teachers want academic success, they use methods aimed at scoring high percentages in examinations. The impending danger is that they teach what will be tested rather than test what will be taught. Since academic success is the goal, is the interest of education shifting from learning to the "cult of certificates"? The inevitable consequence is Fraud. The rigid approach transforms pupils into academic robots who must learn irrespective of their individual desires and aptitudes. In this case, the pupils pay attention to the lesson in order to pass examinations while the teacher teaches because he/she wants to benefit from "excellent" results.

The third characteristic holds that when the learner's focus is divided, his/her interest is blurred. He is confused as such. When teaching neglects the intrinsic desires and experiences of the learners, the educator resorts to soup kitchen theory of education.

What is sometimes called "stern discipline", i.e. external coercive pressure, has his tendency. Motivations through rewards extraneous to the thing to be done have a like effect. Everything that makes schooling merely preparatory works in this direction. Ends being beyond the pupils' present grasp, other agencies have found to procure immediate attention to assigned tasks. Some responses are secured but desires and affections not enlisted must find other outlets (Dewey, 1966 p.178).

Dewey is contemptuous of an educational system that neglects the child's own preferences and argues that professional training is a typical example in this case. In teaching, when one does not exploit the spontaneous and natural impulses of the child, the result is indoctrination. Habits formed are inadequate in society (Dewey, 1966 p.179). Can teaching procedures rely solely on the spontaneous and natural impulses of the learners?

The last characteristic is the ability to take responsibility for the chosen method. One applies a particular method because of one's foreseen objective. Responsibility means intellectual thoroughness, seeing through an action and considering the consequences that could arise from such action. A close examination of cogent facts and scientific truths is imperative. Critical teaching requires a thorough study of what ought to be taught and the methodology employed. These characteristics of straightforwardness, flexibility, single-mindedness, and the scientific method would ensure creativity in learning and improves greatly on one's methods of teaching.

Teaching as Mediation of Subject Matter and Method

Teaching refers to the art and science of helping someone to learn something or information (Hornby, 2000). The teacher qualifies as the person who carries out this activity in the school circle. This section presents the important aspect of teaching, which is mastery of the subject matter. We shall also consider the means as a prerequisite for presenting the subject matter. We shall also examine the principle of interest and the problems surrounding this principle and the conception of the teacher in the changing world.

Dewey holds that in order to teach, the educator must have mastery of the subject matter. With good knowledge of this subject matter, he is able to concentrate his efforts on the interactions with the pupils. The teacher must have the ideas and facts to teach in his/her fingertips. What is the necessity for mastery of the subject matter? The mastery of the facts is unquestionable because the Latin dictum states "*Nemo dat quod non habet*" (one cannot give what one does not have). The subject matter becomes the primary interest of the teacher. Instead of reading the pedagogic manual, the teacher's interest is directed towards the needs and desires of the pupils.

When engaged in the direct act of teaching, the instructor needs to have the subject matter at his fingers' ends; his attention should be upon the attitude and the response of the pupil. To understand the latter in its interplay with the subject matter is his task, while the pupils mind, naturally, should be not on itself but on the topic in hand (Dewey, 1966, p.18).

The presentation of the subject matter requests a particular means that responds to the needs and preferences of his pupils. At the initial stage, the teacher employs the prognostic and diagnostic evaluation strategies to determine the capacity and aptitude of the learner as regards the subject matter in question. The significance of this approach in education is its emphasis on beginning from the known to the unknown. There is a necessary requirement for the teacher apart from mastery of the subject matter. The teacher begins from where his learners are familiar in the subject matter in order to direct them to the objective of the lesson. This is the approach Dewey proposes to teachers. This imparts a good knowledge to the child by the teacher (Deladelle, 1995). As a facilitator of the pedagogic activity, he determines the natural aptitude and the experiences of the persons with whom he is imparting knowledge:

A knowledge of the ideas which have been achieved in the past as the outcome of activity places the educator in a position to perceive meaning of the seeming impulsive and aimless reactions of the young, and to provide the stimuli needed to direct them so that they may amount to something. The more the educator knows of music the more he can perceive the possibilities of the inchoate musical impulses of a child. Organized subject matter represents the ripe fruitage of experiences like theirs, experiences involving the same world, and powers and needs similar to theirs (Dewey, 1966 p.182).

An educator who has mastery of the subject matter finds the process of teaching easy with regard to arousing the interests of the child. Does the teacher's mastery of the subject a guarantee for appropriate teaching? Can everyone who masters a particular subject matter be a good teacher? How does it determine the teacher-student relationship? Given that, the educator has a mastery of the subject matter; his/her relationship with the student is vertical. However, the child is not a "*tabula rasa*" (empty slate) on which the teacher writes. The child and the teacher are partners in the construction of knowledge but the latter by virtue of his/her experiences serves as the guide and facilitator. What the teacher possesses in

act, the child has in potency. What happens when the educator does not understand his/her role as a facilitator? An educator who thinks that he/she is the possessor of knowledge, can inhibit the growth of the child and thus transform learning into indoctrination.

If the principle of interest requires the teacher to adapt his/her lessons to the experiences of the child in his/her environment, then what kind of teacher can one conceive today in the digital age? What are the difficulties arising and the forthcoming perspectives? Considering the constant growth of communication facilities and tools in the educational sector, there are many observations as to whom a teacher is. Bertrand acknowledges the ability of the teacher to conceive an academic environment, which responds to creative learning of the child. The teacher is a facilitator and guide to learning and no longer an instructor as the case may be in the previous years. His role of imparting knowledge to learners is transformed to helping the learners learn by themselves, by trial and error or creative and cooperative thinking (Bertrand, 1993).

Another conception presented by Bertrand is that the teacher who teaches according to the learner's needs ought to be an architect of the pedagogic environment. He does not come to the classroom to teach without initial lesson preparation conceiving the appropriate activities applicable to the discipline to be taught. He organizes the sitting positions and the groups of cooperative learning depending on the objective of his lesson. With this challenge, he/she is a permanent researcher on diverse ways of teaching. He/she is not only a researcher, but he/she is flexible in his/her teaching and he/she should apply his/her methods to suit the diverse needs and interests of the different learners (Bertrand, 1993). The teacher should help the students to work together with him. Here lies the nature of the principle of interest, but the question is: what competence is required in a teacher to meet these challenges?

Significance of Matter and method Dualism

There is a complementarity between subject matter and method of teaching in the pedagogic process. As earlier stated, this fact is justifiable in that for one to teach, he/she must know what he/she is teaching. There is no haphazard teaching without planning, coherence of presentation and enhancement of experiences. Within this framework of thought, the point to take home is that the former is matter and the latter is form in the realization of a pedagogic process. There is an educational hylemorphism discernable in this trend of thought (Hist, 1970). This perception of teaching-learning transactions has implications not only for the pedagogic process, but also for the recruitment of teachers, the training of teachers in an inclusive context and probably the management of human resources in schools.

Debate on Recruitment of Teachers

One of the controversial questions in the recruitment of teachers in any level of education is whether it is advisable to prioritize those who master the subject matter or those simply drilled in pedagogy. This question pretends to perpetuate the view that it is possible to separate subject matter from method in a pedagogic process. However, one has to be prudent in the considerations highlighted. It is not uncommon to find graduates from higher institutes of learning teaching the subject of their specialization with great passion and inspiration without having gone through any teaching training experience or courses. Some of these persons probably produce excellent results and their teaching become a source of inspiration to many persons. To be more precise, our French language teacher in forms one and two was a holder of Advanced level Certificate, with no other training after high school studies. This teacher was inspiring, rigorous and captivating. Many of his students studied French language with interest and later specialized in this language as teachers and translators in spite of the fact that they were learning French as a third language. This example nullifies the view that one has to be trained in pedagogy in order to be a good teacher. In this case, what has to be prioritized in teaching is mastery of the subject matter.

Far from persisting with the above example that mastery of the subject matter is sufficient for good teaching, the necessity for a *modus operandi* cannot be over-emphasized. What has to be noted in the above example is that the French teacher simply repeated the procedures and the processes he gathered through-out his

learning period to serve as a French language teacher. This fact is possibly justified by his keen interest in the teaching profession and his ingenuity to develop a teaching aptitude from the experiences of his teachers. This is not given to all who want to get into the teaching profession. That he learned teaching methods from the experiences of his teachers is worthy of praise. But to maintain the thesis that it is possible to teach without being drilled in some methods is to be exaggeratedly optimistic to teaching by inspiration.

By this same token, I am arguing that persons recruited to teach require basic pedagogic skills which are not simply left to the mercy of inspiration. Prospective teachers have to be drilled in both theory and practice of teaching. Every teacher needs a teaching philosophy that is materialized within the context of the classroom, the laboratory of the teaching principles. These principles are not only got haphazardly from one's previous learning experiences, but they are imparted through well-organized forums, possibly in teaching training colleges, in-service training, refresher courses and pedagogic seminars (Nelson, Palonsky, & McCarthy, 2006). Owing to this latter view, I think that some teachers, lecturers and professors in the University have much to be desired in terms of pedagogy. Knowledge of the subject matter may not pose a problem to these people, but appropriate skills in presenting the subject matter, especially within Deweyan pedagogy of interest maybe worth questioning. This thesis maybe justified by the frustration some learners experience in some subjects at the different levels of education.

Another question that possibly arises in this context is whether teachers drilled in pedagogy should be prioritized to those who simply master the subject matter. The debate on this question has the same weight as the debate in the question above. Should we recruit persons with Teacher Training Certificates to teach rather than graduates from the University without any teaching training? This question is susceptible to the fallacy of many questions, "*plurium interrogationum*". Therefore, prior to answering this question, an affirmative answer to a pre-supposed question has to be provided. Are the persons with Teacher Training Certificates drilled only in pedagogy irrespective of their respective teaching disciplines? This debate is interesting and enlightening. At the same time, I must admit that it is superfluous. There is no possible teaching without mastery of the subject matter. You cannot give what you do not have (*Nemo dat quod non habet*). At the same time, every teaching requires systematic processes and procedures. All these cannot be limited to the chance of one's school experiences, but persons have to embark on a scientific study of all these in order to serve as good teachers. Consequently, emphasis should not be given to one aspect to the relative neglect of the other. Knowledge of the discipline is as important as knowledge of the skills to enhance learning.

Training of Teachers in an Inclusive Context

Another interesting implication of this debate is the puzzle on training of teachers in an inclusive context. Inclusivity in education refers to the provision of equal learning opportunities to students according to their diverse learning aptitudes and challenges irrespective of race, colour, religion, tribe, language, origin, height, size, birth and status. This conception takes into greater consideration persons with special needs because of some physical challenges that may have an effect on intellectual dispositions (Nelson, Palonsky, & McCarthy, 2006). In this perspective, I argue that the training of teachers has to be systematic and coherent in the different ways of enhancing learning with diverse category of persons. This requirement simply emphasizes the necessity of a complementarity of matter and manner in the training of teachers.

The strength of this argument lies in the fact that a teacher may be extremely knowledgeable in one discipline but may not be able to enhance the learning interest in some persons in this particular discipline. The limitation of the teacher may not necessarily be in mastery of the subject matter, but probably in the appropriate method for the learners in question. Therefore, the diversity of learning aptitudes, needs, experiences, desires emphasize the necessity of giving prospective teachers an exposure to the different sciences of education in their training. This permits an exploitation of the different necessary skills present in the baggage of pedagogic courses. Consequently, the complementarity of subject matter and method cannot be over-emphasized.

Perspective for Human Resource Management in Schools

The dialectic of subject matter and method provides a perspective for managing human resource personnel in schools especially in secondary education. The inspiration providing this perspective is rooted in the debate whether a teacher is only expected to teach only what he/she was trained for. This question arises from the fact that persons graduate from History and Geography departments and end up as language teachers in secondary schools. Also, some persons study History and they are expected to teach Economics in schools and some study History and teach food science in Technical Teacher Training Colleges. Some study Mathematics and later teach Biology and Chemistry in schools. This problem challenges the management of human resources in Cameroon schools.

The question whether one is only expected to teach what one was trained for is also guilty of many questions. This interrogation presupposes an answer to a question of teaching out of related subject areas. The question whether one has to teach only what one has been trained for can be answered in both negative and affirmative propositions. The answer can be negative because there are related subject areas where a proper management of scarce resource personnel requires that one teaches across related subject areas. For instance, with the sciences, a trained teacher in Mathematics should comfortably teach basic lessons in Physics, Mechanics, Statistics and Computer science. The reverse of this case is expected to be true. A trained teacher in Biology is expected to teach basic lessons in Chemistry and in some cases Physics. The reverse is also true. For the Arts, a trained teacher in History should be able to teach basic courses in Geography. Also, a trained teacher in Economics should be able to teach basic lessons in Geography. The reverse is true in some cases. However, the supposed question can be answered in the affirmative. This affirmative response justifies some of the problems identified in the teaching field. This refers to the fact that one has to simply teach what one has been trained for. For example, a teacher trained in the teaching of Geology may have the basic dispositions to teach Chemistry and Biology. On the other hand, a teacher trained in Biology or Chemistry may not have the basic dispositions to teach Geology. For Arts, some teachers trained in the teaching of Economics may not have the basic dispositions to teach History or Geography or English Literature depending on high school combinations in the Anglo-saxon system of education. Also, a teacher trained in teaching English Language may not necessarily have the basic dispositions to teach the French language.

The problems highlighted with regard to the mobility of teachers from one subject to another is related to the problem of mastering the subject matter as a precondition for good teaching. With John Dewey, mastery of the subject matter necessarily provides one with the necessary conditions to present the matter in a systematic, coherent and interesting manner. In this context, I argue that the subject matter is hardly separable from the method of teaching. The mobility of teachers from one subject area to another irrespective of the relations in the lessons is waste in education. In order to appropriately manage human resource personnel in Anglophone secondary schools, it is important to consider related subject areas and combinations in high school before distributing teaching subjects to teachers. The situation may be different in other sub-systems of education, but in the Anglophone sub-system with the given specializations, a teacher's high school combination and performance together with related subject areas have to be taken into consideration prior to subject assignment to teachers in secondary schools.

Conclusion

The polemics surrounding mastery of the subject matter and mastery of teaching methods and skills have been at the core of this study. Drawing inspiration from John Dewey, the main thrust of this paper emphasizes that matter is inseparable from form in the pedagogic process. This argument is strengthened by the theory underlying Aristotelian Metaphysics- the inseparability of matter and form (Copleston, 1993).

In this respect, the current debate on curricular organization of teacher training colleges receives a certain degree of enlightenment. Teachers are to be trained in their respective disciplines and at the same time in the

methods of enhancing learning. This refers to the interdependence of matter and manner in the pedagogic process. Following this argument, the recruitment of teachers and the management of human resources in schools have to take into consideration the inseparability of matter and manner in the pedagogic process. Therefore, John Dewey's dialectic of subject matter and method provides perspectives for curricular organization and the management of teachers in educational development.

References

- i. Bertrand, Y. (1993). *Théories contemporaines de l'éducation*. Ottawa *Chronique sociale*. Bertrand, Y., (1999). "Expérience et éducation" in, J. Houssaye, (ed.) *Education et philosophies: Approches contemporaines*, Paris. ESF.
- ii. Copleston, F. (1993). *A History of Philosophy*. Vol. I. *Greece and Rome*. New York, Doubleday.
- iii. Deledalle, G. (1995). *John Dewey : Pédagogue et Pédagogies*. Paris, PUF.
- iv. Dewey, J. (1907). *The School and Society*. Chicago, University of Chicago Press.
- v. Dewey, J. (1966). *Democracy and Education: An Introduction to Philosophy of Education*. New York, Free Paper Press.
- vi. Forbi, K.S. (2004). *Rainbow of Educational Philosophies: Methods and Models*. Indiana, Bloomington.
- vii. Hist, P. H et al, (1970). *The Logic of Education*. London, Routledge & Kegan Paul Ltd.
- viii. Honderich, T. (ed.), (2005). *The Oxford Companion to Philosophy*. Cambridge, Oxford University Press.
- ix. Hornby, A.S. (2000). *Oxford Advanced Learner's Dictionary*, Oxford, Oxford University Press
- x. Leke, T.T. (2003). *Principles and Method in Teaching: Application, in Cameroonian school*. ANUCAM, University of Buea.
- xi. Nelson, J. L., Palonsky, S. B., & McCarthy, M. R. (2006). *Critical issues in education: Dialogue and dialectics*. New York, McGrawHill.
- xii. Reboul, O. (1989). *La philosophie de l'Education*. Paris, PUF.
- xiii. Schofield, H., (1972). *The Philosophy of Education: An Introduction*. London, George Allen and Unwin Ltd.
- xiv. Soetard, M. (2001). *Qu'est que la pédagogie; le pédagogue au risque de la philosophie*. ESF, Hartmann.