A CRITIQUE OF THE CURRICULUM OF THE ELEMENTARY PUBLIC SCHOOLS IN LEBANON

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Submitted in partial fulfillment for the requirements
of the degree Master of Arts in
the Education Department of the
American University of Beirut
Beirut, Lebanon
1957

A B S T R A C T

Ample experience in the teaching field gave the writer a certain educational common sense. Such common sense has, since the writer resumed her studies at the Education department of the American University of Beirut in 1953, developed into a defensible philosophy of education.

This paper seeks to put forth this edueational point of view to parents, teachers, school administrators and to any one interested in the nurture of the rising young generation in Lebanon. It is, however, primarily directed to the curriculum committee of the Lebanese Ministry of Education charged with curriculum development, for consideration as a basic philosophy by which to steer the educational endeavor in the elementary public schools in Lebanon.

The paper is divided into four main chapters.

Chapter One gives the reader an account of the current educational theory and practice. Consequently the preamble to the cycle of elementary education as well as the course of study as outlined in the syllabus issued by the Lebanese Ministry of Education have been explored. Descriptions of classroom teaching situations as actually observed by the writer in elementary public schools have also been included to give the reader an objective picture of the curriculum in practice. Results of surveys and questionnaires conducted by the writer, as well as criticisms levelled against the present curriculum are revealing and have therefore been presented.

Chapter Two depicts the educational philosophy and psychology which undergirds the present curriculum of the elementary public school. Since a curriculum constitutes the educational implications of the educational theory out of which it grows, the present course of study of the elementary cycle has been further explored as an index to such underlying educational theory. Such an educational

philosophy was seen to be the humanistic traditional theory of education further grounded in the classic Greek philosophy whose central principle is the "eternal veritiss" of Plato and the absolute species of Aristotle.

Chapter Three presents a theory of education, which in its goals and its methods marks such a departure from the practice of the traditional school that it has been called the "new education". In contrast to the humanistic conventional theory, the new education was seen to be grounded in the experimental mode of thought, in the evolutionary doctrine of Darwin and its correlative, the concept of continuity and process as well as in the ethics of Democracy.

A detailed account of the philosophical, psychological and social bases of the new education were established . These have been seen to consist of the philosophical view that reality is for man what he makes it to be in the service of practical ends; that in a changing and precarious world, ideas and conceptions are operational in nature and that therefore the pattern of scientific inquiry defines the pattern of thought, that knowledge is the successful adaptation to environment; that values and ideas are not primary but are rather powers things win to the accumulation of their consequences. The psychological basis was seen to consist (in the light of the evolutionary doctrine) of the view that behavior is intrinsically adjustive in nature and that learning is a product of adjustive acts undertaken by the living creature in its struggle to attain satisfying existence though the better utilization of its surroundings. The social basis was seen to consist of the democratic conception that institutions, laws and standards develop from within the context of group activity and that they are to be judged experimentally in an evolving society run on non-authoritarian basis.

Chapter Four seeks the implications of the new educational theory, for the

aim, content and method of the curriculum. This has been necessitated for unless these implications are drawn out and incorporated into a concrete curriculum the new education put forth will remain in the theoretical realm and remote from actual implementation. Such an embodiment however, necessitates a remaking of the curriculum for when, the implications of this new theory on the curriculum are considered, they are found to be inconsistent with those implied by the philosophy and related psychology underlying the present curriculum of the elementary schools. Consequently, a proposal has been made to reorganize the curriculum of the elementary public schools along new lines.

Since the "Project Method" as a philosophy of method, synthesizes, unites and brings to focus the essential features of the new education a proposal for organizing the curriculum of the public elementary schools around projects has been made. A concrete example of how this may be done, has also been included. Such a proposal implies the writer's thesis that the new educational theory be made foundational in the education of the rising young generation in Lebanon. To the extent that a society is committed to the scientific mode of thought and to the democratic way of life, it will, be disposed to support a theory and practice of education which expresses the principles implicit in these two movements, for a people like to have that education which is consistent with its own intellectual outlook and moral attitudes.

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P R E F A C E

The curriculum of any country is a reflection of its philosophy of education and of life. It is a function of what a people believe what their society should be, and what they believe their children should learn as well as how they learn it.

The present curriculum of the Lebanese elementary public school embodies the educational implications of the humanistic traditional philosophy of education. Under the French mandate over Lebanon, it was prescribed for the elementary schools. When the mandate came to an end, the same curriculum, with slight modifications, was retained. For more than ten years now, this curriculum has been slavishly followed by the public elementary schools. By retaining it, the Lebanese Ministry of Education has automatically and inevitably retained the educational philosophy and psychology underlying it. Such an underlying philosophy has not been deliberately chosen by the average Lebanese educator and teacher. It has been given to them by virtue of the perpetuation of the curriculum. However, a number of Lebanese educators who are a product of the conventional educational theory strive to perpetuate the present curriculum because they believe in the philosophy back of it. Due to the fact that the conventional theory of education is absolutistic, it tends to perpetuate itself. Adherents of it fail to accept or

even conceive of any other alternative.

On the other hand not a few Lebanese educators, elementary school principals and teachers, supervisors and parents are dissatisfied with the present curriculum. Their daily experiences with children in and outside the classroom and the hard facts of life repeatedly point out to them the inadequacy of the present curriculum. Criticisms of it, suggestions and recommendations for its reconstruction are repeatedly being made to the curriculum committee of the Ministry of Education. An appeal for the remaking of the curriculum of the elementary school is not an uncommon phenomenon in Lebanese educational circles.

Many Lebanese students of education even go so far as to question the educational ideal underlying the present curriculum. For several years now, the writer has been a student of both the conventional as well as of the newer theories of education. She is convinced along with many of her Lebanese professors of education, colleagues and students that the new theory of education is more atuned to the nature and needs of children as well as to the aspirations of the Lebanese people. She even questions whether the traditional educational stereotype will any longer fit the new world into which the Lebanese are moving. Politically the country is shifting from a feudalistic system to a democratic state, from an authoritarian to an equalitarian social system. It is on its way to building its economy on industry and modern agriculture and is in great need of science and technology.

Convinced that the new theory of education is preferable and aware of the fact that a theory cannot be fruitful unless it is incorporated in practice, the writer believes that the new view needs to be embodied in the curriculum of the elementary schools. Such an embodiment, however, necessitates a remaking of the curriculum for, when the implications of this new theory on the curriculum are considered, they are found to be inconsistent with those implied by the philosophy and related psychology underlying the present curriculum of the elementary schools.

It is the purpose of this essay:

1. To give the reader an account of the theory of the present curriculum. Consequently the preamble to the cycle of elementary education as well as the course of study as outlined in the Syllabus issued by the Ministry of Education have been explored. Moreover, the assumptions in which the curriculum committee of the Lebanese Ministry of Education ground the present curriculum, are also given as an index to the situation in theory.

Descriptions of classroom teaching situations as actually observed by the writer in elementary public schools are given in order to give the reader an objective picture of the curriculum in practice.

The writer has distributed a questionnaire among elementary school teachers. It was worked out in such a manner as to elicit their opinion in regards to the existing situation in the

elementary school curriculum. General criticism levelled against the present curriculum are likewise revealing and have therefore been included.

2. To show that the curriculum of the Lebanese Public elementary school grows out of the traditional educational philosophy. The method of approach for such an attempt is historical and philosophical.

3. To present the new educational theory and its bearings on the curriculum. This has been included because a proposal for the remaking of the present curriculum along new lines must be philosophically and psychologically justified and because the new curriculum to be proposed consists of the educational implications of the new theory.

4. To propose teaching by projects in the elementary school because such is the best modern organization of the curriculum which would implement the new education. A concrete illustration of how this may be done, has also been included.

The writer wishes to acknowledge her indebtedness to Dr. Habib Kurani, to Professor George Shahla and to Professor Howard B. Leavitt, for the deeper formative influences that enter into the writing of this paper. For the intellectual atmosphere and inspiration necessary to the writing of this paper and for help and valuable suggestions, I am deeply indebted to Dr. Habib Kurani, chairman of the Education Department, and to Professor John S. Brubacher of Yale University, who have most graciously given me of their precious time and expert guidance.

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CHAPTER I

CURRENT SITUATION IN LEBANON

I - Historical Sketch

Before, 1914, there was only one public school in Lebanon.[1] During the French mandate which extended between the two world wars, the French started a public school system but never completed it. In 1943, after a period of political struggle which extended for a quarter of a century, the French mandate over Lebanon came to an end and Lebanon realized its full independence.

The nationalist feeling which swept the country after 1943,[2] led some Lebanese educators to establish common educational objectives and common curricula for all schools and to extend educational opportunities to the Lebanese children. It was felt that education was indispensable to a democratic country that believes in the dignity of the human person and relies on the pooled intelligence of its members. It was felt that the different schools with their varied educational philosophies and

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1. Mathews, R.D. and Akrawi, Matta, Education in Arab Countries of the Near East. American Council on Education, 1950, Washington D.C., p. 503.
2. Especially following the political crisis of November 11, 1943.

curricula that existed during the mandate had widened the gap between the different communities and sects and had prevented real national unity. Accordingly, the Ministry of Education issued educational edicts organizing the schools and prescribing the curricula.

On October first, 1946, the president of the Lebanese republic, according to the Lebanese constitution and upon suggestion by the Ministry of Education, issued Decree No. 6998 regulating the course of study of the elementary cycle. The decree is in two parts - a preamble where the aims of education in the elementary schools are stated and a detailed description of the prescribed subject matter content to be taught in the five elementary grades.

II - Current Situation in Theory

A. Description of the present curriculum

1. As to aim:

In the preamble for the elementary cycle, it is stated that the ultimate aims of the elementary school are:

a. To prepare the Ideal human being, the true man.[1]

b. To prepare the good citizen.

No mention is made either of the kind of society desired or the personal and social virtues necessary for such a society.

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1. See Syllabus issued by the Ministry of Education, p. 16: 2.

No attempt is made to reduce the aim of the good citizen into concrete activities or behavioral terms. No suggestions of activities or concrete situations that may lead to the attainment of the aim of good citizenship are given. The teacher of the elementary school finds no guiding light in the preamble as to what constitutes the good Lebanese citizen and much less as to possible experiences that may lead to that.

2. As to content:

The preamble is followed by the time tables showing the weekly distribution of time among the different subjects. Following is a draft of these tables to give the reader an idea of the way the school weeks is spent in the elementary public school.[1]

Distribution of Hours per Week

First Year

	No. of Hours
Religion	1
Moral and National lessons	1½
Reading, memorization, penmanship, copying	6
Object lessons, conversation	2
Arithmetic	5
Drawing, manual arts	2
Music, singing	2
Physical education	2½
A foreign language	5
Total	27

1. Taken from the Syllabus of the Lebanese Ministry of Education and Fine Arts issued in 1946, pp. 18-20.

Second and Third Years

	No. of Hours
Religion	1
Moral and National lessons	1
Reading and memorization	3½
Sentence formation, grammar, dictation	3
History and geography	2
Arithmetic	5
Object lessons	1½
Drawing and manual arts	2
Music, singing	1
Physical education	2
In the Foreign Language	
Reading, memorization, penmanship	2½
Grammar, exercises, and sentence formation	2½
Total	27

Fourth and Fifth Years

	No. of Hours
Religion	1
Moral and National lessons	1
Reading and memorization	2
Grammar, dictation	2
Composition, penmanship	2
Arithmetic	5
History, geography	2
Music, singing	1
Drawing, manual arts	2
Object lessons, hygiene	2
Physical education 2	2
In the Foreign Language	
Reading and memorization	2
Grammar and dictation	1½
Composition and penmanship	1½
Total	27

The time tables are followed by a detailed description of the subject content required in each of the five elementary grades. Portions of the different subject matter content are alloted to each grade and the sequence in which the different school subjects are to be taught is indicated. Following is a draft of the subject content for arithmetic required in the third grade.[1]

1. Taken from the Syllabus issued by the Lebanese Ministry of Education and Fine Arts, 1946. p. 42.

Program of Arithmetic for the Third Year

First month is used for reviewing material assigned in second year.
Addition and subtraction of integers, and of decimal numbers of five or more digits each.
Multiplication by 3, 4, 5, digits - multiplication check.
Easy problems on the four operations.
First introduction to the metric system.
Use of ruler - decimeter, meter, decameter, hectometer, kilometer.
Gram - kilogram.
Liter - decaliter, hectoliter.
Piaster - and the 10, 25, 50, and 100 - piaster pieces.
Easy problems on this material and prices of things sold and bought - profit.
Rule for the simple direct proportion.

3. As regards method:

The foregoing description clearly shows that the elementary school curriculum is conceived as a body of knowledge, arranged according to the inherent logic of the subjects themselves, to be imparted by quotas to the pupil. Such a conception tends to emphasize the acquisition of a prescribed body of race experiences and to make that the controlling aim of the curriculum. As regards content, it consists chiefly of subject matter organized according to the inherent logic of the content itself. Consequently, as regards methods of instruction, it tends to stress logical analytical deductive approach and reduces behavior and concrete experiences to a minimum. When learning is acquisition of the race experiences logically constructed and expressed in subject matter foreign to the mentality and experience of the elementary school child, method would be conceived in a narrow sense as a set of mechanical devices to induce response on the part of the child. In fact most teachers with whom the writer

has been associated conceive method as tricks of the trade and a set of formulas to serve as guides in classroom teaching. Since emphasis in the present course of study is mainly but not exclusively on subject matter content as outlined in the Syllabus, the normal schools in Lebanon teach method conceived as a set of techniques to teach this subject matter.[1]

The subjects around which the present curriculum is organized are pigeonhole arrangements for classifying experiences of the race for the purpose of study. Arithmetic, for example, ought to be a statement of how people deal with a variety of experiences involving quantity. The arithmetic requirements as listed in the Syllabus[2] are abstract generalizations from experiences expressed in terms of addition, multiplication and fractions, decimals and percentages. Such a content constitutes a cross section of a great variety of experiences on the quantitative level. However, it is not the experiences that are classified in the curriculum nor even in the textbooks used. Arithmetic is taught as a subject logically formulated, rather than as means to help children gain efficiency in situations demanding number concepts and quantitative thinking. Likewise the requirements for the languages are technical aspects of language structures assigned to be learned regardless of their use in speaking or writing the language or in facilitating expression. The requirements for the Arabic language are abstractions on the language

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1. The writer attended few classes in the Lebanese Normal School for Women.
2. See the draft of the requirements on page 6.

level. Grammar is taught as a set of language principles.[1] Such prescribed requirements necessitate an atomistic logical approach beginning from the "simple" principles and generalizations and relying heavily on analytic deduction. This logical approach has even permeated the method of textbook writing. It is beyond the scope of this paper to discuss textbooks in elementary schools. It is pertinent to mention here that most of these textbooks are under the spell of logical structure. Especially is this true of Arabic reading books. The mechanics of reading are stressed. The unit element is the letter (as is the subject of the curriculum). Authors seem to be mainly concerned about the fixation of the sound and form of the letter in the mind of the beginner in reading.[2]

4. As regards type of evaluation:

As it stands, the present curriculum of the elementary school stresses a non-thinking type of evaluation. A prescribed content material authoritatively taught determines a type of evaluation which aims to measure the amount of knowledge acquired rather than the degree to which educational objectives have been transferred and incorporated into the child's personality. "Evaluation of the intangibles tends to be neglected."[3]

That such a type of evaluation is not only implied on theoretical grounds, but is an actuality is revealed by Decree

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1. See the Arabic Syllabus issued by the Lebanese Ministry of Education, p. 22.
2. For a detailed treatment of this subject the reader is referred to فارس، بهجة كمال - تعليم مبادئ القراءة - الجامعة الاميركية - دائرة التربية ١٩٥٦
3. See Lecture delivered at A.U.B. on January 1955, by Dr. Najib Sadakah, Former Directory General of Education in Lebanon.

No. 7003 issued on October 1, 1946. This decree sets up regulations for state examinations. Elementary schooling is crowned by the passing of the elementary state exam whose requirements are based on the content of the course of study. The holding of the Elementary School Certificate is the sole hope of pupil and parent alike. The ability of teachers and the standard of schools are measured by the number of students which pass the exam.

Not only is the general exam for the Elementary Certificate a type of evaluation implied by the course of study and its requirements determined by it, but it tends to perpetuate the present curriculum. In other words it is an effect of and also works as a cause for the kind of elementary education that exists.

Let us explore further how this implied type of evaluation colors the current situation.

In the first place, it tends to make school work uniform for all the children of the country. Since all elementary school children have to sit for this examination, the state examination tends to minimize individual differences. The result is that a large percentage of those who sit for it fail.

Following is a table secured from the statistics office of the Ministry of Education, showing the number of students who have passed the state elementary examination during the past thirty years.

Year	Total Number	Number Passed	Percent
1925	116	58	50
1926	229	119	52
1927	259	163	64
1928	267	147	55
1929	447	155	35
1930	401	187	47
1931	549	146	27
1932	586	222	38
1933	762	346	46
1934	1018	216	21
1935	1040	664	64
1936	1465	422	29
1937	1629	888	55
1938	1584	827	45
1939	2135	1301	61
1940	2124	1125	53
1941	2357	499	21
1942	1940	874	45
1943	1981	1207	61
1944	2365	1676	71
1945	3123	1703	55
1946	3618	1849	51
1947	3937	2238	57
1948	4497	2353	52
1949	5607	3965	71
1950	7454	4134	55
1951	9287	5614	60
1952	11139	7569	62
1953	13440	7096	53
1954	14064	8230	58½
1955	15100	10383	68.7

The average percentage of those who passed the exam over 31 years is 51%, i.e. half of those attending the elementary school in the country fail the exam.

Set by other than the teacher[1] the state examination puts a premium on conforming to routine requirements. Memoriter prevails and cramming is quite common. Dr. Sadakah said that he

1. Article 6 of Decree No. 7002 which regulates the elementary state examination, states that the chairman of the examining committee puts the questions of the examination. The Minister of Education chooses the examining committee. These are to be chosen from among state officials.

witnessed many schools where the teacher gives the pupils examples of compositions and dictations obliging them to commit these to memory - a fact that explains the identity of material written on exam papers. The correcting committees usually doubt that cheating has taken place. The fact is that pupils had not copied during examination time but had rather committed to memory what was assigned by teachers in the classroom.

The pupils sitting for this examination are required to write a piece of composition in the Arabic language. Dictation in one of the two foreign languages is also required. Arithmetic problems, questions in history, geography and general science are included. Drawing for boys and sewing for girls are included.[1] The civics-ethics course outlined in the course of study is not required in the state examination. Accordingly this course is badly neglected in the lower classes and almost completely left out as the pupil reaches the higher grades and approaches examination time. In spite of the fact that the ethics-civics course best lends itself to the possible realization of the aim of the good citizen stated in the preamble, this course is thus relegated to a subordinate position and is even dropped out.

Last but not least is the fact that this type of evaluation, tends to stifle the creativity and initiative of teachers for developing both, curriculum and method. The state exam constitutes

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1. See the Syllabus of the Lebanese Ministry of Education, pp. 8-9.

an incubus and reduces byways for applying new methods and instructional materials to a minimum. Mr. Zaki Naccashe, principal of the Mackasid School addressed a roomful of teachers saying: "When the certificate examination is abolished, we would then feel free to do our task of educating the young generation of Lebanon."[1]

5. As regards leadership for Curriculum Construction:

The course of study of the elementary school tends to assign leadership for curriculum construction to subject specialists and college professors. Being a series of documents to be revised, construction of the course of study is mainly the area of specialists, superintendents and directors. Curriculum work as it exists in Lebanon today is crystallized and reduced to a formula - revision and readjustment of content material, addition and subtraction of certain subjects and reshuffling of courses. The procedure is thus additive rather than developmental.

In Lebanon, as it is the case wherever the curriculum mainly consists of subject matter, curriculum development is done mainly by subject specialists. This method not only exists at present but is forecast in the most recent educational legislation which is supposed to reorganize the whole educational system of Lebanon along new lines. One of the most outstanding

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1. At the educational conference on Creative Learning held by the A.U.B., Education Department on May 18, 1956.

features of this organization is to separate instructional activities from administration and to organize these under separate directorates. In spite of this seeming decentralization, (the creation of a directorate of elementary education) curriculum development is always left to the central office. A committee of specialists and superintendents is charged with curriculum work. The curriculum is always to be prescribed and uniform.[1]

As a result, experimentation, better adaptation to local needs, and continual development of the curriculum are stifled. The elementary teacher's job is to teach that which is prescribed in a central office by a supposedly subject expert.

B. Assumptions underlying the present course of study

Supporters of the current educational situation ground the present course of study in certain assumptions. These will be presented here and will be discussed in fuller detail in Chapter Two.

On several occasions, the writer held interviews with members of the curriculum committee (mostly trained in the humanistic educational tradition). They have verbally pronounced the following assumptions as grounds for the present course of study.

We have already seen that the present course of study emphasizes the intellectual memory type of learning. This is

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1. See Decree 3389 Article No. 12.

supported by the assumption that man is essentially a rational being and that therefore his educational life should be predominantly intellectual.

The present course of study implies that the aim of the ideal human being is realized through a body of content material. This belief is grounded in the second assumption which holds that the full humanization of the individual is brought about by steeping his intellect in the culture of the race, selected and arranged into subjects. The following incident reveals the extent to which this assumption permeates the thought and action of the curriculum committee.

In 1954, a committee of elementary and post-elementary teachers was appointed to consider the revision of the present course of study. Several petitions had been sent to the Ministry of Education pointing out that the course of study was overloaded. To reduce this congestion, the committee suggested the extension of the elementary cycle to include six instead of five grades. The subject matter content was left untouched; the contention was that if the contents were to be reduced, the curriculum would suffer emaciation and the standard would drop. According to Dr. Sadakah[1] the requirements of the elementary course of 1924 were distributed over six years of elementary schooling. In 1944, the same amount of content had to be squeezed into five years, a fact that explains the congestion criticized. That

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1. Lecture addressed at A.U.B. in October 1954.

content material cannot be reduced, is based on the belief that the child cannot afford to be ignorant of a certain body of facts upon his leaving the school.

We have seen that the present curriculum is constituted chiefly of subject matter having an objective existence and organized according to the inherent logic of the content itself. Such a curriculum tends to emphasize knowledge as such and in isolation than in its social context or in its functional relationships to child life. The correlation of subject matter with the experiences of pupils is thus made unnecessary. The underlying assumption is that when the child is immersed in a body of knowledge which due to the generality of its principles and due to the formal nature of its content and organization furnishes the child with the ability to solve his personal problems and to meet the demands of society.

This assumption is further grounded in the theory of formal discipline and which heavily supports the present curriculum. The theory holds that the mind is made of distinct faculties; these can be sharpened on certain content material which inherently serves as a whetstone and is thus made sharp enough to cut through the problems that may arise later in life. Since mental powers transfer automatically, the present work of the teacher is to sharpen the child's mind on the content material required. Actually many teachers of elementary schools hold this view. Arithmetic (5 hours per week) and Arabic grammar (6 hours per week) constitute the bulk of the work in the elementary

school program.[1] Since these subjects are usually regarded as inherently good sharpners of the reasoning faculty[2] school teachers hold that the training or the discipline given by these subjects is the element of chief importance in the early years of schooling. They still use the school as a "gymnasium" for the minds of the young.

We shall later see in Chapter Two that these assumptions are further grounded in the traditional theory of education, responsible for the present situation of the elementary school curriculum.

C. Discrepency between statements in the preamble and the course of study

In the following section, the writer will examine further the preamble of the elementary cycle issued by the Lebanese

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1. See time tables in the Syllabus issued by the Lebanese Ministry of Education, pp. 18-20.
2. In his "Conduct of the Understanding" the English philosopher John Locke (1632-1704) who is considered the chief exponent of the disciplinary theory of education, says: "I have mentioned mathematics as a way to settle in the mind a habit of reasoning closely and in brain... having got the way of reasoning which that study necessarily brings the mind to, they might be able to transfer it to other parts of knowledge."
Similarly Plato speaks of Mathematics as inherently good sharpner of the mind. In his Republic Book VII: 526 p. 220 he writes: "Further, have you ever noticed that those who have a natural capacity for calculation, are generally speaking, naturally quick at all kinds of study, while men of slow intellect, if they are trained and exercised in Arithmetic, if they get nothing else from it, at least all improve and become sharper than they were before."
Quintilian, the Roman educator, in his "Institutes of Oratory" says: "As regards geometry it is granted that portions of this science are of value for the instruction of children; for admittedly it exercises their minds, sharpen their wits."

Ministry of Education and the introductory paragraphs prefaced to the subject matter requirements listed in the course of study. A delineation of the statements found in the preamble as regards the curriculum content and the methods of instruction will reveal how inconsistent these statements are with the content and methods of instruction emphasized by the course of study described in section A of this chapter.

1. Statement concerning the contents of the curriculum:

The subject contents around which the present curriculum is organized are prefaced by a statement which pronounces the behavioral outcomes that should accrue from instruction in the given subject.

In the introductory paragraph to the Arabic language course[1] the content required constitutes two activities:

a. Good comprehension

b. Good expression in the mother tongue.

It is also stated that the contents taught should be derived from the activities of the child in his immediate environment and should be within his experiences in time and space. It states also that the teacher should endeavor to correlate subject matter with the experiences of the child and bring the content to life by the use of audio-visual materials.

Likewise, the course in geography and history is prefaced by a paragraph stating the desirable behavior to be fostered

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1. See the Syllabus of the Lebanese Ministry of Education, p. 21.

through these subjects. It is stated that since the study of geography and history lend themselves to the development of the good citizen, they should be taught with this purpose in mind.[1]

Also, the introductory paragraph to the civics-ethics course states that the child is a social being capable of living cooperatively and ethically in a community. The civics-ethics class should foster in the child the human values and the desirable attitudes necessary for such a life and should help the child aim at the good and true both in thought and action. The content of the civics-ethics subject constitutes living in a community of people, the experiencing of the child of moral and spiritual values which would bring out the importance of cooperative living with fellow citizens.[2]

Nowhere is it stated, as is implied in the present course of study that the contents of the curriculum constitute chiefly of subject matter to be acquired as an end in itself. On the contrary it is clearly stated that the school subjects are but means to ends. Each represents a historic type in intellectual activity pursuing a distinctive aim and animated by a distinctive spirit. The introductory paragraphs show that the subjects are to be taught to provoke that aim and to light that spirit in the child. The subjects are sought not for the mere knowledge of the organized facts, nor for the values that may inhere in them, but rather as instrumental for the provocation of the desired aims

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1. op.cit., p. 27.
2. op.cit., p. 38.

and activities.

2. Statement concerning method:

As regards methods of instruction, several statements stand in contrast with the methods implied by the present course of study.

It is clearly stated that in the temporal order, concrete experiences should precede abstractions. The teacher should begin with sense impressions of color and tune and then proceed to verbal symbols and letters. Methods should be in line with the developmental stage of the elementary school child.[1] In the same strain, it is stated that classroom methods of instruction should be varied, motivating and interesting and should be appropriate to child life.[2] Again, the child is instinctively active and spontaneously seeks expression through work.[3]

It is nowhere stated that the child is a passive recipient of the gems of knowledge or that his mind is a graveyard where inert bits of facts and fragments of content material are to be buried. Instead, reverberations of the methodology of giant educators echo in the preamble of the elementary cycle of the Lebanese Ministry of Education. With the great Moravian educator, John Amos Comenius (1592-1670) considered as the sower of the seeds of modern attempts to make the curriculum more realistic and less verbal, it is stated that sense impressions come

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1. op.cit., p. 16.
2. op.cit., p. 13.
3. op.cit., p. 13.

first. In his Didactica Magna, Comenius proposes the use of the eye, the tongue and the hand as methods for instruction. In his Schola Pansophica he repeats this idea and calls it Ratio, Oratio and Operatio. His Orbis Pictus carries out the method of leading by inductive method to a generalized knowledge. In paragraph three of page three of the Syllabus, the curriculum committee, similarly urges the teacher to resort to concrete experiences and sense impressions and to avoid abstract generalizations.

With Rousseau (1712-1778) the members of the curriculum committee have set themselves against verbal teaching and would arrange instruction so as to correspond with child growth. With him they have stated: "Let us transform our sensations into ideas but let us not jump abruptly from sensible objects to intellectual objects; for it is through the first that we are to reach the second. In the first movement of the mind, let the senses always be the guides. The child who reads does not think... he is not receiving instruction but learning words."[1]

With Pestalozzi (1746-1827) we have said that sense perception is the basis of instruction. With this great educator who foreshadowed the modern curriculum, the Ministry verbally agrees that teaching should begin with the simplest elements and proceed gradually according to the development of the child, i.e. in psychologically not logically connected order.[2]

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1. Quoted by Monroe P., A Textbook in the History of Education, the Macmillan Co., London, 1918, p. 570-71.
2. From the Principles of Methods, summarized by Morf, one of Pestalozzi's ablest disciples, p. 620.

The departmentalized atomistic nature of the present course of study is similarly inconsistent with the educational psychology revealed in the last paragraph of the preamble. This last paragraph reads as follows: "Let every teacher behold a basic concept in education namely that the child's personality is a whole and an integrated unit and therefore should be educated as such. Subjects are but means for such an end."[1]

Thus, it is obvious that the present curriculum has fallen short of incorporating the statements which appear in the preamble. A yawning gap between what is stated in the preamble as regards aims, contents and methods and what is implied on theoretical grounds by the present curriculum, have been revealed. That the discrepency is not only inferred on theoretical grounds and that there is a real lag between what is stated in the preamble and what is actually practiced in classroom situations, is to be presently disclosed.

III - The Situation in Practice

During a post-graduate course in curriculum development a public elementary school in the vicinity of the American University, was adopted by members of seminar as a project. The purpose of the adoption was to afford the members an opportunity to observe the course of study in an actual classroom situation. The writer visited the classes regularly for two months and

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1. See Syllabus of the Lebanese Ministry of Education, p. 17.

occasionally for a third month. Although this particular school cannot be considered representative, yet it can serve as an illustration of the methodology in operation herein discussed.

The recitation method predominated in the classroom. Extensive use was made of drill and homework exercises. Pupils were over-burdened with the treatment of empty disconnected details. Fourteen school subjects were treated as unrelated except for geography and history which are superficially correlated in the first two grades. Summaries, principles were committed to memory. Extrinsic motivation was resorted to in the form of "billet d'honneur", satisfaction tickets and good or bad points. These are distributed by teachers to motivate pupils to apply themselves to contents alien to their experiences. Portions of the content of books were assigned to be prepared as lessons.

One day, the following incident took place:

On a Monday morning, a teacher faces the third grade in an arithmetic class. She starts thus: "Before we start solving the problems, we ought to memorize this rule - opposite directions, we add; same direction we subtract, you understand." And the class reechoed yes. The rule was repeated several times by the class in unison. The rule was then written on the board and the pupils transferred it to their notebooks. On page 30 of the textbook in arithmetic problem 370 read thus: "Two trains started off from the same place at the same hour, one travelling North and the other South. The first travelled at a speed of 40 km. per hour and the second at 27 km. per hour; what would the distance between

them be after they had travelled for 4 hours?" The forty pupils took out their copybooks and started to solve. They all realized that the trains went in opposite directions and that they had to apply the "opposite direction - add" rule to determine the distance between the trains starting from the same spot. Some took a short cut, applied the "simple" compact rule and added all three numbers mentioned in the problem! Others simply added 27 and 40. On page 32 problem 394 was of similar nature. After assigning it to the class, the teacher reiterated: "Opposite directions", and the class continued: "We add; "same direction", "we subtract".

When the class session was over, the writer exchanged a few ideas with the teacher. "Once they know the rule, they can then solve the problems." "It is always simplest to start with the principle", was the sentence that concluded the teacher's comments and disclosed her conception of methodology.

Since the elementary public school is departmentalized (the atomistic approach had affected organization), the same teacher teaches a particular subject throughout the grades.[1] This same teacher was in a fifth grade class in arithmetic. The lesson was upon the principle: "The percentage is equal to the base multiplied by the rate percent." The pupils, in an attempt to solve the problem, began by scrutinizing the problem

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1. See later in this chapter, the questionnaire conducted by the writer for the opinion of teachers as regards departmentalization of the elementary school.

for the numbers that stood for the items in the rule - base, rate. These numbers were then interchanged with the letters of the formula and the answers worked out.

The writer had likewise observed a geography class of the third grade. At the end of each lesson in the textbook, a short summary of the material was given. Being compact, short, simple, it was memorized by the pupils. The teacher was thus assured that the content material prescribed in the course and found in the required textbook is taken care of.

That principles and summaries are only structurally simple; that they are arrived at only after people have lived their contents; that they are the compressions of expanded direct experience, seem to be ideas unheard of by both the arithmetic and geography teacher alike. Although the ministerial edict urges the teachers to start with concrete experiences and sense perceptions, instruction in the classrooms reverses the order and follows the logical rather than the psychological order. The systematic logical generalities which appear in the content material in arithmetic, geography and language are presented in such a way that it seems so foreign to the real activities of the school boy and girl. No attempt is ever made (so far as the writer's observations show) to relate what is taught to child's everyday experiences or even to try to show him its bearing on his life.

Although it is stated in the ministerial edict that the child is instinctively active and spontaneously seeks expression

through work, very little provision or even possibility exists to engage in manual activities, in excursions, to make things, to dramatize, to have gardens, to grow plants, to paint murals or to do some of the varied things that children love to do. In the first place, the school adopted, like most of the elementary public schools, is an old house building turned into a school. The rooms are small and house an average class enrollment of forty to fifty children. There is hardly enought space for children to move about. In the second place, sitting chairs, desks arranged in rows and fixed to the ground, a teacher's table and a blackboard constitute the only classroom furniture. No traces of a library, no tools, no instructional materials are to be found. There seems to be hardly any need for anything else since the children are primarily in class to be instructed in the specific knowledges and skills listed in the prescribed curriculum.

The classroom atmosphere is rigid, formal and authoritarian. It is teacher-centered. She tells them what to do, how and when to do it and she evaluates their success or failure in meeting her demands.

The writer dropped in at the school one afternoon to observe a geography class in the third grade. The lesson was about the summer resorts of Lebanon. One child brought to class a piece of cedar wood on which was engraved the largest cedar in Lebanon. He picked it out of his desk and showed it to his teacher. The teacher snatched it saying: "The class is no place

for play; stand up and enumerate the chief summer resorts of Lebanon." The child answered timidly: "I find the cedars the best among the summer resorts." "Is that how you have studied the lesson; your grade for today's recitation is failing!"

The introductory paragraph to the civics-ethics course states that the aim of this course is

1. To prepare the child for life in a community of people.
2. To instill in the child moral and spiritual values.
3. To form the child's character.
4. To stress the importance of cooperative living by allowing the child to experience cooperative and moral living.

However the assumption[1] that a child learns the right formulated statement, he would at the right time act on it (which supports the intellectual memory type of the present course of study) is actually practiced in the classroom. The civics-ethics teacher teaches the intangibles that should accrue from this course, merely by precept. Definitions of such words as nation, administration, sacrifice, love of service, obedience, orderliness, truth (listed as requirements for this course) are merely committed to memory by the child and reproduced to the teacher. The teacher assumes that learning comes in a situation abstracted from life and typically centers her instruction of the attitudes and ideals of the good citizen, around a content of little meaning to the elementary school child. Actual practicing

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1. See infra Section B, p. 13.

of these traits and real experiencing of the content of these terms, is in no way provided for by the method of instruction.

It is beyond the scope of this paper to describe further my observations at the public school in the vicinity of the University. However, I still retain a vivid picture of the classrooms visited - a bored, unhappy, passive child who is made to fit even broken to bits of superficial facts and inert ideas which bear little meaning and use for him. That many other educators and teachers are similarly dissatisfied with the present course of study will be revealed in the following section.

IV - Dissatisfaction with the Present Curriculum

A. A survey of opinions among teachers

The writer conducted a survey of opinions among eighty-five elementary school teachers. To get into the schools and to interview teachers, a permit was secured (through the education department of the American University) from the Lebanese Ministry of Education. The times for interviews were arranged by the principals of the schools. A questionnaire was worked out for the purpose and eighty-five copies of it made. The writer visited the schools at the assigned times and held individual interviews with the teachers. The subjects were allowed to read the questionnaire and answer the questions. In few cases the writer had to answer explanatory questions about it. The following are English and Arabic copies of the questionnaire.

The Questionnaire

Name of School attended by the teacher _____

Degrees held _____

Amount of experience _____

Check the answer which you think best answers the question by encircling the letter preceding it.

1. Which do you think ought to be the primary aim of elementary education in Lebanon?
   a. Prepare the pupils for the Elementary Certificate examination.
   b. Teach the child the subject matter required in the curriculum.
   c. Foster the development of the total personality of the child.
   d. Exercise the child's mental faculties.
   e. Teach the child the 3 R's and some moral and religious principles.

2. On what basis do you think evaluation of the pupils in the elementary school ought to be?
   a. On the amount of individual progress made by the child.
   b. On the amount of required subject matter acquired by the child.

3. Which type of organization do you think ought to exist for the elementary school?
   a. An elementary school where home room teachers teach the respective classes and where together with their pupils plan the activities of the class.
   b. A departmentalized elementary school where the different subjects are taught by different teachers throught the grades.

4. Which of the following duties do you think ought to fall within the scope of the elementary teacher's responsibility?
   a. Participation in the formulation of the school curriculum.
   b. Establishing relationships with the parents of the pupils.
   c. Assuming responsibility for guiding and counselling the students.
   d. Teaching in the classroom.
   e. Sharing in the community life wherein the school stands.

5. After considering the pros and cons of the Elementary General Examination, do you believe the exam should continue or be abolished?

6. Suppose you were given a chance to improve the school you teach in, list in the space below, some of the conditions you think are in greatest need of improvement.

اسم المدرسة التي تخرّج منها المعلم _____

اسم الشهادة التي يحملها _____

مدى خبرته في التربية والتعليم _____

ضع علامة بقرب الجواب

١. ما هي مهمتك الاولى نحو الولد الذى اوكل اليك شأن تربيته ؟

أ ـ تأمين نيله الشهادة الابتدائية .

ب ـ تلقين الطالب المواد المقرّرة في المنهاج .

ج ـ تنمية شخصيته من مختلف نواحيها .

د ـ ترويض مواهبه الذهنية .

هـ ـ تعليمه القراءة والكتابة والحساب وبعض مبادئ الديانة والاخلاق.

٢. على اى اساس يجب ان يكون تقييم الاولاد في الصفوف الابتدائية ؟

أ ـ بالنسبة للتقدم الفردى والنمو الشخصي الذى يحرزه الولد .

ب ـ بالنسبة لمقدرته على تعلّم الكمية الكافية من المواد المطلوبة منه .

٣. اى نوع من التنظيم يجب ان تتمشّى عليه المدرسة الابتدائية ؟

أ ـ مدرسة حيث يهتم في شؤون الصف الواحد معلم او معلمة واحدة ويقوم ذلك المعلم مع الاولاد بتصميم الاختبارات والمواد التي يراد تعلمها .

ب ـ مدرسة حيث يقوم بتعليم مختلف المواد المدرسية المقرّرة عدة معلمين .

٤. ضع علامة بقرب كل من الاعمال الآتية التي تعتقد انها تقع ضمن نطاق مسؤولية المعلم الابتدائي .

أ ـ المساهمة في وضع منهاج الدروس.

ب ـ تنمية العلاقات الودية مع الاهلين والاتصال بهم والتفاهم معهم .
ج ـ توجيه التلامذة وتزويدهم بالنصائح المفيدة .
د ـ التدريس في غرفة الصف .
هـ ـ المساهمة الفعّالة في حياة المجتمع حيث تقوم المدرسة

٥. هل تعتقد بان امتحان الشهادة الابتدائية ضرورة ام انه بالامكان التخلي عنه اذا ما ادخلت على النظام بعض التعديلات ؟

٦. ما هي بعض التحسينات التي تريد ادخالها على المدرسة التي تعلّم فيها الآن اذا ما اتيحت لك الفرصة . استعمل الفراغ ادناه للاجابة .

When all the questionnaires were filled, the answers were tabulated. It is pertient to mention that the statements regarding the name of the school attended by the teacher, the degree held and the kind of experience had, show that the subjects are products of the different systems of education that exist in Lebanon. Mostly, these are holders of the Lebanese Brevet with the normal certificate of the Lebanese Normal Schools and have had experience in the public elementary schools. Twenty questionnaires show that the teachers are holders of the Certificate of the British Syrian Training College. Fifteen are holders of the Sophomore Diploma of the Beirut College for Women. Twenty one are holders of the License of the Higher Teacher's Training Institute of the Lebanese University and seventeen are holders of the Baccalaureate of the Lycee Francaise. Four have had a teaching experience of several years at the German School. Twelve are holders of the Mackasid Schools Diploma.

The answers are tabulated on the following tables.

Table I

Tabulation of Answers to the First Five Questions

Number of Question	Possible Choices	No. of times checked	Percentage
Question 1 As regards Aim	a. Prepare for Certificate	4	4.7
	b. Teach Subject matter	6	7
	c. Develop Total Personality	68	80
	d. Exercise mental faculties	3	3.5
	e. Teach 3 R's, etc.	4	4.7
Question 2 As regards Evaluation	a. Individual Progress	67	79
	b. Amount acquired	18	21
Question 3 As regards Organization	a. Home Room	63	74
	b. Departmentalized	22	26
Question 4 Teacher's Responsibility	a. Curriculum development	61	72
	b. Parent teacher relations	23	27
	c. Counselling pupils	81	95
	d. Teaching in class	85	100
	e. Sharing in community Life	77	90
Question 5 General Certificate Exam.	a. Continue	32	37
	b. Abolish	53	62

Table II

Table Showing List of Improvements Suggested by Teachers

Kind of Improvement	No. of times mentioned	Percent
1. Make curriculum more functional less theoretical	77	90
2. Arrange curriculum in such a way as to allow more pupil-activity	68	80
3. Adapt curriculum to child's needs and decrease content-too crowded	29	34
4. Increase Audio-Visual Aids, instructional materials, equipment, tools	85	100
5. Abolish Certificate	51	60
6. Reduce No. of pupils per class	25	29
7. Better building accommodation	23	27
8. Increase time allotment for civics, health education, manual arts, music	19	22
9. Level down age differences in class	8	9
10. Increase Salaries	5	6
11. Reduce No. of books used	2	2
12. Miscellaneous	5	6

Table I shows that the teacher's opinion is in favor of an aim, type of orgsnization and evaluation and of curriculum development other than those implied by the present curriculum.

Table II shows that the area with which there is most dissatisfaction is the curriculum of the elementary school prescribed by the Ministry. It also reveals the nature of the dissatisfaction.

B. Criticisms of the present course of study

Since the time the present curriculum was issued in 1946, there have been numerous petitions sent to the Ministry of Education for the readjustment of the course of study. Appeals for reconsidering the subject content and criticisms of the present organization are constantly forthcoming. Aside from official written petitions, many teachers and educators repeatedly point out the fact that the present curriculum is rigid, formal, uniform and theoretical. It consists of material presented apart from the uses it serves in life pursuits and without relationship to these.

In a recent book entitled, "Educational Consciousness and the Future of the Arab Countries"[1] the authors give the following criticisms of the present course of study:

1. The course is uniform and prescribed for the whole country in spite of the wide variations, economic, social and physical among the different communities, and in spite of individual differences among the children of the country.

2. The present course of study is traditional and restricted to the intellectual aspect of education. It is theoretical and overloaded with contents that have no functional relationships to the child's life.

3. Much of the content is not consonant with the needs, interests and the abilities of the children.

4. The present course of study is not consistent with the

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statements appearing in the ministerial edict.

In a lecture delivered at the American University of Beirut[1] Dr. Najib Sadakah, then Director General of Education gave the following as the main criticisms leveled against the present course of study. He claimed that these criticisms are based on a field work and experience of ten years ago.

1. The course of study as it stands, is not suitable to the nature and mentality of the elementary pupil. At six, the child is required to study a foreign language and arithmetic. At seven, he has to start composition, geography and history; so on until the age of eleven when he is overburdened with content material. In arithmetic he has to learn how to extract square roots of integers and fractions; he has to learn by heart such concepts as density and specific gravity, distance and speed and unit of work.

2. The course of study being overcrowded, memorization and verbalism are very common.

3. The course of study being mainly theoretical, the pupil leaves the elementary school filled with principles which he cannot apply in the service of his community.

In an address given at the commencement of the Ahliah College[2] Dr. Costi Zurayk, Acting President of the American University of Beirut, emphatically pointed out the fact that the

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1. Lecture addressed at A.U.B. in the Fall of 1955.
2. Address given at the Ahliah College, June 16, 1956.

present course is theoretical and overcrowded. Mr. Fuad Sawaya who is now Director General of Education in Lebanon, agreed fully with Dr. Zurayk and said that a readjustment of the course of study is truly necessary.

The Education Department of the American University of Beirut has been holding educational conferences for the last three years. The chief aim of these conferences is to introduce the concept of creative learning. The program of the conference held in May, 1956 included as one of its items, the presentation of new methods in the teaching of history and geography. A special room was chosen wherein many audio-visual materials were exhibited. When the teacher leading the discussion exhibited some of these teaching aids for vitalizing and enriching the prescribed geography and history course, Public school teachers remarked: "The course is so overcrowded with content that there is hardly time enough to cover it; the pupils have no time to produce any of these materials either."

Similarly the Education Department has been holding extension courses for in-service training of elementary teachers. The writer has had the precious opportunity of working with several groups, both during summer and in the fall. There seems to be a consensus of opinion among these teachers that their teaching is made artificial, dead, stale and loaded with inert ideas due to the nature of the contents prescribed, which has little relation to the everyday life of the child.

Such then is the situation of the present curriculum of

the public elementary school. In the following chapter, we shall fish in deeper waters and seek the philosophy and related psychology underlying the present course of study.

C H A P T E R I I

HISTORICAL AND PHILOSOPHICAL BASIS OF THE PRESENT CURRICULUM

I - Introduction

In Chapter I, we have seen that the curriculum of the public elementary schools is conceived as the requisite content of knowledge logically arranged for progressive acquisition by the child. The ultimate aim of elementary education, as stated in the preamble[1] was seen to be the realization of the ideal man, the true human being. It was revealed that educational method is conceived as tricks of the trade or as devices to induce children to apply themselves to the requirements of the curriculum. Moreover, the deductive a priori approach to knowledge was seen implicit in the logical arrangement of subject matter as well as operational in the classrooms of the elementary schools. The fact that evaluation of the educational endeavor in the elementary public schools is based on the amount of contents stored in the minds of children has similarly been

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1. See the Syllabus of the Lebanese Ministry of Education, p. 16: 2, see also p. 82.

ascertained by the very existence of the general examination for the Certificat d'Etudes Primaires, and by the nature of the examination requirements themselves.[1] Classroom instruction was seen authoritative, rigid and formal.

It has been said, with penetrating insight that the curriculum is a reflection of the educational philosophy that undergirds it. Consequently the present course of study described in the previous chapter will be used now as a clue to the philosophy of education out of which it grows.

An educational philosophy inescapably involves a conception of the three factors involved in the curriculum, namely - educational aims, individual and social, the nature of the learner and a conception of the learning process. What conception of educational aims are implicit in the present curriculum of the elementary public school? What outlook on the world do these ultimately stem from? What conception of the nature of the learner does the present course of study harbor and how does such psychological basis give rise to the course? What notion of the learning act is involved and how does such a concept give the curriculum its standing? What kind of a society does it reflect, and how does such social theory contribute to the conception of the present curriculum?

The answer to these questions waits on a presentation of the philosophy and psychology as well as of the social theory underlying the present curriculum.

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1. The writer secured copies of the examination questions over a number of years from the Lebanese Ministry of Education.

The writer is aware of the fact that these three factors of the curriculum constitute a consistent inextricable interwoven whole. However, a piecemeal approach has been followed only to make the analysis more clear. Moreover, attempt has been made whenever possible, to draw the parallels that exist between the conceptions of the three factos in question.

II - Metaphysical Basis of the Curriculum

Implicit in the conception of the curriculum previously stated, is the Aristotelian metaphysics which views the world as preordained absolute and changeless. The view was first established by the Greeks especially by Plato and Aristotle.

Plato (?427-347) lived in tumultous times, chaotic, disquieting and confused. He therefore aspired for a social political order that is stable and based on justice. Trying to establish an order firm and just, he decided that if thought and institutions are modelled after ideal patterns true in the nature of things for all times and places, happiness and justice would reign and a perfect republic would be established. He, therefore, said that behind the existing phenomenal conditions lie "ideal patterns", the noumenal fixed models of what ought to prevail.[1] These eternal ideals are primordial, absolute, unchanging; men need only to discover them. Once discovered, they should serve as blueprints after which existing institutions are to be patterned. To know them was to be in possession of

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1. Very much after the Pythagorean principles of Mathematics.

truth; to follow and obey them and live according to them was to be good and to appreciate them was to exhibit beauty.

Thus did Plato give the world the conception of eternal verities, of ideal patterns of thought and action to be aimed at always and everywhere.

Similar to Plato's "eternal verities", were the absolute "species" of Aristotle. In the physical realm Aristotle (384-322) looked around and beheld the regularity of the succession of day and night, the seasons and the diurnal motion of the fixed stars. In the biological realm, he noticed that each plant and animal propagated itself after its kind. He beheld change but since each plant and animal undergoes changes within a fixed cycle and propagates itself after its kind, change seemed to occur according to very well defined patterns. Since change was according to an anticedent structure enfolded in the cycle and unaffected by relations with other things into which functioning brought it, Aristotle subordinated change to the changeless. This unfoldment of biological life according to pre-existing cycles of development and the perfect regularity of the solar system convinced him that basic reality is changeless and determined. He, therefore, like Plato, established the doctrine of no change as a metaphysical and a priori absolute. For him the world was preordained and governed by prefixed patterns.

During the Middle Ages, the early church fathers seized on this prevailing Greek philosophy. In Plato and Aristotle the fathers found a basis congenial to their beliefs and therefore to

the social order they wanted to establish. They wanted to perpetuate an authoritarian religious creed uncritically accepted and a feudal aristocratic hierarchical social system. The Christian doctrine was therefore laid down in heaven as the Word, the logos present there since the beginning of the world. Realizing that authoritarianism went hand in hand with absolutism, the fathers would seize on nothing less than the concept of absolute fixed social status in a perennially fixed universe.

This mental attitude as regards the fixity of the nature of things was still prevalent well into the nineteenth century, although it took a form different from that of the Middle Ages. The cosmology of the seventeenth and eighteenth centuries viewed the world as a tremendous machine controlled by laws fixed and absolute. The universe composed of a finite number of physical objects (atoms), worked in accordance with these eternal laws of mechanics; these laws fixed and controlled the future movements precisely and forever. Scientists and philosophers of this age, mostly Deistic[1] established the laws of nature in place of the "eternal verities" of the Platonic metaphysics and the divine Logos, of a supernatural order. They "deified Nature and denatured God." The new faith, however, did not change the metaphysical changeless absolutes. It just shifted the source of absolutism. The Platonic ideas now under the name of "Natural Laws" were still the metaphysical absolutes which formed the bases

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1. The religious belief in a Nature's God.

from which propositions of physics, of law, of philosophy or theology were in general deductively worked out. Physicists, following the Newtonian logic were now trying to discover the natural controlling laws of the Newtonian machine (the world) and to discover the prefixed mathematical formula that controlled its movement once and for all. In the social-political field John Locke (1632-1704) spoke of "essential natural rights" given by the nature of the Universe and therefore cannot be "alienated" either by the action of the person himself or of the goverment. Thomas Jefferson's words "We hold these truths to be self-evident... that men are endowed by their Creator with certain unalienable rights"[1] are a clear repetition of Locke's doctrine of "natural" inalienable rights. These "laws of nature" which were accepted by scientists until the days of Einstein were clear instances of the Platonic "ideas" and were accepted as axiomatic and consequently as metaphysical a priori absolutes.

This attitude toward the universe would naturally emphasize the deductive a priori logic. The Platonic "ideas", Aristotle's "species", Newtonian "natural laws", Lock's "natural self-evident truths" established as metaphysical absolutes furnished the starting point, the bases from which propositions of the physical and social fields were in general deductively "proved." In those days when man had not yet discovered the method of discovery nor had yet John Stuart Hill (1806-1873)

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1. From the doctrines expressed in the Declaration of Independance, quoted by Kilpatrick, W.H. "Philosophy of Education", The Macmillan Company, N.Y., 1951, p. 51.

formulated the study of modern inductive logic, it was common to call on things already accepted as established truth in order to prove anything. The aim of such proof was not to establish new truths for how can there be new truths in a world already preordained. Rather the aim was to prove what the ancient savants already said and knew and what they already grasped of absolute truth. It was typical to begin with definitions and principles, like the axioms of Euclidean geometry, regarded as true and self-evident and from these to reason, to supposedly necessary and consistent conclusions. The philosopher's task was to comprehend the changeless real for this was finally significant and worthy of thought. Since observable happenings and daily experiences were controlled by an over-ruling pattern or law either of God or of nature or of society, therefore, man's philosophic task was to find this law and to realize it. Of the true man, there is an ideal pattern; of the social institutions ideal prototypes exist. Man's task was to proceed gradually towards the realization of these. His task was to progress to a knowledge of ultimate reality for whatever evolves in time had already been involved from eternity.

Having thus established the eternal verities as a fixed frame of reference in the days preceding the scientific inductive experimental era, man could only with difficulty conceive of change as the basic reality; for what is there to be changed? The assumption that there is a prototype, a blue-print of truth for all modes of thinking and institutions which antedates all

endeavors of thought, annuls any notion of change or progress (except if the term progress is used to mean progression towards a predetermined end, law or idea). The conception that change is real and genuine and that events novelly emerge, was not yet born. In fact, such an idea would be a logical contradiction to the established view of the absolute nature of the world and its correlative, the deductive a priori logic. Rather, the actual conditions of life seemed consistent with it. In those days little happened that was significantly different in the lives of the people. The young generation copied its way of life from the old who in turn taught its young that very way. Tradition, custom, habit and quiescent acceptance sufficed to enable the members of a certain society to carry on life activities for there was great similarity between one generation and its predecessor.

Society, thus itself a result of an absolute metaphysics and a deductive a priori reasoning (an authoritarian absolutism puts off the searching of a mind liberated to create, effect and produce cumulative changes in a culture) was a concrete witness of this very outlook on life. Each supported and was consistent with the other. Nothing but a static authoritarian hierarchical closed society could exist in a world absolute and fixed. Man was thus doomed to his lot. He could do little but accept what was and therefore what is dictated from above.

In such a world, education's aim is striving toward the fulfillment of an ideal pattern absolute and immutable. In a fixed world educational aims are final and perennially fixed.

The aim of the preparation of the true human being, the realization of the ideal man[1] is obviously a remnant of the "ideal patterns" of Plato.

Such an aim assumes an end issuing from some outside source and lying outside the daily activities of children. It is something to be attained and possessed. It is rigid, remote and unchangeable. Such rigidity is responsible for making unnecessary the introduction of concrete situations or children's activities to the curriculum or the translation of the aim into behavioral terms. "Since it must apply anyhow, what is the use of noting details which do not count?"[2]

The static character of the aim (stated in the preamble) imposed from without the activities of children leads to a separation of means from ends and consequently "every divorce of end from means diminishes by that much the significance of the activity and tends to reduce it to a drudgery from which one would escape if he could."[3] This accounts for the difficulty of conceiving the curriculum in terms of concrete situations and for an unhappy idle child in the classroom.

General and ultimate aims such as we have for the elementary school curriculum, tend to be abstract and detached from

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1. See the Syllabus of the Lebanese Ministry of Education, p. 16 also p. 82.
2. Dewey, John, Democracy and Education; The Macmillan Company N.Y., 1916, p. 127.
3. op.cit., p. 124.

specific context. Hence the fact that the present curriculum is non-functional and divorced from life - a condition which we have seen decried by many Lebanese educators and which constitutes one of the chief criticisms directed towards the present curriculum. The theoretical nature of the curriculum criticized, similarly has its roots in ultimate and remote aims for a conception of ultimate ends puts less and less emphasis on present activities and situations and neglects concrete experiences.

The aim of the preparation of the true man minimizes the particular specific powers of the individuals. Because the general aim is so dear and ultimate it has to be attained irrespective of the capacities and interests of those educated. Hence the neglect of individual differences in the present curriculum.

Externally imposed aims, such as we have, necessitate an authoritarian atmosphere and emphasizes acquiescent acceptance. Because they are sure of their absolute aims, teachers teach, (as they do) in an authoritative dogmatic dictating manner. Since they are in possession of a greater amount of the absolute truth, their dictation is justified, even necessary.

The absence of creative learning, initiative, purposeful activities in the curriculum is rooted in the metaphysics already presented. In a world where change and novelty are not of the ultimate reality, there is no need for these because hard as he may try, the child cannot effect any significant changes. The curriculum exists to lead the child towards the ideal state and

not to provide him with opportunities to create or redirect his aims.

Since the aim of the ideal man is remote from the child's interests and needs, he can with difficulty apply himself to its realization. Hence the extrinsic motivation in the form of billets d'honneur which is so common in the public elementary school. The child cannot appreciate the aim of the Ministry of Education or of the curriculum committee or even of his teacher. It is too distant an ideal for him.

III - Epistemological Basis of the Curriculum

In considering the curriculum, we need to consider the nature of knowledge for this as well as metaphysics, underlies the organization, aim, content and method of the curriculum.

The metaphysics discussed earlier gives truth an objective absolute nature. Truth has been laid down in heaven from time immemorial. It exists objectively and eternally. Man's knowledge or ignorance of this truth has nothing to do with either the existence of the nature of this truth. Omar Khayyam stated this epistemology not very differently when he observed:

> Yea, the first morning of creation wrote
> what the last day of reckoning shall read.[1]

Aristotle's view that change is according to a potential structure inlaid in the germ and unaffected by relations with other things into which functioning brings it, gave the world the concept of

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1. Brubacher, J.S., Modern Philosophies of Education; McGraw Hill Book Company, N.Y., 1950, p. 31.

the externality of relations. Carried to epistemology, this concept gives knowledge an independent external, objective standing. It exists outside the experience of the knower and its nature is by no means modifiable by its interaction with the one seeking it. Stated differently, truth does not depend on or wait for its verification in activities but rather is outside the scene of concrete human experience. To know is to progress towards a prefixed truth.

Aside from the nature of knowledge, epistemology entertains a concept of the knowability of knowledge. The nature of knowledge we have seen as complete and perfect. Now, how is man to get to know it?

The traditional humanistic epistemology holds that the world is intelligible and can be known through rigorous rational deductions. In order to grasp perfect knowledge and essential being, man was endowed with intellect, with a rational faculty which is his unique essential characteristic and which partakes of the ultimate nature of reality.[1] His intellect can grasp the intelligible, the essence of a thing which can be conceptualized for it can lay hold of the essential form in the objects presented to it. When the form of the mind operates on the form of the object, it knows the object. Thus under this epistemology, knowing is participation in the very being of the object. It is for this reason that adherents of such epistemology are convinced that they can know absolute truth directly and non-emperically.

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1. See the following section on the psychological basis of the curriculum.

Moreoever this theory of knowledge holds that the more the intellect grasps of ultimate knowledge, the more cultivated it becomes and consequently the deeper it can delve through the depths of reality.

We shall now see how this epistemology has affected the curriculum.

Absolute knowledge is reduced to subject matter content in the curriculum. Subject matter is thus the funded capital of concepts; it is knowledge subjugated by the human endeavor in its progress towards absolute **truth.** Since the fundamental tenets of these concepts (culture) are rooted in immutable traits of reality and since there is abiding faith in these unchanging traits of reality, then knowledge provided as subject matter content is absolute, and universal and cannot be ignored. How can subject matter be minimized if it has the status of knowledge? Rather it is emphasized on its own account and subordinates the child to it. Hence the overemphasis of the present curriculum on subject matter as such.

Similarly the practice of prescribing the curriculum grows out of this epistemology which holds that there is universal and absolute truth. This truth is embodied in curriculum content as subject matter and is applicable for any time and place. Such a view stresses the universal rather than the particular. It similarly renders unnecessary the introduction of innovations, the development of the curriculum and the variation of the curriculum according to time and locality; for these are mere accidental particulars of a pre-existing universal truth. The dealing

of childhood in general, the minimizing of individual differences and interests, characteristic of the present curriculum lie herein.

In the light of such epistemology, it is now easy to understand the assumption made by the curriculum committee - the assumption that man is essentially intellectual, that the chief aim of the curriculum is to cultivate his rational faculty and that this is effected through immersing the child in the culture of the race - in the subject matter prescribed.

The metaphysical notion that man cannot alter the course of events or the essential nature of things reenforces the idea that the activity of the knower cannot alter the nature of truth. Hence the difficulty of conceiving the content of the curriculum as the concrete experiences of the child or his activities and the absence of these from our present course of study.

This epistemology is similarly responsible for the prescription of the curriculum. Existing prior and beyond the child's experience, knowledge can be set, arranged, and systematized by the curriculum committees beforehand and in a central office. It is all set for us in the Syllabus.

Treated objectively, knowledge can be accumulated compressed into words, into verbal symbols that stand for vicarious experiences. Hence the emphasis on words rather than or concrete experience - an emphasis hospitable to the verbalism we have seen wide spread in the elementary classroom.

Because acquisition and information of knowledge is worthwhile in and of itself by virtue of its ability to cultivate the intellect, then evaluation is in terms of the amount of knowledge of subject matter content stored in the mind.

We have examined the position that an a priori deductive method is man's surest path to knowledge. It is therefore the deductive logical approach rather than the psychological that is to be stressed and this is done in fact as we saw in Chapter I.

Subject matter was seen as the funded capital of culture accumulated by the human race in its movement towards absolute truth. Since the teacher has acquired a greater amount of it, he is in greater possession of knowledge. Being thus armed, is it any wonder that his teaching tends to be authoritative and dogmatic?

IV - Psychological Basis of the Curriculum

In treating the epistemological question of how does man get to know, of how can he achieve complete and perfect knowledge, reference has been made to a certain rational "faculty" which is able, through an intellectual process, to conceptualize the thing to be known in terms of its essential nature. Endowed with such an ability, this faculty is the surest road to absolute truth. Now, what psychological view does this "faculty" imply?

The psychology of longest standing has its origins in

Aristotle. Since then it has ruled Medieval educational psychology as well as Scholastic, Renaissance and Post-Renaissance psychological thought. Even up to the present time, it reigns supreme in many quarters. Twentieth century Lebanese educational psychology is still the Aristotelian faculty psychology which strongly supports the present course of study.

For Aristotle, the psyche or the soul is the self-activating dynamic principle of the human nature. This psyche, although unitary has a number of faculties which stand in hierarchical relationship one to the other. The mental faculties are superior to the bodily for although the bodily are important, since the mental or rational faculties activate and direct these, they claim the superior position. Besides the rational belongs to the spiritual realm which is superior to the material. According to Aristotle these faculties are aspects of the soul which is a unity. The Scholastic hold this same view with him. Such a psychological conception implies a structural view of the mind, that is, it views mind as an entity occupying space. It is this "entity" conception of the human mind that is responsible for the traditional educational view especially for the traditional concept of learnings.

This view holds that the main aim of the curriculum is to develop, strengthen or sharpen these faculties. Being an entity, a structure, mind can be sharpened. Supporters of faculty psychology, however, are not agreed on how the aim of sharpening is to be realized. The humanists hold that steeping the mind in a wide, varied and rich curriculum, that is, in the culture of the race,

can best accomplish the sharpening act. Adherents of the theory of formal discipline hold that a few subjects, inherently good whetstones, best serve the ultimate aim of education - the sharpening of the rational faculties. Implicit in such a concept is the assumption that the strengthening of the faculty will be made use of in later endeavors.

It is interesting to note in passing that, starting from a premise that the learner's essential nature is dynamic and active, faculty psychology, paradoxically enough, reduces man's mind to an entity, an instrument to wait until it is sharpened and then to be used.

That faculty psychology and its correlatives, the immersing of the child's mind in the content of the curriculum, and the theory of formal discipline, heavily support the present curriculum is obvious. The assumptions stated in Chapter I are outright subscriptions to it. The overemphasis on content as the epitomized culture of the race and the emphasis on the logical subjects (arithmetic and grammar)[1] are not less convincing that faculty psychology undergirds the curriculum. In an attempt to justify the decried overloadedness of the present course of study as well as the emphasis on the theoretical subjects, members of the curriculum committee of the Lebanese Ministry of Education put forth the traditional argument - the best way to insure the development of the child is to immerse him in the culture of the

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1. See time tables in the Syllabus issued by the Lebanese Ministry of Education, pp. 18-20.

race and the best way to sharpen his intellect is through the logical subjects.[1]

The present course of study is also affected by another school of educational psychology - that of behaviorism. The behaviorists wanted to get rid of the dualistic nature of faculty psychology, to rid psychology from its mentalistic character and to put it on an equal footing with the physical sciences. They therefore, reduced the behavior of man to a monism of the body, made mind a function of matter and built their psychology on physiology. Physiology being but body, non-thinking and mechanistic seemed a good basis on which to establish their "scientific" objective psychology.

Newton (1642-1727), starting from a naturalistic absolutist metaphysical frame of reference, analyzed the world ultimately into small material particles (atoms) which are self-existant. Those and their motion constituted all phenomenon. His logic was to analyze every complex thing to be studied, into its elements or atoms. Whatever is found true of these elements in separation, holds true in any complex whole or situational context.

The behaviorists seized on this Newtonian logic avidly and carried it over to the psychology of behavior. They analyzed mental phenomenon ultimately into small elements. These were called the conditioned reflex or the Stimulus-Response bond.

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1. See section on Assumptions in Chapter I.

Aiming at objectivity, they built psychology on the chemical and physical constitution of the body and banished consciousness, purpose, motive and personality from behavior. Learning for the behaviorists consisted of the aggregate of mechanical material connections. It is a mere conditioning, an effecting of stimulus response bonds.

In an attempt to explain how learning - conditioning - takes place, they leaned heavily on associationism for this is explanatory of all psychological events through the juxtaposition of mere sensory impressions. Ignoring the dynamic nature of the learner, learning was to be effected through drill and repetition. Education was thus made mechanical preferring impersonal habits to personal conscious creative learning. It was reduced to mere training; human personalities were but a conglomeration of stimulus response bonds stuck together.

That this scientific analytic mechanistic psychology underlies the present curriculum is apparent from its organization and from the methodology prevalent.

Casting an eye on the course of study enclosed in the Syllabus, we see there an aggregation of minute elements, a collection of specific and unrelated items to be learned one at a time. History affords a good example. The course consists essentially of a series of rather disconnected names, dates and specific events. It is assumed that the child, by merely memorizing the elements specified, will see the relationship between them, and by a stroke of magic combine these and thus obtain a

full picture of a certain historical event or character. Similarly arithmetic is analyzed into its logical structural parts. The language requirements are listed (as well as taught) as technical aspects of language structures. The unit element is the letter and the mechanics of reading is stressed. Most of the textbooks used are similarly under the spell of logical analytical structure.[1] The conception of curriculum content as subject matter areas divided into topics in turn broken into lessons presented as daily quotas for classroom work has its basis in the Newtonian atomistic psychology and its correlate associationism. The departmentalized elementary school is no less a witness that atomism has been likewise carried over to classroom organization.

Since, according to the behavioristic educational psychology, learning is but the effecting of neural connections, repetition, memorization of syllables and mechanical drill are necessary for associating the stimulus with the bond and for strengthening the bonds. The conception of method as mechanical devices and the extensive use of drill and homework exercises is due to the concept of learning underlying the present curriculum.

Moreover the conception of curriculum development as a mere addition and subtraction of subjects and reshuffling of subjects is due to an atomistic mechanistic psychology. The additive rather than the developmental procedure in curriculum construction

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1. See فارس، صبحة كفافي ـ تعليم مبادئ القراءة ـ الجامعة الاميركية ـ دائرة التربية ١٩٥٦ ص ١٤٢ - ١٤٢

C H A P T E R I I I

THE NEW EDUCATION

I - Introduction

For over three centuries now, the traditional curriculum, of which the present course of study of the Lebanese public elementary schools is but a prototype, has been subject to close examination. Educational giants like Comenius (1592-1670), Rousseau (1712-1778), Pestalozzi (1746-1827), Dewey (1859-1952) looked askance at its inadequacy. The extensive literature written on the subject since the turn of the century by different authors both in Europe and America indicates the extent of protest against it. Since a curriculum as means has no standing by itself but is a function of ends, critics have pointed out with great insight that a different conception of ends arising from a new philosophy should entail a reorganization of the curriculum.

We have seen in Chapter I that there is considerable dissatisfaction with the present curriculum among many educators and teachers in Lebanon today. Criticisms of it are constantly forthcoming and there is real demand for the remaking of the present course of study.

Dissatisfaction is a healthy sign and a symptom that

tensions do exist. Yet agitation is but the first step in the solution of a problem. The medical man studies a case at hand, digs deep to reach out for the causes of the symptoms. Unlike the doctor's procedure, the common discussions (centering around the curriculum) among education students and in-service teachers in Lebanon are descriptive rather than explanatory. During her work with teachers in-service and through her association with education students, the writer gets the feeling that a new set of techniques rather than a new philosophy of education is replacing an old set of techniques. Teachers list the characteristics of a new curriculum without fully grasping the underlying philosophy which gives rise to modern practice.

A classical curriculum acquires its main characteristics only when projected against a certain background - a certain educational frame of reference. It is this very frame of reference that should be reconstructed, if we expect students and teachers to grasp the essence of the modern trends which they wish to incorporate in the curriculum. A partial understanding of such underlying criteria is insufficient and not very useful unless the new truths which derive from an ever expanding knowledge of life, of man and of society are recognized.

However, the fact still remains, that the dissatisfaction with the present course of study reveals the existence, no matter how vague, of a certain frame of reference, a certain underlying philosophy and psychology of education. When the implications of this new underlying philosophy for the curriculum are considered,

they will be found quite different from those implied by the philosophy and related psychology underlying the present curriculum.

In order to consider the implications of the new educational frame of reference emerging in Lebanon today,[1] the philosophical, psychological and social bases of the new education are to be presented in the following pages.

II - Sources of the New Education

A. The Experimental Method of Inquiry

It took a martyr - the Italian Galileo (1564-1642) who was willing to give his life so that a new principle might be born - a principle that constitutes one of the main sources of the new education. It was he who lit the first spark of experimental induction - that method which was to remake the world. When Galileo dropped the two balls of unequal heaviness from the Leaning Tower of Pisa which hit the ground at the same time, his theory as to falling bodies won out and it proved the falsity of Aristotle's theory which held that the greater the weight the faster the fall. In establishing how bodies fall he established the principle of experiemental science - undoubtedly the greatest intellectual advance by man since the days of classical Greece.

Applying the experimental method to the physical sciences, Copernicus and Kepler in Astronomy and Galileo in physics all

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1. To be treated in Chapter IV.

challenged the concept of absolute fixed laws of nature. When Galileo said, "It is my opinion that the earth is very noble and admirable by reason of so many and so different alterations and generations which are incessantly made therein" he expressed the transfer from the permanent, absolute and fixed logic of classic metaphysics to that of the changing.

The experimental method operative in the physical realm gave man a new instrument of inquiry. Starting with the observed facts immediately at hand (rather than with absolute assumptions fixed in advance and self-evident) the scientific method with its twin - technology - revolutionized man's life. He beheld changes taking place in front of his very eyes and affecting his very life. But more significant than the comfort and conveniences which the technical appliances furnished man, the method of experimental science and the logic of the changing, gave man a new outlook on the world, still more important a new outlook on himself. Armed with the method of discovery in a changing world, he now can really effect, create and change. He can with his own effort discover significant and wholly new knowledge, (not pre-existing knowledge lying outside his experience) knowledge which can be verified by concrete experiment and observation rather than by rigorous deductive thought. Man now trusts himself. His intelligence counts. He can shape the world to serve his ends - he can conform it to his will. The experimental method introduced responsibility to his intellectual life and has elevated his very selfhood.

B. The evolutionary doctrine of Darwin

Another main source of the new education is the evolutionary doctrine of Darwin.

We have seen in Chapter II that the Aristotelian metaphysics, epistemology and ethics were embedded in the concept of absolute "species" - εἶδος - which was held to be the completed and perfected form or end of all things. This ultimate formal activity or purpose operates throughout a series of changes and controls these to a single course that ultimately leads to its own fulfillment. Although changes do occur, the absolute final form subordinates the aimless flux to its own perfect realization. In spite of time, space and environmental conditions, things unfold to a uniform type of structure and function inlaid in the species. This unfolding to a pre-involved essence, has made relations external between any thing and its surroundings. Moreover it made change constant and orderly and circumscribed by a pre-fixed cycle. Things in nature change only to realize their species - εἶδος - and nature as a whole is a progressive realization of purpose similar to the realization of "species" in plants and animals.

Carrying this principle to a concept of reality, epistemology and ethics, classic Greek philosophy gave these an absolute character. Since change is mere flux, genuinely to know was to grasp the permanent and absolute end that realizes itself through changes. Since what is seen is in change, direct experience does not satisfy the conditions of perfect knowledge. Since human experience is in flux it is not a reliable source for the apprehension

of reality, of perfect knowledge or of the ideal patterns of morals. The search for these was to be as has been noted in Chapter II, through the rational forms transcending ways of perception, experience and inference.

In spite of the fact that the experimental method of inquiry was operative in the physical realm in the sixteenth and seventeenth centuries and has already challenged the classic logic of the absolute and the pre-fixed, its impact on life, mind and values was arrested. The arrest was due to the apparent fixed cycles of plants and animals and the absolute "species" of Aristotle. The organic realm could not be permeable to the experimental method of inquiry. Unless someone could prove that the phenomenon of life is in a state of transition and evolution, scientific inquiry into life would be blocked.

It was Darwin's "Origin of Species" - itself a great scientific achievement - published in 1859 that did the task. Darwin's principle of natural selection cut right under Aristotle's fixed species. The changes in the life of plants and animals are not controlled and determined by a fixed type. Darwin asserted that these changes are but organic adaptations due to constant variations and the elimination of those variations which are harmful in the struggle for existence arising from prolific reproduction. Thus, if such is the nature of change, there is no call for a prior intelligent causal force to plan and to preordain them. Since variations are sifted out simply

by the pressure arising from the conditions of struggle for existence, there is no need for a prefixed patternof living things. If the breeder can under artificial selection, produce variations in the pigeon and give the pouter pigeon, the logic that variations in natural species are pre-designed can no more hold. Darwin thus ascertained that biological life is continuous with its environment and that its relations to it are internal. Structures vary and are even altered by these relations.

Thus Darwin has asserted that biological life undergoes genuine changes, that life evolves and is ever in the making. He thereby conquered the biological life for the principle of transition and consequently ushered the logic of experimental science for application to life, mind and ethics. Laying his hands upon the rock of absolute permanency and treating species as originating and passing away and life as transforming and generative, he made genetic and experimental ideas the method of asking questions and looking for explanations. Since he could say of species what Galileo had said of the earth e pur se muove - organic life was now permeable to the method of experimental induction and freed for use in philosophy, psychology and ethics.[1]

III - Philosophical Basis of the New Education

The philosophy underlying the new education consists of the bearings of the evolutionary doctrine, and the experimental method on metaphysics, epistemology and value theory.

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1. Dewey, J., The Influence of Darwin on Philosophy, Henry Holt and Company, New York, 1910, p. 9.

Until the days of Darwin, the absolute species of Aristotle and the "eternal verities" of Plato were the central principle of classic Greek philosophy which ruled the world for two thousand years. These absolute fixed types gave philosophy its task and method - to seek and to understand ultimate reality by a priori reasoning. To resort to testing, to experiment with ideas was unimportant for these could be grounded without such a procedure. But now, Darwin's assault on the fixed species was the very attack on the central principle of classic philosophy. His evolutionary doctrine supplanted the ontological premise of absolute being and instituted in its place the concept of process, change and transformation as the great reality. The changeless and the eternal done away with, philosophy could no more take its start from ultimate reality but rather from the experience of the actual objective world. The attack extended itself to the classic epistemology as well and to the hitherto dominant theory of ethics. With change now proclaimed king, knowledge is ever in the making and consequently can no more take its start in established and prefixed premises but is to emerge from the actual experience of it. Ethics and politics could no more be treated as fixed and absolute but rather as emerging from within the context of the activities of man and were therefore to be approached experimentally.

This newer logic and its impact on philosophy found first expression in the philosophical ideas of Charles Pierce (1839-1914). The Darwinian doctrine of evolution excited Pierce who was disciplined by laboratory experience in the physical sciences. Therefore

Pierce put forth the new concept (in great contrast to the concept supporting the traditional theory of education) that all philosophy takes its start from the experience of the objective world. He said that the muddles of metaphysics can be cleared up if one attends to the practical consequences of ideas. He insisted upon the desirability of resolving these metaphysical problems by practical distinctions unprejudiced by dogmatic presuppositions. In the spirit of science he was willing to put every question to the test. The pragmatic (Greek to do) maxim was first stated by him in 1878 and reveals very clearly how the new logic was carried into philosophy. "Consider what effects, that might conceivably have practical bearings we conceive the object of our conception to have; then, our conception of these effects is the whole of our conception of the object."[1]

William James (1842-1910) treated philosophy in the same manner and the impact of Darwin is easily discernable in his works. He rebelled against the verbal, abstract nature of philosophy and his life long endeavor was to transform philosophy (as well as psychology) into specific, concrete, vital and new observations of the qualities of men and the nature of things. His attitude towards philosophy rejected the exclusive self-consistent unity which the older concept held of philosophy and permits an openness to every item of experience. He asserted that every event and belief or idea cannot be accepted on authority, cannot even present a claim to truth unless it proves that claim by actual

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1. Under the classic philosophy the concept of a thing inheres in it, is absolute and exists independently of man's experience of it.

experiment. No idea or event can either be rejected or accepted a priori before it is experimented with. Its status is not prefixed in advance but depends on its consequences.

James asserted that throughout human experience, the reality or falsity of things or ideas, their truth or falsehood are not primary but rather depend on how they work out in life. This assertion is a clear indication of the extension of the new outlook on life[1] - an outlook which views the world as one of change, chance, plurality, novelty and struggle - to the conception of philosophy. Thus the Jameian movement is a rebellion against classic metaphysics and epistemology supported by the experimental method and Darwin's doctrine of change.

Another philosopher who attempted to carry the new view into philosophy is the French Henri Bergson. It seems quite evident that his "Evolution Creatrice" (creative evolution) had originated in Darwin's theory of evolution.

To him, the life process is the great reality. He makes this his ontological premise. For him real time is psychical, a sense of duration and not the spatialized time of the mathematician. Psychical life is rather a multiplicity of changing states which merge into one another while qualitatively enriching the enduring subject who is the great reality.[2] Time

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1. Resulting from the method of experimental science and Darwin's doctrine of change.
2. Bonhomme, M.B., Educational Implications of the Philosophy of Henri Bergson; The Catholic University of America Press, Washington D.C., 1946, p. 91.

conceived thus by Bergson was the intuitive experience of existence continuing itself. He concluded therefore that to exist is to endure and that to endure is to go on changing unceasingly. Thus Bergsonian durée (duration) was identified with real time and described as the overlapping of past, present and future. Being thus substantial it constitutes the ultimate stuff of which reality is made. His metaphysics, like that of Darwin and unlike that of Aristotle, is thus one of becoming. Everything is in process, flux, mobility and change. He thus affiliates himself with James and is regarded by many writers as the French representative of the Jamesian movement in philosophy. For him life is not bounded by rigid mechanical laws nor does it evolve according to a prearranged goal but springs from the "elan vital" from the creative impulse - the sole cause of evolution.

John Dewey, the great American philosopher and educator attempted to carry the new logic into philosophy. His instrumental logic (originating in Galileo and Darwin) freed philosophy from the muddles of metaphysics as well as from philosophy's sterile preoccupation with epistemology. Knowledge to be real must be functional rather than conceptual. It must see not so much the abstract nature of things (as did classic epistemology) as their actual operations in relation with the world of experience.[1] Knowledge is not something complete in and of itself, it is not objective and pre-existent, but can exist only in relation to actual or contemplated purposive activity. For him an

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1. For Dewey the only reality is experience and all experience is of objects in relation.

idea does not begin with established premises, but to have meaning, it must be a way of dealing with actual situations and difficulties. Moreover, since life is evolving and in transition and events emerge novelly, every idea concludes not with a certainty but with a tentative hypothesis that can be verified only by the sanction of experiment. An idea, a piece of knowledge, is true not if it fits the established pre-supposition (under the old view) but in proportion as it is an effecting instrument in the realization of desires and in the illumination of experience.

Since the starting point of Dewey's system of thought is biological, he sees man as an organism in an environment remaking it as well as made by it. Hence knowledge for him is an outcome of this interaction between organism and environment and is but the successful adaptation of the individual to his environment.

The Darwinian doctrine holds that relations in life are internal. This concept as well as the experimental method permeated the theory of value and gave rise to the conception that values are biological in nature and origin. They arise in the interaction of organism (valuer) with his environment. The value of things is determined by the way they advance the restoration of the equilibrium that is upset by the strain arising between the organism and his environment. Values are therefore subjective and relative to people and situations. Their worth is not determined unless an organism, a valuer is invqlved.[1] Things

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1. Under the old view, values exist independantly of their valuer.

have value because of the relation they bear to the person who values them. Under the new metaphysics, values cannot inhere in the form of things but are rather contingent on the evolving conditions of life. Under the new logic, they are experimentally determined rather than rationally grasped. They are determined by anticipating what value is the best means of attaining some end. They are thus "experimentally grounded rather than metaphysically in the nature of things or of man."[1] They derive from the one who uses them, rather than from a pattern set once and for all. To determine the value of things is not to seek their essence wherein lie their value; rather valuation is a matter of experimental inquiry just as knowledge is. They are chosen pragmatically: that is, on the basis of how they work out in practice, how they advance interests and how they realize anticipations. The pragmatic test of knowledge applies to the realm of value validity as well. But, even when thus grounded, they are like knowledge, ever subject to constant examination and further evaluation in the light of experience. For, in an evolving world, ethical aims, values and standards cannot be ultimate; they vary with time, person and place. Intelligence[2] alone can specifically and transiently determine values.

Thus the metaphysical theory that reality is for man what

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1. Brubacher, J.S., Modern Philosophies of Education, McGraw Hill Company, New York, 1950, p. 104.
2. Not in the traditional humanistic sense which holds that the role of intelligence is to know but in the sense arising from the evolutionary doctrine and the experimental method that it is an instrument for testing hypothetical solutions.

he makes it to be in the service of practical ends, the epistemological theory that knowledge is the outcome of successful adaptation to environment, and the value theory which holds that the value of things or ideas are not primary - not stations and qualities these are born with - but values are rather positions and powers things win to the accumulation of their consequences - these form the philosophical basis of the New Education.

IV - Psychological Basis of the New Education

A. Functional versus structural theory of the mind

We have seen in Chapter I that the theory of mental discipline as well as the assumption which holds that the ultimate aim of education is the cultivation of the intellect through immersing it in a wide and rich body of knowledge, heavily support the aim, content and method the present course of study.

In Chapter II we have seen that both the theory of formal discipline and steeping of the intellect assumption are corollaries of faculty psychology which underlies the present curriculum. Both of these theories are grafted on faculty psychology which holds that the mind is an entity, a self-existent structure composed of faculties and imply that these faculties can be sharpened and that the resulting increase in their cutting power can be transferred at will to any field of mental endeavor. They assume that a sharpened faculty becomes serviceable in life situations no matter how dissimilar from the one under which the original exercise took place. In other words, the resulting power can be transferred automatically.

We have further seen that many educators in Lebanon today criticize the inert nature of the curriculum content and decry the fact that this is unrelated to the needs of the Lebanese child in a Lebanese community. Such decried content we have seen justified by the theory of formal discipline.

When in the nineteenth century educators in the West vehemently criticized the curriculum content as being remote from the evolving conditions of life and needs of society, the theory of formal discipline was more strongly revived and was seized upon to justify the traditional curriculum. Contents could still claim a right for inclusion in the curriculum by virtue of the sharpening power they possessed.

But today, in the twentieth century, the justification by the disciplinary theory of the curriculum content cannot be experimentally grounded. Rather experimental psychology has cast considerable doubt on such a conception. At the turn of the present century Edward Lee Thorndike (a former pupil of William James) and R.S. Woodworth set up experimental situations to test the actual extent to which improvement in one area of activity would carry or transfer to other fields of endeavors. In 1901 he published the results of the experiment which stated that "there was evidence of transfer but only to the extent that there were identical or similar elements in the two situations under which practice took place."[1] These studies shook both the disciplinary theory and indirectly faculty psychology. Those clinging to the

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1. Brubacher, J.S., A History of the Problems of Education, McGraw Hill Book Company, 1947, p. 154.

present course of study can no more justify it on such a shaky basis. In connection with this theory, Whitehead says, "I have no hesitation in denouncing it (theory of formal discipline) as one of the most fatal, erroneous and dangerous conceptions ever introduced into the theory of education. The mind is never passive, it is a perpetual activity, delicate, receptive, responsible to stimulus. You cannot postpone its life until you have sharpened it. Whatever powers you are strengthening in the pupil, must be exercised here and now, whatever possibilities of mental life your teaching should impart must be exhibited here and now.[1] In the same strain, John Dewey says, "We cannot learn in general, we can only concretely learn something."[2]

It is true, however, that when successive activities have identical elements, transfer takes place; but this transfer is due not to automatic transfer but because the identical element is present in both cases. Consequently activities should be planned broadly enough so that they may contain various identical elements, if transfer is to be expected. To do that activities of children in the elementary school should be planned not around content as such and in isolation but in its social context.

Faculty psychology has also been attacked by the extension of the evolutionary doctrine of Darwin into the field of psychology, more specifically into the conception of the nature of man's mind.

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1. Whitehead, Alfred North, The Aims of Education; The New American Library, 1929, p. 18.
2. Dewey, J, Democracy and Education; The Macmillan Company, N.Y., 1916, p. 76.

The evolutionary view led to a functional (rather than a structural view held by faculty psychology) view of the mind. The evolutionists hold that mind is an emergent within the evolutionary life process and is a late-comer (rather than a spark of primordial mind present throughout history) in the evolutionary process which came to help man better adapt to his physical and social environment in an open universe. Mind is thus not destined from heaven to contemplate an external set of relations but to be instrumental in directing and reconstructing them. It is but the interactive adjustive process becoming conscious of the conditions involved in it.

John Dewey is perhaps the thinker who contributed most to the development of a theory of the mind consonant with the evolutionary principle. He, like Thorndike, held that the rational powers are not a demigod from another planet nor do they derive from transcendental forces, but are simply complex intellectual behaviors which developed from earlier and simpler organic acts of adjustment to surroundings.

In his "Logic, The Theory of Inquiry", Dewey asserts that "complex forms" are continuous with "lower forms" of activities.[1] Thorndike, in like manner, asserts that the human intellect consists of the secondary results of the great increase in the number and fineness of connections over those of animals. He says that a quantitative difference in associative learning is the

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1. Dewey, J., Logic, The Theory of Inquiry; Henry Holt and Company, N.Y., 1938, pp. 23-24.

producer of the qualitative differences called ideation, analysis and reasoning.[1] Thus both Dewey and Throndike reject the historic dualism between the bodily and the rational faculties and the concept of mind as an inner structure or a substantive entity made up of distinct faculties. Man's mind is not to be treated as an instrument in and of itself but rather as instrumental in helping man better adapt to his environment in the struggle for existence. Mind is an instrument of behavior rather than created and destined to grasp the essentials of Being and knowledge. Mind is thinking operative in the solution of daily problems and situations in a precarious world.

Moreover, since mind as thinking is operational in nature rather than contemplative of fixed reality, the pattern of thought cannot be merely deductive and discovering,[2] but should rather be patterned after the scientific mode of inquiry.

Dewey's formulation of the steps or phases involved in a "Complete Act of Thought" reveals clearly his attempt to carry the scientific method into the mode of human thinking - thinking as adjustive behavior arising in the interactivity of organism and environment, appearing within and staying within conduct. Both Pierce and James held that thought and activity are interrelated. Building on their analysis Dewey analyzes thought in the following manner.[3]

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1. Thorndike, E., Human Learning; The Century Company, N.Y. 1928, p. 52.
2. Certainly mind can have both of these functions. The instrumentalists' theory of the mind adopts the contemplative for aesthetic purposes.
3. Dewey, J., How we Think; D.C. Heath and Company, Boston, 1910, Ch. 6.

According to Dewey, thinking originates in the experience of a felt difficulty, in a situation characterized by real doubt, in a situation which is genuinely novel and for which man has no ready solution in his repertoire. Out of this life situation purposes develop and effort is generated to resume the equilibrium between the organism and his environment.

The second step is the making over of the "felt difficulty" into "an intellectual problem." Overt behavior stops now until the organism analyzes the nature of the difficulty and grounds his analysis in actual conditions and is guided by ideas.

The third step is the making of the inference about what needs to be done to solve the problem. This step is the most creative aspect of the act of thought for inference-making is the essence of thinking.

The fourth step is the testing of the inference or hypothesis. In this step both induction and deduction are used - the entertained inference is tried on the problematic situation and the actual conditions of the situation refine the proposed idea. This step involves making inferences and testing ideas by the consequences they produce in human experience.

The fifth step is the trying out of the refined idea or inference in the disturbed situation. The hypothesis is either accepted or rejected by what happens when it is put to the test of action.

Thus for Dewey, thinking originates in a situation of activity and culminates in a situation of activity. It is not having intercourse with an external world removed from its own functions or delving into the depths of absolute Being. It is man's instrument of adaptation in an evolving world.

B. A new theory of the learning process

Aside from rejecting faculty psychology and giving rise to a new concept of thinking, the functional theory of the mind embedded in the evolutionary principle, gave birth to a new concept of the learning process.

We have seen that the content and method of the present curriculum are supported by the intellectual memory type of learning. This holds that learning is acquisition of book material and consists of learning the words or statements of others and expects learning to come in a situation abstracted from life. It thus typically centers around content as such with little or no present meaning to the learner and holds that learning can be got mainly if not solely by repetition and drill.

By contrast to this theory, the funcational theory of mind and behavior, and the conception of thinking formulated by Dewey gave rise to a new concept of learning. In the process of interaction and transaction between organism and environment, the human organism is modified. Its subsequent behavior is different because of that which it has done and undergone. Since the life process is intrinsically adjustive in nature (the organism tends to adjust to environment for survival), in this process of doing and undergoing,

the adjustive efforts develop into modes of response to a variety of life situations. Such changed behavior wrought in the living organism through its interaction with the physical and social environment is what is meant by learning. Thus the new concept of learning views it as inherent in the interaction between man and his life situations, as creative of its own subject matter and since instrumental to the life process works inherently within it. The fact emphatically stated by Dewey that thinking is called upon and originates in a felt difficulty, in real doubt, and that the solution of the felt difficulty is the end of man's inquiry, makes learning a rote process (what is prevalent at present) unless it is anchored in a real problem and related to some felt difficulty which calls mind as thinking into functioning. Hence Dewey's learning through experience - experience (not in the sense that it is a mysterious process where an inner psychical agency seeks to know the external world) but rather as a form of behaving as "just certain modes of interaction, of correlation, of natural objects among which the organism happens, so to say, to be one."[1]

Dewey's assertion that the more real the problem, the better the opportunity for significant learning lies herein - in the fact that learning arises within the context of adjustive acts. The behavior of the organism is modified (learning takes place) as it begins to connect and correlate that which it undergoes with that which it does. Attitudes of expectations are thus

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1. Dewey, J., Creative Intelligence; Henry Holt and Company, N.Y., 1917, p. 37.

developed and the living conscious organism begins to react to things in terms of what they denote in the way of consequent satisfactions and dissatisfactions. It is through these experiences with environmental conditions that learning takes place rather than through verbal symbols abstracted from life.

Thus the new concept of learning holds that behaving, outwardly and inwardly, is essential for the learning process, that learning accrues best from a situation of real concrete living, that learning arises and is applied within experience.

Since the biological purposive approach to human nature and behavior gave rise to this new theory of learning, to better understand the new theory, the biological approach to man's behavior, must be considered further.

To start with, we have an organism imbued with the vital impetus - élan vital of Bergson - with the will to live and with spontaneous self-activity. In simpler terminology, the organism possesses certain basic needs that it actively seeks to satisfy in order to carry on life.[1]

The need concept explanatory of human nature and behavior is today widely accepted by most psychologists. There is today great emphasis on basic human nature and on the body as a biological organism. This emphasis increasingly postulates the dynamic nature of the individual and brings about a withdrawal from faculty psychology on the one hand and from the extreme behavioristic

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1. The biological approach to the study of man conceives man in terms of his instincts or basic drives rather than in terms of faculties - see Brubacher, John, Modern Philosophies of Education; McGraw Hill Book Company Inc., N.Y., 1950, pp.51-52.

school of thought on the other.

In the Psychological Bulletin, seven of the most recent books in educational psychology are reviewed.[1] All seven authors focus their attention on the individual who is regarded as a "biological organism which is aware of itself and is actively and persistently and more or less consciously seeking the satisfaction of certain basic needs. There is little disagreement about the nature of the basic needs which are generally classified as physiological and psychological or socially derived. Some of the physiological urges for example are pain or restriction of movement, sex, and fatigue. Some of the psychological needs are the need to belong, to be with others, the need for attention and affection, the need for approval, the need for security and the like. These needs or urges constitute the springs of man's behavior. Cronbach's statement, "whenever a person acts, he is presumably trying to satisfy a need"[2] is representative of the view held by the other authors. The mechanistic S-R. approach of the extreme behaviorists is neglected and in keeping with the concepts of needs, the individual activity springs from within. Mursell states that, "stimuli function only in the presence of needs."[3]

These needs with which the organism is imbued, build up tensions and create "gaps" in the individual, for characteristically

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1. Psychological Bulletin, Vol. 52, No. 6, Nov. 1955, The American Psychological Association Inc., Washington D.C. (Reviewed by Snyzz, D. - State University of N.Y., Teachers College).
2. Cronbach, Lee J., Educational Psychology, N.Y. Harcourt, Brace, 1954.
3. Mursell, James L., Psychology for Modern Education, W.W. Norton, N.Y., 1952, p. 48.

in life, strain arises between the organism and his environment. To reduce these tensions the organism becomes sensitive to his surroundings. The way he perceives these surroundings becomes the situation with which he is to grapple. In an attempt to resolve his tensions, he sets up goals and pursues them until he attains an equilibrium. Normally emotions serve as resource to help the organism pursue his struggle. In fact all his resources impulse, physical movement, glandular action, feeling, thinking - act cooperatively to resume this equilibrium. They do not act in disjunction but as aspects of one unified pattern. All activity mental and physical is mobilized and integrated. "To each stirring belongs its peculiar "set" or "pattern". Man thus experiences whole "sets" and perceives whole situations (not disconnected bits of ideas).

In such an endeavor, thinking is the only feature restricted to the human organism. It is resorted to, in order to help the individual size up the confronting situation and to help him make plans and set up goals for dealing with it. While he is thus engaged, it helps him to evaluate the process, and to redirect the ways in order to better attain his goal. Due to the thinking ability of man, he is conscious; he knows what he is striving for, he knows why he has set up goals and for what purpose. And it is because of his consciousness that man has the privilege of experience "experience being a specific kind of life content as a self-conscious being sees it when he is in active interaction with his environment."[1] In the process of interaction the early stages

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1. Kilpatrick, W.H., Philosophy of Education; The Macmillan Company, N.Y., 1951, p. 23.

remain with him to shape the later stages of the same experience "Experience, then in a true sense, is a kind of life in which the early stages pervade, through learning, the later stages to shape these further efforts."[1] Learning, therefore, arises in and from behaving especially where behavior is modified. The organism learns therefore through his behavior, through its efforts at controlling a situation to his ends. We may say, then, that learning is identical with behavior.

This conception of learning is widely accepted by most psychologists today. The psychological books referred to above, reveal much the same point of view. All the author's conception of learning is much in line with Dewey's conception of the "Complete Act of Thought." The reviewer of the books summarizes the conception of learning as follows:

1. Learner's awareness of need.
2. Existence of an obstacle.
3. This requires learner to interpret the situation.
4. Attack on the problem in terms of the learner's interpretation.
5. Consequences of learner's attack.
6. Reinterpretation of situation.
7. New attack.
8. Learning stops when learner is satisfied.[2]

In fact any other conception of learning is not adequate in a purposive dynamic conception of life. Under the metaphysics

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1. Ibid., p. 24.
2. Psychological Bulletin, Vol. 52, No. 6, p. 513.

that life is ever evolving and under the epistemology that knowledge is ever in the making and that thinking arises in problematic situations, the learning process takes on an inherent purposive character. The situations with which an individual is confronted are ever new and different to some degree. Were they identical, one could learn, through mere drill and memorization, fixed patterns of behavior to fixed situations and then apply them accordingly. But with the emergence of the modern notion and fact of rapid change, affairs develop in ever new fashions, new situations confront continuously. Every new situation is unique and genuinely novel. As Whitehead said, "Each event is a process issuing in novelty." When, therefore, situations are new, the organism inevitably needs to contrive new response patterns and rework older ones as well. This new contriving is a creative action as far as the organism confronting a situation is concerned. It is exactly this creative phase that both faculty psychology and the mechanistic S.R. psychology ignored. For both the creating has already been done. Both ignore the fact that the organism (learner) must create for himself the new response and this is effected only while he is engaged in an experience, or while he is behaving or while he is in interaction with a novelly developing environment.

The reader may at this point ask how does the organism learn the patterns of response to new situations?

According to the gestalt theory of learning which supports the new education, thinking and problem-solving are a "progressive

realization of forms, a process of recentering. By recentering is meant the discovery of new forms of figure-ground organization in which an inadequate and ultimately disorderly mode of centering is thrust aside in favor of a newly recentered pattern."[1] In other words when an individual is up against a problematic situation, he contrives a way out by reconstructing both the situation and his experience. This implies that the situation upsets a total field of forces, which includes both the environment and the learner. Hence learning is not just the simple impact of these disturbed forces on the mind of the learner.[2] Rather it is a reinterpretation of the whole field. As a result of such reorganization of relations the "organism is a different being. Novel functioning leads to a modification of human nature and learning is the actual building of new structure."[3] The organism is thus continously accommodating his changing self to changing and changeable surroundings.[4]

Through this process of recentering (the Gestaltist term) or to use Dewey's words, through the "reconstruction of experience", man is able to discover new things and solve new problems. Problem solving is not like Thorndike's stamping in and stamping out of definite pre-existing bonds but an activity directed toward an end - "an activity that is a continuous whole and in which every part actively falls into place in the total pattern that alone gives

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1. Gardner, Murphy, Historical Introduction to Modern Psychology, Revised edition, 1949, p. 290.
2. The behaviorists' and associationists' view.
3. Brubacher, J.S. Modern Philosophies of Education, McGraw Hill, N.Y., 1950, p. 61.
4. Butler, S., The Way of all Flesh - quoted by Kilpatrick, W.H. Philosophy of Education, The Macmillan Company, N.Y. 1951, p.25.

its significance."[1]

While the organism is thus engaged in contriving new solutions or patterns of behavior, he is necessarily rebuilding his self, for as we have seen, such a rebuilding is inevitable. It is implicit in the very act of contriving. Facing a difficulty he will try one new response after another until finally one response may be accepted as meeting adequately the needs of a situation. This very fact of acceptance changes the very self of the organism. The self consciously identifies itself with the full range of relationships implied in its activity and readjusts and expands its past ideas of itself to take in new consequences as they become perceptible. The pattern so accepted to act on henceforth becomes by and through the fact of acceptance incorporated into the person's very organism. "Each such new learning in making its contribution rebuilds in so far the very structure of the organism."[2]

Thus learning through actual experience has two aspects. The child creates what is to him a new behavior pattern and the child incorporates the one pattern he himself contrived and therefore accepted into himself as an integral part of his own being.

Besides, while the individual is engaged in such a process, he is not only learning the thing immediately under consideration, but along with it, what Kilpatrick calls, concomitant learnings such as personal attitudes, attitudes towards the subjects of

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1. Heidbreder, Edna, Seven Psychologies, 1933, p. 354.
2. Kilpatrick, W.H., Remaking the Curriculum, p. 27.

study, towards the teacher, towards one's self. In other words, the learner is building within himself the constituents of character - his ideals, his beliefs, his habits of work, his action and feelings; he is establishing tendencies in his self on which to act henceforth. These are intrinsically involved in such a process. Because the organism responds as a whole his behavior is integrated. It, therefore, includes not only the knowledge and skills, but along with these, a reconstruction of his very personality. As the child learns that certain purposes are desirable, that certain solutions are better than others; that certain solutions should be discarded while others prove more efficient and profitable, attitudes and ideals emerge.

C. Organismic versus mechanistic atomistic psychology

In Chapter II we have seen that the Newtonian "scientific" procedure underlies the content and method of the present course of study. This Newtonian logic based on the philosophy of material essentialism, tried to reduce all phenomenon to its ultimate elements or atoms. When these elements were studied in separation what was found of them as such was held to be true of the whole original phenomenon. Such a procedure implied two suppositions which are in line with the metaphysics underlying the present curriculum. The first is that the world is made of a primordial stuff and its correlative that any phenomenon is explained as the mechanical sum of its constituent elements.[1]

As for the first supposition, the doctrine of evolution

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1. The concept of material essentialism excludes the notion that relations affect the constitution of elements.

refutes it for it has established the concept of process and continuity in place of essential ultimate being and has therefore made flux and change as the ultimate reality. Moreover the Einsteinian physics refuses to accept the concept that solid, indivisible particles - atoms - are the essence of matter. Modern physics has given us the equation $E = MC^2$, that is, matter is just a form of energy and that energy and matter are mutually transposable. The idea of matter as lumps of atoms is obsolete today and in its place a field theory of forces has come.[1]

In modern physics logical dichotomies and conceptual antithesis are losing ground swiftly. "Their places are taken by more and more fluid transitions by gradations which deprive the dichotomies of their antithetical character and represent in logical form a transition stage between the class concept and the series concept."[2] Certainly the modern continuous logic permits of continuous variation and change and implies that transition stages are always present. Freud in abolishing the boundary between the normal and the pathological, the ordinary and the unusual was certainly reasoning from a frame of reference where things are continuous and his doctrine has greatly influenced the modern tendencies of continuity and fluid transitions.[3]

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1. Brubacher, J.S., Modern Philosophies of Education; McGraw Hill Book Company, N.Y., 1950, p. 47.
2. Quoted by Kurt Lewin, A Dynamic Theory of Personality; McGraw Hill Book Company, N.Y., 1935, p. 24.
3. In an unpublished Doctorate thesis, Dr. Najarian, P., tried to depict the logic of continuity and how it has permeated the writings of several philosophers and psychologists. The thesis is an endeavor to draw out the logic of process underlying the writings of John Dewey, of Kurt Lewin, of Otto Ranke and of Sigmund Freud.

In contrast to this modern notion of continuity in physics, the Aristotelian physics held that the nature of an object does not depend upon the relation of that object to the environment and that its nature belongs to it once and for always irrespective of its surroundings. For example, according to the Aristotelian physics, the tendency of light bodies to go up inhered in the bodies themselves and the downward tendency of heavy objects was seated in those objects. In modern physics not only is the upward tendency of a lighter body derived from the relation of this body to is environment, but the weight itself of the body depends upon such a relation. According to Lewin, the kind and direction of the physical vectors in Aristotelian physics are completely determined in advance by the nature of the object while in modern physics, the existence of a physical vector always depends upon the mutual relations of the object to its environment.[1]

As for the second supposition, that of elementarism which means that when one has reduced a complex to its supposed parts, that these parts constitute the real key to the understanding of the complex whole, the modern tendency seems to be away from it. Although there is no clear theoretical treatment or positive answers from experiments as to the theory of atomic or non-atomic character of psychological events, the tendency is certainly toward an organismic psychology rather than toward elementarism. This newer tendency conceives that the component

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1. Lewin, K., Dynamic Theory of Personality; McGraw Hill Book Company, N.Y., 1935, p. 28.

parts of a total need to be seen in their inter-relationships in order to understand the whole structure. Relations between parts of a whole and between wholes are internal rather than external. The nature of a whole changes, with the way its parts are related to each other. "A change in a thing's relations also alters the thing itself. They are part of the very constitution of the thing itself."[1] If the Einsteinian physics refuses the idea of the irreducible components of reality, then we have to accept the idea that relations are internal for the externality of relations leads to an atomistic view of reality. For atoms being the irreducible core of all relations, relations must be external.

This tendency of seeing component parts in their inter-relationships is thus in accord with general trends in physics which is towards fields and wholeness.. It is also in accord with the new tendency in Biology toward the actualization of "Evolutionary patterns involving the inter-relationships of different organs, of whole individuals and even of species.[2]

William James seems to have foreshadowed this modern anti-atomistic tendency. The analytic method, the breaking down of phenomena into their elements seemed to him to be unwarranted. Writing in Psychology, he said that experiences are not groups of elements hitched together. Unlike Locke, who is a structuralist (who for example would hold that the taste of lemonade is the sum of soureness, coldness plus sweetness and so on), James thought

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1. Brubacher, John, Modern Philosophies of Education; McGraw Hill Book Company, London, 1950, p. 26.
2. Gardner, Murphy, Historical Introduction to Modern Psychology; Harcourt, Brace and Company, New York, 1949, p. 295.

that such analytical, mechanical, atomistic approach to mental processes and experience is distorted. Mental content cannot be broken into elements nor can we subdivide consciousness into a series of temporally distinct phases. On the contrary there is a continuous flow, a stream of thought, a constant flux of consciousness."[1]

In line with the doctrine of evolution, James rejected the structural analytical approach and refused to analyze experience into temporal pigeonholes. Mental life, he held, is at any time a unity, a total experience like the flowing and changing stream. There is no starting or stopping; instead a "dynamic readjustment in the complex experience is constantly taking place."[2] He thus rejected mechanical analysis as unfruitful.

Henri Bergson, the French philosopher, had similarly expressed the evolutionary outlook when he said that the perceptual whole which one experiences on a clear night includes an integration of everything from stars to the mental condition of the perceiver during the event.

However, it was Charles Von Ehrenfels, the Austrian psychologist (about 1890) who more adequately questioned the atomistic view that was operative in psychology. He put forth the question: What does one hear when he hears a melody? Does he only hear the mere sum of the tones heard of six different people each playing one tune? The answer was certainly no. He therefore concluded

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1. op.cit., p. 196.
2. op.cit., p. 285.

that in the individual's experience of the melody something else is real besides the sensory tones themselves - something created by a mental functioning, something over and above the sensory ingredients, something belonging to organized forms. He, therefore, coined the term "form quality" - Gestaltqualitat - to describe that which a melody (in this case) possesses which is not given in the component tones. "If there are form qualities which go with certain sequences of tones, these must be regarded as new elements in experience."[1]

Parallel to Ehrenfels' investigation, the vitalist Driesch, the German philosopher biologist, developed a similar view in Biology. He held that a super-mechanical agency is immanent in the organism. This supra-mechanical mental function, which he called the psychoid, like the gestaltqualitat coordinated and regulated the sensory and reflex mechanisms. Thus both Ehrenfels and Driesch held that meaningful behavior is inexplicable on purely mechanical basis.

Following Ehrenfels, several German psychologists, namely, Wolfgang Köhler, Kurt Koffka and Max Wertheimer, set up experiments for the purpose of showing that an understanding of a whole experience of an individual cannot be understood by breaking such an experience into its component parts. Wertheimer vigorously protested against the general scientific movement from below to above. He believed that an understanding of wholes of structured

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1. Gardner, Murphy, Historical Introduction to Modern Psychology; Harcourt, Brace and Company, N.Y., 1949, p. 286.

units cannot be achieved by starting with these ingredients, that enter into it. The whole structure should be understood first and then the components. This position of the gestaltists is justified when we know that in accord with the new metaphysics they hold to the concept that parts do not have fixed qualities; rather their attributes are defined by their relations to the system as a whole in which they are functioning.[1] Therefore such attributes, depending on the place of an identifiable component in a structure, permit no use of the conception of elements which when compounded into totals remain what they were before.[2]

The gestaltists emphasize the futility of dissecting supposedly independent elements. Unlike the behaviorists, and associationists and in line with the evolutionary doctrine, they insist that behavior responses are intelligible only as whole structures and that all "aspects of such wholes express cross sections in a dynamic flow oriented toward the completion of some purposive act."[3]

Modern American psychology has been an attempt to reconcile both these theories. It is an endeavor to show that both piecemeal (behaviorists) and organized (gestaltists) responses occur. In fact the stress on the whole does not exclude the existence of piecemeal responses; it does however presuppose parts. Many experiments were undertaken to prove such a position. Helen

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1. This is technically called the law of membership character.
2. Gardner, Murphy, Historical Introduction to Modern Psychology; Harcourt, Brace and Company, N.Y., 1949, p. 295.
3. Op.cit., p. 294.

Durkin's work is representative. From a dozen studies Durkin generalizes that the responses in man's behavior range all the way from mechanical responses to insightful learning including as well "all the theoretical possible intervening points on a continuum."[1]

"Today, every nook and cranny of psychology has been invaded with the conception of structure;[2] or system, or interdependence; every theoretical system today either rejects atomism or admits its incompleteness, or at least apologizes for it."[3]

We have thus seen, that modern psychology is moving perceptibly away from the mechanistic view and grows out of Biology (not physiology) and the Darwinian evolutionary doctrine.

V - Social Basis of the New Education

A. Introductory note

Certainly, the foregoing psychology and theory of learning underlying the new education have suggestions for the purpose, content, and method of the curriculum. But psychology cannot alone determine a theory of education and an educational philosophy cannot ignore the social dimension, that is, the nature of society under which education operates. In the last analysis education

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1. Durkin, H., Trial-and-Error Gradual Analysis, and Sudden Reorganization: An Experimental Study of Problem Solving; Arch. Psychol., 1937, No. 210.
2. The author uses the word structure here to denote a system, and not in the atomistic sense.
3. Gardner, Murphy, Historical Introduction to Modern Psychology; Harcourt, Brace and Company, N.Y., 1949, p. 295.

exists in a society and is set up to help the young live in that society.

The democratic way of life constitutes the social basis of the new education. The values implicit in the democratic society are made foundational in the new education. Such social basis is consistent with the philosophical and psychological basis discussed earlier. The democratic ideal of running human affairs on a non-authoritarian empirical basis is responsive to the philosophical belief that experience can stand on its own botton without resort to an external agency and that experimental methods are authors of truths and values. The democratic ideal of a community regulating its affairs through shared analysis and evaluation of what it does and undergoes is supported by the belief that experimental procedures are self-correcting and therefore are the source for regulating society and for establishing standards. The democratic values of freedom of thought and inquiry and of the dignity and sovereignty of the individual implies the philosophical belief that man and his liberated intelligence are the measure of all things and that knowledge, truth and values are written by the human individual while he is in interaction and association with his social environment. The democratic conception of a society as associative cooperative living wherein the individual is continuous with his social milieu, making as well as made by it, is supported by the evolutionary principle of continuity extended to the social realm and explanatory of the nature of relations between individual and society.

To better understand the social basis of the new education and to grasp the intrinsic connection between democracy and the philosophical and psychological basis discussed earlier, a consideration of what democracy in essence is, seems in order.

B. Democracy as society operating on the evolutionary principle of continuity and the method of experimental science

Commonly, the term democracy is used in a political sense to refer to government by the people as opposed to government by one (autocracy) or by a group (obligarchy or aristocracy). However, in essence, democracy is a way of life. According to Dewey, today considered as the world's foremost interpreters of the democratic society,[1] he conceives society as a mode of associative living wherein men engage in many overlapping and interacting associations. These associations, or communications among individuals constitute the cement that binds society together. The meeting of the minds of individuals living in a society and their mutually shared purposes makes up society. If there is no such communication or meeting of minds, there is no society. Thus the effectiveness of a society depends on the degree to which communication results in a real amalgamation of minds. "To share purposes in common, individuals must have the same understanding of them, the same emotional disposition toward them."[2]

Since for Dewey, society, thus exists in and by communication,[3] or necessitates that individuals forming a society become

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1. Childs, J.L., American Pragmatism and Education; Henry Holt and Company, N.Y., 1956, p. 105.
2. Brubacher, J.S., Modern Philosophies of Education; McGraw Hill Book Company, N.Y., 1950, p. 124.
3. Dewey, J., Democracy and Education; The Macmillan Company, N.Y., 1916, p. 5.

the kind of persons they do, from what they share in communication, the conception of the individual as an irreducible social atom,[1] or as antithetical to society seemed to Dewey in discord with his conception of society. Discrete, self-existing individuals, unaffected by relations, seemed to him to allow a minor kind of communication and thus to loosen the ties that give rise to society. For him the externality of relations makes of society a mechanical collection of individuals existing merely in physical proximity. Dewey, therefore, found in the evolutionary principle of continuity real congeniality to his concept of society as communication. This concept of continuity carried to the social realm, implies that the individual as he becomes more and more social, strikes deeper root in his society and undergoes real change in his very being. Since the concept of the internality of relations holds that the nature of a thing is dependent on its relations, the individual is a function of the surrounding social life. Society permeates his very thinking and behavior and his very self is socially built and conditioned. In fact, as he communicates, society enters increasingly into the warp and woof of his thinking and behaving. Such a process, wherein, individual and society form two aspects of the same continuum supports Dewey's conception of society, in fact is explanatory of it.

Since relations make of the individual a social being disposed to act and think socially and since a democratic society is but individuals thinking and working cooperatively together, the

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1. The social counterpart of the Newtonian physics.

concept of continuity is thus basic to Democracy. Unless individuals are continuous with society, they cannot act and think cooperatively and unless they thus act democracy is a Chimera. Democracy as a way of associative living of cooperative action and of evaluation, and the logic of continuity extended to the social phenomena are more or less indentical concepts. Democracy as a way of life cannot succeed unless the individual and society are continuous with each other.[1]

C. Intrinsic connection between democracy and the philosophical and psychological basis of the new education

The democratic society is thus a group of individuals getting together in associative living each contributing to the whole and the whole existing only to serve the individual citizen. Thus conceived Democracy has a moral meaning that a "social return is demanded of all living in a society and that opportunity for individual development be afforded to all."[2] In a democracy, the desirable individual and the desirable society are defined with mututal regard to each other. Man needs society and society must do its best to promote the growth and well-being of the individual.

But in order that institutionalized society can dispense with its moral obligation towards the individual, the individual must be able to act and think socially, criticize continuously and regulate the social institutions; for the social institutions

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1. Cf. Chapter II, Section VI - Social Basis of the Present Curriculum, p. 63.
2. Dewey, John, Democracy and Education; The Macmillan Company, N.Y., 1916, p. 142.

are but individuals working cooperatively together. In such a democratic society, every member is responsible for the choices and decisions that affect the welfare of the group and should participate in the regulation of common affairs. A democratic society, in fact cannot exist unless each citizen has the knowledge and the ability to make judgments, to take decisions and moreover, is ready to take responsibility for his choices and actions. This democratic ideal implies a deep faith in the rationality, creativity, dignity and effectiveness of the individual. For society to put its faith and its reliance in the individual, it assumes that the human personality is a self-conscious being which feels and is concerned and strives and makes decisions in the light of experience and accepts responsibility for what it does. Such a being acts freely and is self-determined, master of his destiny. Man in such a society is the "measure of all things" as the sophists of old proclaimed and as the hard facts of experience daily witness.

It is, however, not to be inferred from the above that atomistic individualism is the democratic ideal. The democratic conception of individuality holds that each individual is unique, that individuality must build itself and run itself, that each individual has a recognizable pattern. But true individuality will not result without interaction with a social milieu. In fact the richer the cultural environment, the more effective is communication, the more complex and extensive social relations grow, the richer individuality becomes and the more the individual finds fulfillment of his life.

As J. Mark Baldwin (1861-1934) said: "The individual's normal growth lands him in essential solidarity with his fellows, while on the other hand the exercise of his social duties and privileges advances his highest and purest individuality."

The democratic ideal holds that control and law in a democratic society cannot be vested in one person nor in an outside agency. Law is a moral affair. Instead of an external power, the democratic society relies for its own regulation on an inner attitude of moral obligation. Man is the unit of judgment and responsible action. Being vested with such a sublime task, man is sovereign. All social institutions, exist to express and serve him and help him hold to his individuality and his freedom of conscience. Unless, therefore, each citizen has a fair chance to live as a conscious, responsible, self-directing being, democracy is an illusion.

Yet since every individual in a democratic society is to be sovereign and free, individual freedom cannot be an absolute concept in a democracy. The very fact that every individual has a fair chance for respect, limits his freedom to the point where such freedom oversteps that of the next individual. The democratic ideal of the right of liberty for all, implies duties and responsibilities. In a democracy it is the duty of every citizen to insure the liberty of his co-citizen. In short, responsible freedom is the spirit of democracy. Rights thus imply duties and freedom to act and think necessitates moral responsibility. In a democracy man is the seat of this responsible freedom - man as a

creative intelligent being who can act on thought.

We have seen that the philosophical basis of the new education conceives the universe, as William James put it, "with the lid off", unlimited and precarious. In a changing and precarious and ever-evolving world, society demands that each individual be so equipped as to meet new situations in a critical and creative way. In an open universe, society demands responsible and creative thinking and this is Democracy in operation where man must act critically and morally, as we have just seen.

Another intrinsic connection between the philosophical basis and democracy is the fact that in a changing world man assumes new roles. He can change and effect. He has intrinsic worth and is capable of steering the rudder of his life. Under the new outlook, discussed earlier, his efforts count in shaping the world. He is spiritually exalted and has won self-confidence. For man to have faith in himself as he lives and works with his fellow men in society, for him to rely on his own judgments and intelligence for regulating his own affairs, is the psychological basis of democracy.

But if man, possessing the method of discovery and invention in a universe of unlimited possibilities, develops a faith in himself for creative action, such a universe necessitates at once, greater moral responsibilities on the part of man. Novel possibilities and freedom, if not guided by moral responsibility, are deadly. For man to live in such a world, he needs to cultivate his spiritual and moral responsibilities. This spiritual moral

side fits the spirit and essence of democracy as responsible freedom.

The democratic faith in the rational behavior of man and Democracy's faith in the ability of the human group to develop its own directing principles on an emperical non-authoritarian basis, are in accord with the philosophy discussed earlier and which holds that human thinking patterned after the scientific procedures can establish principles and standards from within the context of shared experience.

At last, we are ready now to seek the implications of the new education on the curriculum. From all the foregoing we come to ask: What is the lesson for curriculum making? In particular how shall we conceive the unit element out of which the curriculum is built?

C H A P T E R I V

THE NEW CURRICULUM

I - Implications of the New Education on the Curriculum

In Chapter III, the philosophical, psychological and social bases of the new education were established. These we have seen to consist of the philosophical view, that in a changing and precarious world, ideas and conceptions are operational in nature and that, therefore, the pattern of scientific inquiry defines the pattern of thought. The psychological basis was seen to consist (in the light of the evolutionary doctrine) of the view that behavior is intrinsically adjustive in nature and that learning is a product of adjustive acts undertaken by the living creature in its struggle to attain satisfying existence through the better utilization of its surroundings. The social basis was seen to consist of the democratic conception that institutions, laws and standards develop from within the context of group activity and that they are to be judged experimentally in an evolving society run on non-authoritarian basis.

We shall now seek the implications of such conclusions for the aim, content and method of the curriculum; for unless these implications are drawn out and incorporated into a concrete curriculum, the new educational theory remains in the theoretical

realm and remote from actual implementation.

1. As to aim:

In a changing evolving world, aims cannot be fixed in advance. The metaphysical premise that change and process are traits of reality implies that the aim of the curriculum be the constant reconstruction of experience rather than the realization of what eternally is. In a dynamic world, static aims such as self-realization or unfoldment of what is latently enfolded within children can no more hold. Instead, the metaphysics underlying the new education implies that the aim of the curriculum is to foster the greatest possible growth of children. Since in a relativistic world, educational aims lie within the educative process itself, growth becomes its own end and is "subordinate to nothing save more growth." The aim as preparation of the true man must give way to aim as the actual desirable full living of children in the present. The aim as preparation for an ideal state or as unfoldment of what eternally is, is logically inconsistent with the metaphysical premise that time is real and brings about real changes. Aim, both as preparation or unfoldment, assumes that what is taught now will necessarily be of use in the future and implies the metaphysics that the world is circumscribed by a fixed cycle in which the future meets the past at the same point. But in a world where novelties emerge from the growing living experiences of children, the aim is actual, full, real living of children in the present. This does not exclude the idea that education is preparatory; it rather means that, in a precarious world, living fully in the present, helping children constantly

to reconstruct their experiences, treating childhood as an end in itself, is the best preparation for an uncertain future.

The theory of knowledge that underlies the new education does not aim to come at the reality of the external world. Its aim is not to grasp ultimate truth. It rather starts with a child-in-active-interaction with his environment. Hence, again, the full living and the life of the child in his community, is the aim of the curriculum.

The value theory of the new education endorses the implication of the metaphysics and epistemology for the aim of the curriculum. Educational aims are but values adhered to. Aim as cultivation of the intellect is a counterpart of the value theory which holds that values inhere in the essence of things (the essence of man being his intellect). The new value theory, as we have seen, views values as subjective, instrumental and relative to people and situations. This implies that the aim of the educative process lies within the process itself and is relative to it. It is this theory of values that led Dewey to put forth his famous statement concerning the aim of education, "The educational process has no end beyond itself; it is its own end." Education does not have an external and fixed aim, towards which it moves and for which it is a means. Hence the aim of the curriculum as the growth of children.[1]

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1. For Dewey education is growth - that type of growth which is conducive to more growth.

2. As to content:

The new epistemology views knowledge as functional, as an outcome of the interaction between organism and his physical and social environment. Since it is thus conceived as the outcome of what pupils undergo while they are solving the problems life presents, curriculum content cannot be knowledge antedating children's experience of it, arranged into subject matter for logical acquisition by children. Since content cannot have the status of knowledge unless the learners set up hypotheses for the solution of their problems, test these by the way they work out in practice, curriculum content must necessarily consist of opportunities where pupils engage whole-heartedly in purposeful activities. The unit element of the curriculum instead of being a logically organized portion of subject matter would be an instance of real everyday life, a purposeful activity centering around the daily real experiences of children. The theory that knowledge is ever in the making cannot conceive of content as having the status of knowledge, unless the child has had some purposive part in its production. "No one truly and fundamentally possesses any knowledge that he has not, so to speak, created for himself."[1] The content of the curriculum unfolds as pupils select from the race experience what may seem useful in advancing the solution of their problems and resuming their functional relation-ship to environmental situations. Whatever knowledge bears functional relations to child's life, that becomes knowledge for

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1. Enunciated by Bacon, quoted by Jullien Marc-Antoine, "Esprit de la Methode d'education de Pestalozzi; Milan, Imprimerie royale, 1812, p. 158.

the child and makes up the content of the curriculum. In an attempt to meet the situation with which the child is confronted he will turn to the store of knowledge to select from it that which suits him.

This does not mean that subject matter is discarded; it rather means that subject matter content is to be learned incidentally while pupils use it to carry out their purposeful activities.

The value theory which holds that values arise from within the context of activities and are to be judged experimentally by the way they work out in experience, implies that curriculum content should be tied to real life experiences in which the child naturally engages. This is necessary to afford the child a medium from which to distill the standards by which he is to abide.

Moreover the new theory of values, (reinforced by the new learning theory) holds that values are learned through specific realization and genuine appreciation. This "realizing sense" is best brought home by direct experience of the values themselves. In order to afford children with direct realization of values and thus to insure the incorporation of values into their very structure, content should provide active experiences embodying typical life situations. Only thus can children acquire effective and real, not nominal, standards of value. Life situations as content provide the child with the experiences that are required to get the life-values and meaning of the words symbolizing values.

The psychological basis of the new education and the new learning theory have similar bearings on the content of the curriculum. To hold that learning inheres in the interaction of the organism with his environment, implies that the unit element of the curriculum be an instance of life and that the unit of study be a pupil (interacting with his environment), that is, a learner facing a problematic situation or pursuing a purposeful activity. To hold that purposeful activity is the essence of thought necessitates that content be the felt problems of the learner. To incorporate the new psychology (which starts with life as the pursuit of ends) into the curriculum, content must be conceived in terms of experiences undertaken by the child under the aegis of the school. Since a desirable educative experience is present when a child faces a challenging situation and undertakes responsibly and creatively to deal with it, the new psychology reinforces the implication that curriculum content should provide for children's purposeful activities. To say that thinking and doing are inextricably related, to say that learning and behaving go hand in hand, to say that learning is the outcome of experience and that it is the modification of behavior, are all one with saying that curriculum content consist of the living experiences of the child stimulated and guided by the teacher.

The implication that curriculum content be the purposeful activities of children is also reinforced by the findings of experimental psychology. We have seen that the theory of mental discipline and automatic transfer assumes that the mere possession of facts and skills insures transfer to life situations which call

for these skills after the child leaves the school. This has tended to divorce the content (and even method) of the curriculum from out of school life. The findings of experimental psychology rejects the assumption for it was found that few definite connections in mental life are made between the material (content) and its uses (life-situations) if the material is learned independently from its uses. This implies that curriculum content be functional, that is, subject matter be correlated with the actual experiences of the child. Content should include not only the essential facts, principles and processes[1] that may be useful in the daily conduct of life but also the activities that call for these. By including, whenever appropriate, the situations in which the information and procedures are of use in meeting them, the connection which is necessary between the material and its uses is strengthened.

Again, this does not minimize the importance of skills and knowledges of which the present curriculum is made. However, when these facts are presented without relationship to the activities for which they are useful, they cannot become meaningful and functional in the lives of the children. As Charles Pierce perceived, concepts are constituted by the behaviors and consequences they denote, and when the young acquire verbal formulations apart from grasp of their functional or life equivalents, they accumulate verbalisms not meanings. If we need to develop function and not to stop with mere accumulation of facts, if we

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1. See the course requirements which are listed in the Syllabus of the Lebanese Ministry of Education.

want the child to learn meaningfully, to act, think and feel in vital relation to his life, curriculum content should provide those life situations that call for the subject matter we present. Thus, conceiving the unit element of the curriculum as an activity springing from the natural environment of the child does not neglect subject matter; in fact the idea of vitalizing subject matter through organizing it around a purposeful activity implies that subject matter is important. However, subject matter is not the only aim or content of the curriculum nor does an experience curriculum exclude subject matter. Experience involves subject matter and subject matter is a function of experience. But, the fact that curriculum content organized around the purposeful activities of children, implements the psychological basis of the new education and thus helps the child learn subject matter in a meaningful, effective and functional manner, makes content conceived as the experiences of the child more desirable. This conception of curriculum content does not exclude the argument that knowledge (subject matter) may be pursued for pure aesthetic reasons. For even knowledge pursued for its own sake has been originally squeezed by functional intelligence from practical activities and has been abstracted from concrete situations. Moreover, no matter for how long a period, pupils may pursue abstract knowledge for its own sake, there is need at some point, for resorting to actual practical situations. Besides only a small percentage of the total school enrollment, has the ability for and the interest or need to pursue knowledge as such. It is also true that children in elementary schools live in visible and

tangible reality and their concepts are nourished by it.

The social basis of the new education we have seen as the democratic way of life. The essence of democracy is respect for human personality. In a democracy the child should be accepted as a person and the school, as a democratic institution should provide for developing his living experience, for in a democracy this is intrinsically significant. Hence curriculum content as the living experiences of children. Since significant purposes and activities are the supreme characteristics of a person, content should provide for the preferences and purposes of the child. Curriculum content of a school operating in a democratic country, should provide the child with opportunities and activities, with situations in which he can exercise self-direction, can develop responsibility, can develop his individuality and can share effectively with others in the direction of class activities or school life. When curriculum content provides the child with opportunities through which he can set up ends and seek their realization, only then can content foster the democratic ideals of respect for personality, of responsible freedom and of cooperative life. Moreover, activities should be socially organized so that the members of a class can effect the greatest degree of communication. The classroom should also be a community of living, organized and run on democratic basis. This implication of democracy on curriculum content is also in line with the psychological principle that a child learns what he lives. Content socially organized is also implied by the democratic view that society exists in and by communication and that the individual is

continuous with his social environment. If it is held that the child acquires the meanings and mental powers characteristic of a conscious purposeful human existence by virtue of his participation in the activities of a cultural group, curriculum content should consist of these activities socially organized.

To treat the child as a person involves regard for the whole child. Nothing less than the growth of the whole child is adequate for a democratic society. Desirable growth must take due account of the whole child. Curriculum content cannot be restricted to intellectual interest alone. It must provide those opportunities that develop the affective as well as the cognitive and conative sides of his personality. The democratic moral obligation implies that curriculum content should incorporate those experiences which help develop the attitudes, ideals and appreciations necessary in a democracy. Since, according to the psychological principle, these concommitants develop in one and the same process of experiencing, curriculum content conceived as a course of experiencing incorporates both the psychological principle of learning and the democratic obligation of developing the whole child.

To say that curriculum content is not to be restricted to intellect alone, is not to be interpreted as anti-intellectualism. In fact democracy's morality is intellectual. It needs that education which can develop intelligence for discriminating consequences, for distilling values, because in a democracy intelligent behavior is the seat of authority and the source from which

standards and values emanate. But in line with the gestaltist principle, a person acts as a whole, learns as a whole and responds as a whole. Particular learnings do not occur separately. His intellectual life is continuous with his physical and emotional life; his personality is integrated.

3. As to method:

In a dynamic world with the "lid off", in a changing world where the future is more or less unpredictable, in a world where experience needs to be constantly revised, method cannot be conceived as a set of devices used by teachers to indoctrinate children with established knowledge or with fixed patterns of behavior in set situations. Under the new metaphysics, method must stress both the how and the what; it should encourage creative learning, inventiveness and a problem-solving attitude. In a world of novelty, plurality and individuality, it cannot be static but must be experimental and develop mental. In a world where human experience is the great reality, method should provide for the uniquely different experiences of children.

We have seen that the epistemology underlying the new education starts with a child living and interacting with his environment. It thus starts with the concrete, with actual experience and proceeds from it to the abstract. The concrete here is not an object whose essence is to be grasped and known. It is a pupil whose equilibrium has been upset and who is trying to intellectualize the nature of his problem, to set up goals, to plan for action, to anticipate results and to test his plans by

action. This implies that the psychological rather than the logical method be employed and that an activity methodology is necessary on epistemological grounds. Since the new epistemology views knowledge as the method whereby successive experiences become meaningful and directional, method should provide for welding the activities and experiences of children with knowledge logically organized (subject matter). Since the method of thought should be patterned after the experimental mode of inquiry and comes as a result of purposive reflective active inquiry, method should provide those life problems, those felt difficulties of pupils through which they can develop their thinking power. Hence project teaching as the method of the new curriculum.

The problem-solving, experimental method implied by the metaphysics and epistemology underlying the new education is reinforced by the new psychology, which adheres to the functional theory of the mind and the premise that thinking arises when the uncertain and the problematic is present in experience.

The method of learning through behavior or learning by experience is also implied by the value theory which demands that values be taught through first hand knowledge and realization of them. Learning to play a musical instrument does not accure from merely reading directions and instruction. The child needs actually to play the instrument. He similarly needs actually to live what he learns, live the content of values. He must contrive and accept them himself. To live a spirit, the child should have the opportunity to respond with that spirit to some concrete life situation. It is not knowledge about citizenship, but proficiency

in citizenship that is desired. Hence the inadequacy of the method of direct inculcation, of teaching by precept alone, and on the other hand, the desirability of the experiential and experimental method of the curriculum. Method should provide for those experiences which can evoke the behaviors that beget the desirable habits and values. In order to communicate a value to a child, it is thus necessary to do more than add a word to his vocabulary. Such words as honesty, magnanimity, sacrifice and the like have no intellectual potency when they are unrelated to the world of experience from which they were originally derived, and to which they refer.

This does not mean that teaching values by precept is not necessary. Educators agree that moral law can often be stated to children but they also agree that values can best be developed through the actual experiencing of them and arise from within the activities of life.

We have seen that learning through purposeful activities affords the child with a means through which he can develop into a critical person, responsible for the outcome of his ideas and actions. Such a methodology of learning through purposeful activities is therefore desirable on democratic grounds. We have seen that the basic principle of democracy as respect for the human personality. We have seen also that in order to achieve person-hood, the child must learn to think and to develop meanings from his own experiences so that he can eventually become the author of his own standards and conduct. Hence the desirability

of a methodology in a democracy which helps pupils to become self-determining and competent to make their own life-commitments and moral judgments. Methods which induce uncritical acceptance confiscate the right of a child to live to his own self-determination and this is in conflict with the values of democracy. A method which encourages children to play a creative, responsible role in school, is consonant with one by which democracy operates. The experimental method of democracy is best insured when children organize their learnings around a purposeful act they plan, execute and evaluate in order to change an unsatisfactory situation into a satisfactory one.

Organizing the learning environment in the form of problems does not minimize expository instruction, nor does it necessarily neglect the social heritage or the transmissive role of the school.

> "It would be a mistake to think that the methods of authoritative exposition and problematic inquiry necessarily stand in opposition to each other. As a matter of fact they should rather supplement each other. There is an appropriate time for each and the teacher should be facile in recognizing both. In the very midst of a problem, for example, the pupil may have some technique explained to him which he may need to complete the attack on his problem. Having acquired it on good authority he can return to his problem solving. Antagonism between the two methods only arises where the teacher invokes the wrong method for the wrong occasion."[1]

The foregoing implications of the new education on the aim, content and method of the curriculum may convey to the reader an unstable disputed picture of the curriculum especially when the curriculum has been for centuries regarded in more static, fixed

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1. Brubacher, J.S. Modern Philosophies of Education; McGraw Hill Book Company, N.Y., 1950, p. 260.

forms. The case, however, is not such. The curriculum which is viewed as the total living of children, differentiated and diversified according to individual and environmental needs, may be outwardly different, but inwardly it will make for an inner spiritual unity. For a curriculum which encourages the young to work upon a problem in a real life situation, a curriculum whose unit element is a life instance pursued in a social setting, will always be characterized by unity of purpose, unity of end goals as well as unity of method. Such are the cementing forces of a society.

II - The Project Method

There have been several attempts by educators so to organize the curriculum that it would incorporate the implications of the new educational theory already discussed. Dr. W.H. Kilpatrick is perhaps the foremost educator who more than any other tried to seek a unifying conception that would synthesize and unite these implications. Such a conception, he found, in the purposeful whole-hearted act of the child. For, he thought, when the basic unit element out of which the curriculum is to be made becomes the purposeful act of the child, such a curriculum would unite, synthesize and bring to focus the essential features of the new education - the evolutionary view of human behavior, the method of experimental science and the ethic of democracy. His own term for a curriculum constructed out of the purposeful acts of children, out of real instances of life, is the "project" Method. In the article in which he first set out his conception

of the curriculum he makes this clear when he describes the main factors involved in it, factors almost identical with the implications already discussed.

> "I had felt increasingly the need of unifying more completely a number of important related aspects of the educative process. I began to hope for some one concept which might serve this end. Such a concept if found, must, so I thought, emphasize the factor of action, preferably whole-hearted vigorous activity. It must at the same time provide a place for the adequate utilization of the laws of learning, and no less for the essential elements of the ethical quality of conduct. The last named looks of course to the social situation as well as to the individual attitude. Along with these should go, as it seemed, the important generalization that education is life..... As the desired unification lay specifically in the field of method, might not some typical unit of concrete procedure supply the need - some unit of conduct that should be, as it were, a sample of life, a fair sample of the worthy life and consequently of education? As these questionings rose more definitely to mind, there came increasingly a belief corroborated on many sides, that the unifying idea I sought was to be found in the conception of whole-hearted purposeful activity proceeding in a social environment, or more briefly, in the unit element of such activity, the hearty purposeful act.
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> "It is to this purposeful act with the emphasis on the word purpose that I myself apply the term 'project'."[1]

It is thus apparent that Dr. Kilpatrick's emphasis on the whole-hearted purposeful act and his endeavor to make a child facing an actual situation the basic unit element of the curriculum results from his belief in the new education, from the belief that education is the effecting of desirable changes in human beings, from the belief that such changes may be brought about

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1. Kilpatrick, W.H., The Project Method; Teachers College, Columbia University, N.Y., 1921, p. 3-4.

through the willing and more or less intelligent pursuit of ends in a social environment. A curriculum organized around projects incorporates such notions as self-activity, interest, intrinsic motivation, knowledge of problem-attack, the psychological approach, the inductive method. It also insures transfer for subject matter would be correlated with the life activities of children. It would socialize the pupils, for the project curriculum assumes that the class is a social unit living and working together not thirty or forty pupils working individually. It is that organization where the pupils join together in the pursuit of certain common ends and organize themselves appropriately to attain these ends. They talk matters over until there is a good understanding. They plan their activities. They set forth in an explicit statement their purposes and plans. Thus the project method is true to the democratic way of life. In fact, the project method is the democratic way of living - living by one's own wits and in cooperation with others. It is also a way of learning - the way of learning held by the new education - learning through experience, through behavior, through the conscious pursuit of goals. It is also the mode of living in a precarious world, for in such a world, life is full of projects, of situations to some degree unwonted. The moment we face such a situation, there is need of making a conscious adjustment, with more or less intelligence, more or less satisfaction and more or less perception of what we do, why we do it, whether it succeeds or fails and the reason for this. Thus life, in so far as it involves situations not under habitual control goes on. Thus also does the project

method ape life itself and prepares for it. It is to be noted that the project method is not a method in the sense that it is a specific technique or procedure. It is rather a philosophy of life, an inclusive concept, a guiding principle. It, therefore, cannot lend itself to direction by rule of thumb nor can it be picked up by imitation. One must have a sound knowledge of the philosophy and psychology underlying it - the philosophy already presented. In the project method there are no recipes. Any attempt to standardize or use ready made rigid projects, limits the educative possibilities of projects. For the best results these should be initiated, planned, executed and evaluated by the learners themselves, because the heart of the project method is the whole-hearted purposeful act incorporating the implications of the new education.

Many terms have been in use to convey the meaning implied by the project method. Chief among these are "activities", "centers of interest", "themes", "unit experiences", "adventures", "problems" and the like. The particular word or phrase used as a label is unimportant provided it connotes to the user a rich and inclusive series of experiences in which emphasis is placed on the active participation in planning, executing and evaluating the work and provided further that experiences and knowledge are sought and integrated in relation to worthy purposes which are significant to children.

The emphasis on the purposeful acts of children and their interests has been the target for criticisms levelled against the

new curriculum. Such an emphasis on the child seems to imply to many a critic a Rousseaian hands off policy, a Free School where children's natural longings and instincts become the sole guide for their development and education, where subject matter is discarded and where discipline abdicates to the passing whims of children. Moreover, it conveys to critics the notion that the education of the young is a haphazard endeavor, inefficient, and lacking organization and integration.

Fortunately the case is not such. If the project method starts with the child's existing interests and seeks to work with rather than against the grain of inclination, this does not mean that the teacher abdicates his leadership and takes only the child's impulses as guides. Dr. Kilpatrick himself shares with Dewey the belief that it is by virtue of a culture that the child acquires his full human purposeful existence. He, therefore, does not believe that the child should be left to his spontaneous interests and activities. For him freedom involves more than mere absence of external restraint or doing what one wishes to do. For him freedom involves the achievement of those behaviors and understandings that make possible an intelligent manifestation of preference and also involves mastery of the techniques and skills which give control over concrete life situations. He even insists that these capacities are best learned under responsible adult-directed course of experiencing. However, he also believes that the only real available starting point for developing the young along the values, skills and techniques necessary for life, is the child himself with his present interests, needs and abilities.

Starting with the child as he is now, the teacher guides his available interests and utilizes his fullest learning potentialities in every possible way toward higher and more desirable interests. Instead of representing an abdication of discipline, the project method by capitalizing on the whole-hearted purposeful act, realizes the ideal discipline, namely self-discipline.

Nor does the project method imply a hands off policy as far as the teacher is concerned. Rather the role of the project teacher is a varied one. She is leader, chairman, guide, taskmaster, authority, judge, adviser, sympathetic listener, expert performer, examiner friend and coordinator, as occasion may require. Which of these roles will be appropriate can be determined by the circumstances - the state in which the pupils are and the stage which their project has reached. These roles are not for the mechanical mind or the follower of routine and techniques. It calls for creativity, for adaptability. The project teacher is versatile. She will anticipate, plan, of course, tentatively determine but not arbitrarily, what the next move of the pupil should be. No, her role is not that of a spectator, not in a project curriculum. She is concerned with each succeeding new venture which her class undertakes; she is concerned that the project reach fruitfully into new territory and not simply repeat ground already covered. She is concerned that in relation to what has gone before, the projects be sufficiently varied to provide for all the significant sides and aspects of life suitable for the age level of her pupils. She is concerned that each pupil find a task suited to his peculiar needs. If the project

teacher does not impose her ideas, she is still busy trying to build up a process from within, a process through which pupils become creative and self-directing.

The fact that projects should be initiated by children does not mean that the teacher need not plan her work. Before a series of experiences can develop from a common project, the teacher must learn the pupils' interests and needs. She should therefore definitely plan and seek opportunities by which she gets to know her pupils personally. Moreover, although pupils have interests, these should be stimulated. To accomplish this orientation and stimulation, she needs to plan for a variety of materials and to provide children with opportunities to examine these materials and react to them. She needs to encourage them to bring from home and community things that reveal and challenge worthwhile activities. She must encourage students to ask questions and should help them to find their own answers. If the children do not suggest profitable activities, she should make suggestions. She should be alert in looking for leads to worthwhile projects. She should deliberately work for a feeling of group unity and for freedom and enthusiasm in the learning process. She should think through a possible plan of activity before school opens or before starting on a new project. She should consider the interests and drives characteristic of children at the age level of her group. She needs to familiarize herself with projects carried by other teachers with children at this age level. She must study the records of the individuals in her group. She may even make a tentative selection of projects and begin to build up her back-

ground of knowledge for it and consider ways of initiating it. But she will always hold herself open to consider other projects that may be suggested later by the children. It is in the children's interests that she should look for cues to educative experiences. She must be ready and able to see the possibilities for growth in the varied activities suggested. This is one of the chief reasons why a project teacher needs a rich background of information and culture.

The project teacher is not one who comes to class with no plans of her own and stands there with folded hands. She is a guide and the first principle of true guidance is to know when to short-circuit an answer or a solution to a problem and when to let the learner do a good deal of mountain-side exploring on his own. She may at times go with him and from time to time assist him, but she knows that the learner will know the mountain for his own later use only as he accepts responsibility for thinking through his own experiences. But, if she, for the sake of giving the child a great amount of information, furnish him with the final orderly statement of the expert thinker and scholar, she will very likely prevent him from building an adequate knowledge of the matter at hand. The child must explore for himself, and himself accept responsibility for organizing results.

This does not mean that proponents of a curriculum made up of pupil-pursued activities, are indifferent to systematic learning and organized knowledge. It means that project pupils are to perfect their organization of knowledge themselves after

the raw material of experience has been assembled, rather than always attempt to take over a ready-made (often too mature and exhaustive) organization prepared by adults. In a word, they reach a purposeful organization in due time. Although, perhaps, the amount so organized will be less than has been common but the amount really understood will be much more.

Nor is project-teaching averse to subject-matter. As has been already said, proponents of a project curriculum need subject matter and expect to use it, but they get it in a different way. Projects, to the degree that they are well chosen and directed will call for the intelligent mastery and application by the pupils themselves of the cultural heritage. When knowledges and skills are sought and used because a life situation inherently calls for them, they are better learned both because they are personally desired and because they are more intelligently thought through and used.

Nor is project teaching a haphazard endeavor. Although the teacher looks for her leads in children's interests, she has her criteria for selecting projects. She knows that a project should involve intimate contact with an aspect of life sufficiently important to merit earnest and persistent study. It should have many points of contact with the present life of children and sufficiently difficult to challenge them and give them a sense of achievement. It should be sufficiently comprehensive and should make possible abundant first-hand contacts with source materials. It should permit a series of consecutive activities - purposing,

planning, executing and evaluating. It should lead to acquisition of accurate organized information and should require systematic thinking. It should provide opportunities for creative expression through writing, dramatization, painting, modeling and music; above all it should provide for continuous sharing of purposes in an atmosphere of cooperative effort. It should be practicable in a particular school and community for a particular time and environment and with the particular group at hand. Those who properly interpret and carry out project teaching cannot conceive it as a haphazard endeavor. It is a science as well as an art. It calls for the best knowledge of subject matter, for a knowledge of child psychology and for a knowledge of human engineering.

III - A Sample Project

Having considered the project method in theory, it is well now, to give the reader a concrete example of the project idea.

The project method, in its broader sense - as a relatively inclusive synthesis of the implications of the new education discussed in Section I of this chapter, has been given body in many of the elementary schools both in Europe and America. Since the turn of the present century, an extensive literature has been written on the subject and a host of books describing project curriculums actually carried out have been constantly forthcoming.[1]

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1. See Appendix, p. 146.

A sample project has been selected from one of these books. It will be described in the following pages to serve as an illustration of how the project idea can be implemented.

The Hackensack Bank[1]

In the third grade classroom of the Union Street School of Hackensack, there were placed blocks and construction materials which were frequently used for making buildings like those the children have seen in the city of Hackensack.

On Main Street of this city a new bank building had just been completed and the City National Bank of Hackensack had opened there.

One day the children of the third grade asked if they might use the blocks and other materials to build the Hackensack Bank building. The teacher welcomed the idea and found in it possibilities for educative experiences. The next day one of the boys brought to school a calendar that had on it a picture of the bank. The boy said that he had walked into the bank to see how it was built from the inside and that a man had given the calendar to him. The children found a place to hang it and expressed their wish to start building.

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1. This is a project that had been carried out in the Third Grade of the Union Street School of Hackensack, New Jersey, by Miss Julia De Mott under the direction of Miss Sara Chase. It is selected from Hosic J.F. and Chase, Sara E., Brief Guide to the Project Method; World Book Company, New York, 1929, pp. 188-192.

The teacher talked with the children about the purpose of real banks. They discussed their father's bank books, the work of the men employed in a bank and the saving of pennies.

The boys built a bank whose exterior resembled the picture on the calendar and whose interior had a deposit window, a window for withdrawal, a safe and a place to write. They made paper money and some bank books.

When they were ready to open the bank, they chose one of them, Don, for the banker and Flora for a clerk.

They decided that the bank could not begin business at once because the people had to earn money before they could put it into the bank. They said that they must have a store-keeper, who could sell the things which they had made and sold to him. A store was built and stocked. John asked to be the store-keeper and he hired Mary for his clerk.

Robert decided to have a peanut stand. Esther and Ethel were chosen as the mothers of two families and they began at once to arrange their homes in opposite corners of a large classroom. The other members of the class became the children of the two families.

The store-keeper, the clerk and the peanut vender had money to deposit in the bank. The mothers made things to sell to the store and they saved some of their money, so they too, had accounts. The children also deposited the pennies they saved.

For a time everything went well and then the store-keeper

had trouble because Mary did not prove to be a good clerk. He asked the teacher what he could do and decided to discharge her. Ethel said that she would act as clerk and would hire Mary to take care of her home.

After several weeks, Don, the president of the bank moved out of the school district and was transferred to another school. John, the store-keeper wished to take his position. The teacher explained that bankers did not get positions that way. Consequently, the class acted as a board of Directors and John was chosen president of the bank.

John could not attend to both the bank and his store; so it was decided that he must sell or rent the store. Each child made a "For Rent" sign for John and the best one was hung on the store. Ethel, the clerk rented the store from John for $ 18 a month.

One morning all the prices in the store were lowered. The teacher questioned the store-keeper about the reason. She answered that on her way to school that morning she noticed that the prices in a down town store window were lowered. Ethel said: "If we do not come down, people will go somewhere else to buy and we shall, then, have no money to put into the bank."

Because of illness, the new banker's attendance was irregular. Interest in the bank gradually waned. It was, however, developing in another direction. Some of the children had gone to have their teeth filled and their eyes examined at the Health

Center. Interest in the Health Center was deepened and the children decided on their next activity - the building of the Health Center.

If we cast an eye now on the implications of the new education on the curriculum discussed in section I of this chapter, we find that a project such as the Hackensack bank synthesizes such implications and makes them operational in a real classroom situation.

Miss De Mott had certainly made the content of the curriculum, the purposeful activities of children rather than subject matter content. Building the Hackensack bank was an activity initiated, planned and executed by the pupils themselves. The method was certainly experiantial and experimental. The children experienced the real activities of their community - the banking system (bank), the buying and selling activities (store), housekeeping (the homes), elections (board of Directors), renting stores or houses - and through these came to know the life of their community and to understand the relationships between one worker to another and the interdependence of community activities. The children learned by doing and living and were acting and reacting on real objects.

The aim of Miss De Mott's teaching was not to impart specific facts and knowledges but rather to foster the greatest development of her children.

The Hackensack bank project had socialized the classroom of Miss De Mott. The children cooperatively planned and executed

their work. Moreover, the wholehearted purposeful activity of constructing and playing the Hackensack Bank afforded the children real life situations from which they distilled the meaning of such values as fair play, accuracy, cooperation, thoughtful planning, and orderliness. Keeping to one's task, keeping accurate book accounts, constructing buildings and objects, keeping the homes clean and in order were but few of the activities that called for many of the desirable values which the teacher wanted to teach. The saving of pennies for the bank did much more for realizing the value of thrift in the selves of the children than any of the teacher's talks on the subject.

Last but not least, the project carried out in the Union Street School of Hackensack, brought into play much of the subject matter goals usually required in the third grade. The homes gave the teacher an opportunity to fix a few important facts about good house-keeping and hygiene. Spelling, reading and writing were made incidental to the writing of signs, of items of articles bought and sold. The stores taught the concept of quantity, of profit and loss and of wages. Price tags, bank accounts, measurements of space and making change gave opportunities for real arithmetic.[1]

Thus when the curriculum is organized around projects and is conceived as a course of experiencing under the able guidance

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1. It is interesting to note that the subject matter requirements for arithmetic in the third grade of the Lebanese elementary public school include these very concepts brought into play by the Hackensack Bank project. These requirements appear on page 6 of Chapter One. They include notions about currency, simple problems involving buying and selling, prices and gain and loss; simple notions about measurements of weight and space and the four operations.

of the teacher it provides the elements necessary for effective learning, for cooperative self-directing living, for the development of attitudes and ideals and for the acquisition of tool subjects.

IV - By Way of Conclusion

In Chapter I, we have given the reader a picture of the educational situation in the public elementary school in Lebanon. In Chapter II, the historical and philosophical basis of the present course of study was presented. In Chapter III, the central features of the new educational theory were considered. In the preceding sections of this chapter, we have considered the "project" method as a synthesis of the philosophical, psychological and social basis of the new education.

At this point, we wish to recommend that the new educational theory be made foundational in the education of the rising young generation in Lebanon and that the curriculum of the elementary school be organized around projects - an organization which, as we have seen, incorporates and implements the new educational theory.

In making such a proposal, we wish to present briefly the main considerations that led us to such a recommendation. Since these considerations constitute the main features of the new education, a brief outline of these will also serve as a summary of what has already been said about the new educational theory.

The first of these features which is as well a reason for

our proposal that the curriculum of the elementary public school be organized around projects is the democratic way of life as it is interpreted by the new education. We have seen that democracy as a way of life denotes a society that has no good other than the good of individual human beings. Education in such a society, therefore, should be grounded in respect for the growth of the young if it is to apply the democratic morality of the worth of the individual human being. A curriculum that can implement such an education should make provision for the all-round growth of the child through his purposeful activities - hence the desirability of the "project" curriculum.

Moreover, democracy, as a form of government, signifies a society in which all its members develop through cooperative action the ends for which they live and from their own experience set up and regulate their social arrangements. From their theory of learning, adherents of the new education believe that unless the young in their early and formative years are provided with opportunities for responsible participation in real life situations, they cannot have the kind of experiences required to equip them for these responsibilities as members of a self-governing community run on non-authoritarian basis. Thus Democracy's morality and procedures necessitate a curriculum conceived as a process of experiencing under the aegis of the school. If Lebanon has subscribed to the democratic way of life, it should set up that curriculum which provides the young with opportunities through which they develop into self-directive cooperative members of society. We have seen that a project curriculum provides such

opportunities socially organized.

The second of these considerations is the evolutionary view of human behavior. The new education views human behavior as a never-ending process of adjustment to surroundings. Habits are developed and attitudes are formed through adjustive acts. Since we learn as we do and undergo and consciously relate what is done with what is undergone, habits, appreciations and attitudes must be earned and learned through purposeful activity. They cannot be handed on to the child ready-made. This is also true of meanings and knowledge. Learning, growth and development is a process of reconstruction rather than a process of simple mechanical addition externally imposed. Acquiring, of course, is necessary, but it is a matter of inquiring into. Therefore, a curriculum which provides significant interaction with objects, persons and phenomena, during the period of childhood, will bring about actual reconstructions in experience and therefore human learning and growth. A curriculum organized around projects will provide the child with opportunities to purpose, plan, reconstruct and cooperate and thus to learn from what he does and undergoes. Moreover, according to the psychological premise of the new education, learnings are not solitary occurrences, but are rather acquired in one and the same process of experiencing. Herein lies the reason for the emphasis which the new education puts on the all round growth of the child through purposeful activities. We have seen that a curriculum organized around projects provides such all round growth and is thus made desirable.

The third main consideration which prompted our recommendation of the project curriculum is our belief in the philosophy underlying the new education. In a dynamic world characterized by the emergence of novel situations, thoughtful readjustment of old ideas and habitual patterns of behavior, is necessarily required. In such a world a curriculum which seeks primarily to preadjust the child to finished patterns of habits is bound to fail. In such a world, the school should attempt to make the young emotionally secure, and intellectually resourceful. The curriculum should be so conceived as to provide for the training in the attitudes and procedures by which novel problems can be encountered and resolved. A curriculum organized around projects nurtures in the young the method of scientific inquiry, of problem-solving necessary for life in a changing world. Moreover, according to the operational logic underlying the new education, knowledge and ideas are prescriptions of acts to be performed rather than fixed truths to be imbibed. Ideas are to be confirmed or disconfirmed by the consequences they produce when put to the trial of action. The young, therefore, acquire knowledges as they learn to think in terms of action that will test, reconstruct and expand the ideas they develop. We have seen that a curriculum organized around projects, properly planned and interpreted, makes provision for this operational thinking and intelligent learning.

Our proposal for the reorganization of the curriculum of the public elementary school, around the purposeful activities of children, not only implements the new educational theory, but

also makes provision for the statements that appear in the preamble for the elementary cycle issued in the Syllabus of the Lebanese Ministry of Education. In our presentation of the current educational situation, we have delineated a discrepancy between statements found in the ministerial edict as regards the content of the curriculum and methods of instruction on the one hand, and the content and method emphasized by the present course of study on the other.[1] The statements that the content should be derived from the activities of the child and should be within his experiences in time and space; that the teacher should correlate subject matter with the experiences of the child-both would be more effectively implemented through the "project" idea than through a curriculum organized around subject matter requirements. We have also seen stated in the preamble that in the temporal order, concrete experiences should precede abstractions and principles, that the teacher should begin with sense impressions and concrete experiences and should avoid as much as possible abstract generalizations. A curriculum organized around the purposeful activities of children provides for the implementation of such statements. Stated differently, the "project" idea can unite the statements put forth by the Ministry of Education as guiding principles for curriculum construction in the elementary school, and actual practice in these schools.

Besides implementing the guiding principles which appear in the ministerial edict, a curriculum reorganized along the lines

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1. See Chapter I, Section II C, p. 16.

herein proposed would meet the criticisms levelled against the present course of study.[1] We have seen that there is dissatisfaction with the verbal nature of the present course of study, with its remoteness from real life, with its rigid uniformity which reduces leeways for the application of active methods and with its formal nature. Since a project curriculum properly interpreted, ties school to life, affords the direct experience necessary as basis for verbal symbols, affords the child with real life situations, makes learning functional and meaningful and has greater potential for adapting instruction to individual and regional differences, it seems a possible readjustment through which the criticisms levelled against the present course of study may be met.[2]

True to the position held throughout this paper, the writer believes that the "project" curriculum herein proposed should be adopted on an experimental basis. Although the "project" idea has in many schools both in Europe and particularly in America proven its claims, it still should be adopted as a tentative alternative to the present course of study and should be applied experimentally.

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1. See Chapter I, Section IV, p. 27.
2. The project curriculum, however, is not without its difficulties. Two of the main problems involved in it are first the problem of providing a framework of categories required for a curriculum pattern and second the problem of sequence. In an organization by subjects, each subject has its sequential pattern. What should be the basis for this sequence in a project curriculum? For a discussion of the problems and criticisms of the project curriculum, the reader is referred to:
   The Thirty-Third Yearbook, Part II of the National Society for the Study of Education; also
   Smith, Stanley and Shores, Fundamentals of Curriculum Development; World Book Co., Yonkers-on-Hudson, N.Y. 1950, Ch. 19.

In the present stage of our knowledge and school organization, perhaps, the best possible application of the project idea is teaching by subject units. Projects may lie largely, if not wholly, within the field of a single subject. Usually other subjects will of necessity be brought into play, but the organizing purpose will lie in the particular field of study chosen. Projects chosen on such basis contain all of the elements of a complete purposeful active experience and at the same time are explicit with regard to the results to be attained. They also do not cause a sudden radical departure from the beaten track.

Such projects may be first introduced in a couple of elementary public schools in the first grade only for the first year. Then the first grade teacher may move up with her group to the second grade while a new project teacher may start with a new first grade and so on until all the grades in that school are taught by projects. In the course of their teaching and while they are on the job, teachers will gain new insights and see new possibilities and gain power in the interpretation and application of the project curriculum as incorporating the new educational theory.

It is our hope, therefore, that the Lebanese Ministry of Education will grant us a permission to embark on such an experiment on a small scale in one or two of the Lebanese elementary public schools.

APPENDIX

The writer regrets the fact that she has had no opportunity to give body to the project idea in a real classroom situation. This has not been possible because the educational system in Lebanon is highly centralized and because there does not yet exist an experimental school in Lebanon where new ideas can be put into practice. The reader is referred to the following books as a source for ample concrete illustration of the project idea:

> Hamaide, Amélie, The Decroly Class - translated by Jean Lee Hunt - J.M. Dent and Sons L.T.D. London, 1924.

In Belgium the Decroly teaching started at the turn of the present century. It was initiated by Dr. Ovide Decroly. It is interesting to note that the Decroly program of Centres d'Interet share many similarities with the project curriculum although both were developed at opposite sides of the ocean. In fact the Decroly teaching by Centres d'Interet is often spoken of as the Belgian Project Method for it shares many basic similarities with project teaching. Dr. Ovide Decroly shares with Dewey the belief that the elementary schoolroom should be a laboratorium rather than an auditorium and that the school should be brought into closer contact with life. He also would have the pupils learn by doing. Some of the specific suggestions of the Decroly teaching are quite similar to the implications of the new education on the curriculum.

Dr. Decroly believes that primary concern be given to the facts of here and now in the early years of the child's life, that the tool subjects be made incidental to and an outcome of the activities of children rotating around centers of interest, that separate subjects be eliminated for subject matter refuses to stay in these traditional pigeon holes when presented in the actual experiences of life and that the needs and interests of children should be considered. The Decroly Program which seeks to organize the curriculum around centeres of interest, makes use of the needs of children, socializes the classroom, provides varied activities as vehicles for individual expression as well as for the learning of tool subjects and bids for affective responses and constantly re-enlists the child emotionally.

Wells, Margaret Elizabeth, A Project Curriculum; J.B. Lippincott Company, Philadelphia, 1926.

This is a book dealing with the project as a means of organizing the curriculum of the elementary school. It describes a project curriculum which was actually carried out in Trenton, N. Jersey.

Miss Wells, the author, has made and developed one interpretation of the project method which lays emphasis upon the selection of a major project for each grade of the elementary school, large enough to provide a basis for most of the work of that grade throughout the year. Within each major project arise minor projects related to the major purpose and providing the immediate activities which make up the daily work of the elementary grades.

Miss Wells has undertaken the task of checking up the out-

comes of the work as she developed it, in terms of the subject matter as usually organized under the subjects of study. The results show that there seems to be quite as much of the regular subject matter covered under the usual organization. The units of these subjects were taken up in situations which naturally call for them, giving them a sense of immediate worth.

The book is stimulating and helpful. It suggests many ways of connecting the life interests and environing activities of children with the subject matter of the school studies throughout. The book offers many helpful suggestions especially to teachers who must follow, rather mechanically, organized courses of study. The book suggests much vitalizing activity to awaken greater interest and contribute larger social meaning for the work required.

Washburne, Carlton and Stearns, Myron M., New Schools in the Old World; The John Day Co., New York, 1926.

This book gives a very refreshing account of a few of the outstanding experiments based on the new education carried in free government supported elementary schools of England where the principles of the New Education had been followed since 1890.

Hosic, James F. and Chase, Sara E., Brief Guide to the Project Method; World Book Co., New York, 1929.

This book contains excellent sample projects which were carried out in the Union Street School of Hackensack, New Jersey, under the direction of the author, Miss Chase.

Collings, Ellsworth, An Experiment with a Project Curriculum; New York, The Macmillan Company, 1929.

Collings, Ellsworth, Project Teaching in Elementary Schools, The Century Company.

This books treats both the theory and practice of progressive teaching in elementary schools. It sets forth a practical procedures for guidance of the purposeful activities of children. The procedure described has been tried out in several elementary schools over a period of years and has been positively helpful and practical to teachers. The book also includes a plan for introducing purposeful activity in elementary schools. In the writer's opinion, Mr. Collings plan could be followed in Lebanese schools.

BIBLIOGRAPHY

Bobbitt, Franklin, The Curriculum; Houghton Mifflin Company, 1918.

Bonser, F.G., The Elementary School Curriculum; New York, The Macmillan Company, 1930.

Brubacher, J.S., A History of the Problems of Education; McGraw Hill Book Company, 1947.

_____., Ed., Eclectic Philosophy of Education; Prentice-Hall Inc., New York, 1951.

_____., Modern Philosophies of Education; McGraw Hill Book Company, New York, 1950.

Bruechnor, Leo and Others, The Changing Elementary School; New York, Inor Publishing Company, 1939.

Cole, Luella, Teaching in the Elementary School; New York, Rinehart, 1947.

Collings, Ellsworth, An Experiment with a Project Curriculum; New York, The Macmillan Company, 1929.

_____. Project Teaching in Elementary Schools; The Century Company, New York, 1928.

Caswell, Hollis Leland, Education in the Elementary School; 2nd ed., American Book Company, New York, 1950.

Childs, John Lawrence, American Pragmatism and Education; Henry Holt and Company, New York, 1956.

_____. Education and the Philosophy of Experimentalism; The Century Company, New York, London, 1931.

Comenius, Johann Amos, The Great Didactic of John Amos Comenius; translated by M.W. Keatinge, 2nd ed., London, A. & C. Black, 1921.

Dewey, John, Democracy and Education; The Macmillan Company, New York, 1916.

_____. Experience and Education; New York, The Macmillan Company, 1938.

_____. Experience and Nature; Open Court Publishing Company, Chicago, 1925.

_____. How We Think; D.C. Heath and Company, Boston, 1910.

_____. Interest and Effort in Education; Houghton Mifflin Company, New York, 1913.

_____. The Child and the Curriculum; University of Chicago Press, 1908.

Ferriere, Adolphe, The Activity School; The John Day Company, New York, 1928.

Hamaide, Amélie, The Decroly Class; translated from the French by Jean Lee Hunt, E.P. Dutton and Company, New York, 1924.

Hockett, John A. and Jacobson, E.W., Modern Practices in the Elementary School; Ginn and Company, Boston, 1943.

Hosic, J.F. and Chase, Sara E., Brief Guide to the Project Method; World Book Company, New York, 1929.

Kandel, I.L., Educational Yearbook; 1924, International Institute of Teacher's College, Columbia University, New York, The Macmillan Company, 1925.

Kilpatrick, W.H., A Reconstructed Theory of the Educative Process; Teacher's College, New York, 1925.

_____. Education for a Changing Civilization, The Macmillan Company, New York, 1926.

_____. Foundations of Method; The Macmillan Company, New York, 1926.

_____. Philosophy of Education; The Macmillan Company, New York, 1951.

_____. Remaking the Curriculum; Newson and Company, New York, 1936.

Lewin, Kurt, A Dynamic Theory of Personality; McGraw Hill Book Company, 1935.

Macomber, Freeman Glenn, Principles of Teaching in the Elementary School; American Book Company, N.Y., 1954.

Meriam, J.L., Child Life and the Curriculum; World Book Company, New York, 1920.

Miel, Alice, Changing the Curriculum - a Social Process; Appleton-Century Crofts, Inc., 1946.

Monroe, Paul, A Brief Course in the History of Education; The Macmillan Company, New York, 1935.

_____. A Textbook in the History of Education; The Macmillan Company, New York, 1917.

Najarian, Pergrouhi, Toward a Theory of Human Nature; A Basis for a Philosophy of Education in Lebanon - unpublished Ph.D. Thesis carried at Cornell University, 1952.

National Society for the Study of Education - The 54th Yearbook of the National Society for the Study of Education, Part I, 1955, Nelson B. Henry, editor.

Niblett, W.R. Education and the Modern Mind; London, Faber and Faber, 1954.

Saucier, W.A., Theory and Practice in the Elementary School; The Macmillan Company, New York, 1951.

Saylor, J. Galen and Alexander, W.M., Curriculum Planning for Better Teaching and Planning; Rinehart and Company, New York, 1954.

Schoenchen, Gustav G., The Activity School - A Basic Philosophy for Teachers; Longmans Greene and Company, New York, 1940.

Schorling, Raleigh, Student Teaching an Experience Program; 1st ed., McGraw Hill Book Company, New York, 1940.

Schorling, Raleigh and Wingo, G. Mary, Elementary School Student Teaching; 1st ed., McGraw Hill Book Company, New York, 1950.

Thayer, Vivian Trow, The Passing of the Recitation; D.C. Heath and Company, Boston, N.Y., 1928.

Thorndike, Edward L., Educational Psychology, Vol. I - The Original Nature of Man; Teacher's College, Columbia University, New York, 1913.

_____. Educational Psychology, Vol. II - The Psychology of Learning; Teacher's College, Columbia University, New York, 1913.

_____. Human Learning; The Century Company, New York, 1931.

Washburne C. and Stearns, Myron M., New Schools in the Old World; The John Day Company, New York, 1926.

Wells, Margaret Elizabeth, A Project Curriculum; J.B. Lippin Cott Company, Philadelphis, London, 1924.

Woodworth, Robert S., Psychology - 4th edition; Henry Holt and Company, New York, 1940.