Some Points in Organizing Educational Contents

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I. Assertion of “The National Education”.

In the years of 1958–1961, it was carried in the process of struggle against “Efficiency Rating System for Teachers” and “over-all revision of the public schools curricula”, both of which were intended and put into practice by the Japanese Ministry of Education. They insist—that the National Education should be for the nation, by the nation and of the nation.

The Japanese Constitution which was newly promulgated after the Second World War (Nov. 3rd 1946) was based upon three doctrines—Pacifism, Democracy and Humanism—“and these doctrines should be realized fundamentally by education”, thus prescribes the Fundamental Law of the Japanese Education (Mar. 31 1947) in its preamble. But in 1957 and 1958 there occurred, in the educational administration, something like anxious tendencies which were apt to neglect these doctrines; enactment of the appointment system of members of the Board of Education, prohibition of teacher’s political activities, enforcement of “Efficiency Rating System for Teachers”, the simultaneous achievement test of the national level for those pupils of elementary and jr. secondary schools and “over-all revision of the public policy control over teachers by the authoritative power of the Ministry of Education, and against such anxious manifestations “the National Education Movement” began to spread throughout the country aiming at “the Education for the people, with the people and by the people”.

In 1960 Prof. S. Uehara (Hitotsubashi University) exquisitely defines the National Education as “the education to respond to the national problems and to build the autonomy of Japanese people”. The problems he pointed out were as follows:

1) Problems of existence (Problems of peace and security)
2) Problems of daily living (Livelihood)
3) Problems of freedom and equality
4) Problems of progress and prosperity
5) The above four areas of problems are condensed into the actual problems of the National Independence.
He asserted that these problems had been deeply apprehended among the Japanese people through their bitter experiences in and after the Second World War.

II. Important Problems of the National Education

1. The National Education which is supported by the urgent and actual needs among Japanese people in general, should be responsible to realize the principles of democracy, which is apt to be neglected in political, economical and industrial process of everyday living. Education which is based upon the principles of democracy should contribute for bringing up youth who are deeply imbued with love of peace and friendship towards other nations.

In case of reactionary administration and authoritative control by the Ministry of Education these principles should be emphasized, because they are the embodiment of the educational needs of the absolute majority of the people, v.g. labourers, farmers and citizens in general.

2. The National Education should be based upon the racial characteristics and should bring up youth who are able to solve the important problems as I have stated above, especially who are imbued with genuine patriotism and are eager to realize the real independence of the country.

As regards with nationalism it is apt to be connected with a reactionary thought, and goes straight to imperialism or militarism. History tells us that it is a great menace to other nations and it is likely to solve the international struggles by the means of arms. But esteem for the racial characteristics, which is nationalism in other words, is the comprehension of enormous energy of the majority of the people. It put great emphasis upon common language, common area, economic life in common and mentality and culture in common. Education of the young people must not be allowed to neglect such common factors, and to put these factors into consideration in the process of organizing educational contents means to re-organize education on the basis of people's autonomy.

3. The National Education should be closely combined with modern sciences. Every content which is taught everyday in school should not be allowed to be false or unscientific, but as a matter of fact, falsehoods or mistakes are taught carelessly. As for teaching the social problems which include serious contradictions in themselves, people of the leading class — statesmen, enterprisers, etc; — show hostility and try to oppress teachers and schools. Therefore if teachers wish to preserve scientific contents of education all the people of their society should esteem scientific truth, and it is especially important for teachers to examine where and why the scientific contents are checked or interfered.

In Japan there has been social and political climate, where research of natural sciences is encouraged and, on the contrary, that of social sciences is regarded as somewhat dangerous. This is the real testimony of the monopolistic stage of capitalism, which needs the highly developed natural sciences and technology to reinforce the productive powers, and, on the other side, it needs maintenance of the productive relations between capitalists and labourers by
turning labourer’s eyes away from social sciences which deals to pursue serious contradictions of the real society where they live and work.

Such being the case we must bear in mind to pay our utmost efforts to organize the educational contents on the firm standpoint to unify natural sciences with social sciences, otherwise we can not expect the real effect of education.

III. Reform of the Educational Contents

For these twenty years or so the educational reform has been one of the most remarkable tendencies in the advanced countries, especially the first point of the reform is concerned with the educational contents; planning of the training of those people who would participate in the reform campaign in each domain of society and community and vocation.

In this point J.D. Bernal, the professor of physics of the London University, emphasizes simplification and reduce of the educational contents of each stage of school as well as prolongation of the school periods. Because only accumulation or transmission of knowledges in school lessons can not overtake the enormous increase of the amount of knowledges in modern times.

Therefore emphasis should be put upon discovery rather than acquirement, presenting the methods of discovering new truth rather than conveying traditional truth; it means the importance of teaching the positive side of the scientific methods. This may be called the astonishing change of the educational aims, and there will be needed more time, more thinking power and more experiments to realize these aims. (J.D. Bernal; World Without War. Chap. X. Education for the New World)

In October 1973 the Central Curriculum Council was setted to provide advice and suggestion as requested by the Minister of Education, who inquired to reform the curriculum of each stage of school, the curriculum which has each structure of harmony and unity. Besides in December, 1970 the Investigating Committee of Educational System started at the request of the Japan Teachers Union. After three years and a half this committee made the final report, the title of which is “For the Educational Reform of Japan”.

As regards with the fundamental principles of the reform of the educational contents this report mentions five points as follows:—

1. Enrichment of the basic scholarship and self-formation of the view of the World
2. Careful selection of the educational contents and realization of their system and unity
3. Organizing many sided activities of the pupils
4. Highest regard for the spontaneous activities of the pupils in educational methods
5. Voluntary organization of the educational contents and democratization of the procedure

As for the pupils the inner relationship between the basic scholarship and the view of the world can be realized actually in the teaching and learning proce-
dures of every subject lesson, which contains teachers confident activities, carefully selected teaching contents, and pupils' vivid activities. We believe that both intellectual training and moral training, both knowledge and morality, can be united in the teaching and learning activities, and can enable the pupils attain their over-all development, which complies with the ideal of the Constitution of Japan and the spirit of the Fundamental Law of Education.

IV. Difference between “Curriculum” and “the Educational Contents” and Concerning “the Minute Selection of the Teaching Materials”

In those days when the Curriculum Reform Movement was developed after the Second World War, educators' concern centered around the research of the curriculum structure or the curriculum patterns.

Here I must roughly allude to a slight difference of the meaning between the curriculum and the educational contents. The curriculum means courses and contents of teaching and learning activities within each subject, and it is connected with proportions of curriculum activities and extra-curriculum activities, whereas the meaning of the educational contents is rather wider than that of the curriculum, and it puts the emphasis upon the consistency of aims-contents-methods (means): the contents are the means to realize aims on one side, and are closely supported with every possible method. Therefore I dare give the definition to the contents — “they aim at the object, being strongly supported by the methods.” — To organize the contents the structure which is based upon philosophy and science, is needed.

Now, before discussing about the structure, I must add some comments about “the minute selection of the Teaching Materials”, which has been the center of interests among people concerned with teaching, research and administration of education; It has been the chief point of their insistence saying that all pupils of Japan have been seriously over-whelmed by superfluity of the contents of each subject, therefore the quantity of the contents should be diminished resolutely and a structure of higher quality must be reorganized.

But to diminish the quantity only does not mean the minute selection; it means only the intentional negligence on the side of the teachers. The minute selection of the reorganization of both quantity and quality of the educational contents must need the systematic research of the national level, and must not be allowed to limit it within narrow circle of concerns, as the curriculum revision, which has hitherto been put in force by the Ministry of Education.

V. J. S. Bruner’s theory about “the Structure” of the educational contents and “Structure-Learning”

For these several years most of the Japanese educators have paid much interest to research and discuss about the problem of “the Structure”, which J. S. Bruner, as the Director of the Woods Hole Conference in 1959, had arranged and emphasized in the book — “The Process of Education” (1960). He says in this book as follows:

“Grasping the structure of a subject is understanding it in a way that permits
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many other things to be related to it meaningfully. To learn structure, in short, is to learn how things are related” (p. 7).

And further he points out in the 2nd chapter — “The Importance of Structure” — the following four general claims that can be made for teaching the fundamental structure of a subject:

(1) “Understanding fundamentals makes a subject more comprehensible. This is true not only in Physics and Mathematics, where we have principally illustrated the point, but equally in the social studies and literature” (p. 23)

(2) “Perhaps the most basic thing that can be said about human memory, after a century of intensive research, is that unless detail is placed into a structured pattern, it is rapidly forgotten” (p. 24)

(3) “An understanding of fundamental principles and ideas, as noted earlier appears to be the main road to adequate” transfer training” (p. 25)

(4) “By constantly reexamining material taught in elementary and secondary schools for its fundamental character, one is able to narrow the gap between “advanced” knowledge and “elementary” knowledge”(p. 26).

Although Bruner criticizes the theory of J. Dewey, the basis of the above introduced theory seems to be rather revaluation of J. Dewey, and has given much influence upon research and practice of Japanese education. It is well based upon the academic result of psychological research about the cognitive growth of children, which, according to Bruner, means “the enlargement of abilities to obtain and actualize knowledge”, in other words, “the enlargement of abilities to transact various kinds of information”. And abilities or operations of transacting information rely chiefly upon three kinds of experiences, as Bruner asserts, of motorial, of perceptive and of symbolic nature.

The above mentioned is only a sketch of Bruner’s view about structure and its theoretical foundation. He thinks that modern society of highly developed communication and of enormous amount of information requires children higher standard of abilities of analysis and synthesis to adjust to their environment, therefore growth of the symbolic ideals should be accelerated in order that their cognitive abilities may be structure of the educational contents and of structure-learning in schools. And I think his theory or standpoint is based upon the Functionalism or the Behaviourism, which, in the end, is connected with American Pragmatism. In this point he walks on the same road as J. Dewey did.

VI. Philosophical Science about “the Structure”

In the world of nature everything or organism has its proper structure in itself and is chiefly co-related to each other. Philosophical study concerning “the Structure” has recently been carried out to issue many thesis by Soviet philosophers; some stand upon the Dialectical Materialism and regard the structure as one of the categories. Whether the structure and its contra-concept “the element” is connected with such dialectical categories as “a whole and a part” and “the form and the substance”?
L. V. Agudov asserts in his thesis “Quantity, Quality and Structure”, that a quantitative change is an expression of numerical increase or decrease of the composing elements, but a structural change in a change of correlations of the composing elements. Thus he regards the independence of the three categories—quantity, quality and structure—and proposes his viewpoint on the mutual correlation of these three, and further he insists that the hitherto thought about the law of mutual conversion from quantitative change to qualitative change should be closely corrected; a new law should be settled as regards with mutual conversion among structural, quantitative and qualitative change.

Such being the case, if there is any change of elements in quantity (increase or decrease in number), the structure would be changed accordingly. And we may think that a change of the structure is likely to be concerned with form, and on the other hand, a change of its composing elements is rather concerned with substance. Therefore the structure is “the dynamic structure”.

It goes without saying that the educational contents are the objects of pupils’ cognitive activities in their learning each subject, so it must be assured that every pupil can have possible opportunities to learn them autonomously to acquire the concepts and laws of science, and this acquirement should exactly accord with the systematic activities of both analytical and synthetical cognition.

For this reason there should be the structure of the educational contents, and this structure is required to reflect the correct structure of modern sciences, which include, in themselves, the general and fundamental concepts and laws as their composing elements. But, in this case, we should firmly bear in our minds that the structure of modern sciences can not be allowed to be exactly the same as that of the educational structure. Between these two structures, there stand the pupils, who are the subjects of learning and have each right to be taught and understand truth and humanity. Therefore the structure of modern sciences should be dialectically intermediated to that of the educational contents. By means of such transactions the structure of educational contents would become understandable for every pupil.

Order or succession of understanding of each pupil is the embodiment of systematic activities of his cognition, and signifies the concrete structure of the teaching materials, which, being intermediated by the structure of the educational contents of each subject, is connected finally with the structure of modern sciences. We may call this “the didactic refraction” of science to education. This is the reason why “Nuffield Physics” emphasizes “The Science Education for Pupil’s Understanding”, and advises teachers to teach pupils a little amount of teaching contents so as to let them understand the exact knowledge, pupils need “a firm foundation of understanding, and it is their fundamental right to understand”.

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