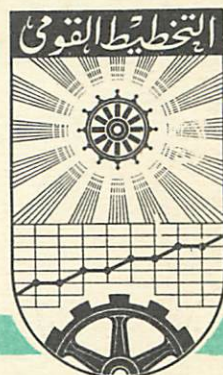


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Economy of Education

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So far, in the phases of development of human society, education played mostly ^{broader} a humane-cultural function and so it has for long been considered the exclusive domain of pedagogists. Apart from pedagogical science the other scientific disciplines ^{often} rarely paid any attention to the development of learning and its methods. Likewise, ^{formally, technically} actual social practice whether in production or in economy took no special interest in the needs of an educational system or in its results and the solution of all the problems in this field was left to the educational authorities. This attitude may be considered quite natural emanating as it did from the role of learning and education they played for quite a long time in social development.

Later, in the ^{economic} investigation of the laws of development in social science, especially in economic theory, it was found that in the perspective development of economy and of society, the classical sources of development will no longer be sufficient and that new sources - with ^{flexible} movable limits of exhaustion - would have to be used, having movable limits of exhaustion or being, as a matter of fact, inexhaustible. It is the implementation of science for a change of natural forces into productive forces. This fact brought revolutionary changes also in the field of education and learning since education conditions the development of science and, at the same time, its control as of a materialized force demands educated, qualified workers. As a result of this learning began to fulfil a significant economic function and it became the object of interest of economic science and of other related scientific disciplines.

^{colours (influence)}
Quite a special role is being played here by economic science

for the reason that even if the educational process is a cultural process, outside production, it nevertheless has its economic dimension, it requires live and objective work. It therefore has its economic aspects. On the other hand, learning as a product of education, influences and even conditions economic processes and at the stage of the scientific-technical revolution it represents, together with science, the most significant factor of economic growth. That is why to economic theory befalls the task of investigating the economic aspects both of the educational process itself and of examining the laws of development of learning and of economy and create theoretical conditions for the integration of the educational system into the overall economic system of the country.

Since the educational process has a special character belonging to the field of investigation of several peripheral scientific disciplines, in course of time a new independent scientific discipline was formed, that of the "economy of education". It is essentially an economic discipline but, not unlike other modern disciplines, it is combined, or rather imbued with aspects of other branches of science, especially of the science of education, sociology and psychology. Therefore, there is question not of pure economic theory even though the methods used are mostly those that prevail in economic science.

Economy of education may be looked upon, on the one hand, as a branch of economics dealing with the economic aspects of the educational system as a branch and, on the other hand, as a special discipline in economics if we consider its relation to economy as its object. That is why we divide it into

- internal economy of education
- external economy of education.

For the sake of information we shall describe briefly the object of investigation of external economy of education. Its aim is to study the relationship between education and economic development, i.e. learning the laws of development of education and of economy. This study should not be an aim in itself but should be performed ^{vykhodivshisya} with the view to use the information thus obtained to find their optimum relations to the future. They will, therefore, form one of the bases for the ^{vykonavannya} performance of both educational and economic policy in the country. This possibility rests ^{intelektual'na} on the thesis that education induces changes in the development of society, in the development of science, economy, technology as well as in social changes.

The following belong to the field of investigation of this group:

a/ The analysis and ^{shchodo ekonomiki} evaluation of the relation of the investments of society on education compared with the other investments on economy, eventually on the rest of the public consumption. Here belongs, at the same time, the measuring of the share of the expenses from national income and of the relation to the social product.

b/ ^{vyvedennia} Defining the sources of financing education, dividing them into individual and social and the investigation of the possibility of their exchange or, eventually, of their increase.

c/ Investigation of the character of the product of the educational process, of the forms in which it affects economy and of the problems of measuring this effectivity.

d/ Finding suitable methods of evaluating the economic effectivity of education from the aspect of society, of enterprises and of the individual and the practical application of such methods.

g/ Investigating the dynamics of education development, of the number of qualified workers, their distribution and utilisation in economy and in society.

f/ Prognoses of education development with respect to the perspective needs and requirements of economy and society in general.

It may be summed up in general that external economy evaluates the development of education in relation to its function in the reproduction process, in relation to its input expressed in investments on education to achieve a certain economic effect, i.e. in investigation and analysis it considers education to be an integral part of economic development.

On the other hand, the object of investigation of the internal economic ^{is the} process of education achieved by the school system or other educational facilities the aim of which is to educate and provide the students both ^{with} elementary and general knowledge and to provide specific knowledge from various scientific and technical branches.

The same as in the other branches of economy so in education also holds good the law of time economy, i.e. the requirement of the economy of work that is, that social work be expended only to such an extent as is necessary to achieve the desired effect at the required qualitative level. This question is closely linked with the problem of financing education development. If the economic function of education is to be fully implemented it is necessary to consider not only what share of the national income is to be devoted to this end but also what types of schools and what levels are to be built, in what time sequence in order that the training of qualified manpower correspond

to the needs of scientific and technical development not only as to quality but also as to suitable time.

That is why the economy of education deals with the pedagogical, the organizational and the economico-financial aspect of relationship occurring in the educational process. On principle, there is question here of the following kinds of research:

a/ The definition and analysis of the external and the internal factors influencing the educational system.

b/ Organization of the educational system and its management on a macrolevel.

c/ Location and distribution of the individual cycles and kinds and the determination of the optimal size of these schools.

d/ The internal organization of schools, their management and economic direction.

e/ Material and personal factors of the educational process and the analysis of their utilization.

f/ Rationalization of the teaching process, especially in the drawing up of study plans, their structure and content, the repartition of the content into the individual cycles or school years, in methods and technique of education, in the utilization of teaching technique and the like.

Justification of the need of implementing economical principles
in the educational system

The demand for instruction which is being laid by society before the educational system in the present phase of development is rapidly increasing in all the countries of the world. This goes hand in hand with considerable increase in population which is to be provided with at least elementary general edu-

cation and, apart from that, there grows the need of providing education in higher cycle schools especially in university level schools.

Moreover, there is a growing interest on the part of adults who begin to understand ever more the need of life-long learning and, therefore, register in various evening, external and post-graduate forms of study.

Together with the quantitative growth in the number of students there grows also the need of raising the standard and the quality of education. This is linked with the scientific-technical development which requires the training of specialists of such a level of qualification as will be able to meet the material factors of to-morrow's production process. That is why it is necessary to ^{improve} accommodate and ^{rebuild} extend the present content of the teaching curricula. In the case of adults it is necessary to see to the ^{obnova} refreshment of knowledge grown old and stale and bring it to the latest level and to the required degree of specialization demanded by their profession.

The rapid growth of scientific knowledge increases the ~~the~~ demand on the brain/capacities of the students and in many cases demands a lengthening of the period of study.

This growth of quantitative and qualitative demands on education requires not only a greater number of teachers but lays new demands on school capacities, their technical equipment and so also on the necessary financial means. The increase of these demands cannot be limitless in any society since each country has greater or lesser possibilities of satisfying them, these possibilities being determined by the overall economic situation in the given phase of development. In order that these possibili-

ties may not become limiting factors or even an obstacle to ^{freedom (widom)} further development of education as to quantity, quality and standard, it is necessary to ^{local} seek ways and means of increasing the effectivity of education by utilizing the latest findings of science and technology and by discovering the internal reserves of the educational system.

That is why economic theory - apart from investigating the laws of development of learning and economy - deals also with the analysis of the course of the learning process from economic aspects. This activity should not be looked upon as a kind of form of curatella of economists over pedagogists but rather as an endeavour to make use of this branch of science to create suitable conditions for the development of learning while taking into account the economic possibilities of society.

In practical educational activity we often meet a certain aversion on the part of pedagogist against the "interference" of economists with their monopolistic activity. This is often provoked by new administrative requirements emanating from economic necessity, at other times it springs from financial problems met by schools and pedagogists. Whatever the sources from which such aversions arise it is necessary to realize that they are harmful to the development of education and of society as well. One must bear in mind that economy not only creates conditions for the realization of education but economic demands may be an incentive to have done with a relatively much imbedded conservatism in education, to pass on from the traditional method of "blackboard and chalk" to more modern methods which allow for effectivity on the part of the teacher and an improvement of the quality of education.

That is why the task of economists is to create such an atmosphere as to convince educational workers of the necessity of innovations in learning in the broadest sense of the word.