

"New Education" A Determining Factor of Economic Growth in the 21st Century

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Abstract

In the context of postmodern society, by extrapolation, of postmodern pedagogy, where a special place belongs to the permanent education, it becomes imperative to manifest the new educations, as pedagogical answers to the problems of the present society.

*Being aware of the problems and values of today's society, mankind has been able to formulate its problem-solving strategies, entailing the values within which they are. The most important type of strategies is the one that realizes the change of mentality. And it is known that any change of mindset occurs effectively and globally through the transformative action of education. In this sense, we believe that the new educational model, called **New education**, has an overwhelming importance for the economic growth in the 20th century. XXI.*

Key words: New education, training, economic growth, the knowledge society

J.E.L. classification: I20, I21, I25

1. Introduction

The huge amount of information, accumulated due to technical-scientific progress, exceeds the possibilities of assimilation. In this context, the education of the 21st century emphasizes the application of the principle regarding life experiences and „the provision of the consequences of the individual's action”.

In order to prevent any problems, the education of the 21st century must assimilate the direction, content and rhythm of social development, prefigure its content according to the demands of tomorrow's society, prepare the man for adaptation to change, applying a series of strategies:

- ensuring an optimal balance between the informative and the training dimension;
- focusing on innovative learning
- implementation of the principles and contents of anticipatory learning;
- extending the educational act throughout the whole life of the individual;
- global approach and coherent approach to content;
- adaptability to change

Education, meant to contribute to the building of a personality capable of „foreseeing to prevent”, to trigger positive change both within one's self and outside it, can be conceived as a permanent reconstruction of future existence and experience, what makes the man of the third millennium correspond, at a higher level, to the social expectations of renewal and cultural enrichment, but also capable of solving contemporary problems.

2. Theoretical background

The evolution of education has brought humanity to the awareness of the phenomenon defined as learning throughout the life. This was conditioned not only by the rapid and wide-ranging changes that human society is subjected to, but also by the problems that are emerging and serious, undermining the integrity of the human personality, the culture and the existence of the human being, even of the world as a whole.

After the 1980s, UNESCO, through its programs and recommendations, promotes the concept of contemporary world issues and outlines a set of possible answers of the education systems, which have been concentrated and formulated under the new education genre. According to G. Văideanu pedagogical acceptances, the new educations represent new specific contents, approached as concrete answers to each identified problem. The existential framework and theoretical analyzes demonstrate the need for effective solutions and holistic treatments. The scientist proposes three practical ways to capitalize on new education: - the introduction of new disciplines focused on a certain type of education; - creation of specific modules within the traditional disciplines; - capitalizing on the approach technique infusion / infusion with messages related to the new contents in the classical disciplines.

Another researcher, S. Cristea, details the methodology of capitalizing on new education by applying strategies for implementing and designing training content, noting that they are adaptable to the level of each dimension of education, depending on the particularities to them, but also to life cycles; by the specific conditions of each education system. It is valuable that, in this context, the author proposes a holistic approach, correlating the possibilities and objectives of the three forms of education: formal-non-formal-informal. Thus, the infusion approach involves capitalizing on the problem of new education within the school and university disciplines in the form of modules, topics, formalized or independent study recommendations, including, explored in the process of non-formal activities and dissemination through modern media communication systems (TV, radio, networks socializing etc.).

Adhering to the nominated approaches, based on the analysis of their own pedagogical experience, we mention that the idea of capitalizing on new education must also be realized within the family, through its education. Of course, this depends on the initiation of the parents, the training and strengthening of the parental competences in the given field, but it will essentially contribute to the strengthening of the family influence process and the development of the child's personality. The infusion approach is closely linked to the modular one and implies a greater concentration of the specificity of solving a problem, conceived as a desire for new education (education for peace; education for democracy; education for health; education for the environment; education for the family, etc.), structured scientifically, theoretically and applied, in a module, provided by the disciplinary curriculum.

The disciplinary approach intends to include, in the curriculum, some school or university disciplines, distinct with institutionalized objectives at the level of the school documents. In this case, we consider that the curriculum is being revised and non-formal educational activities must be well thought out in the school's decision. In this order of ideas, it is necessary to respect the particularities of age, the specificity of the education step and the ergonomic principles, those that ensure the respect of the intellectual hygiene of the student.

The trans disciplinary approach, which, in our view, has a great future, involves the approach of new education at the level of scientific summaries proposed annually or quarterly / semester by well-prepared teams of teachers. For example: addressing global environmental issues and ecological education from the perspective of a team of teachers, consisting of teachers of biology, geography, economics, chemistry, physics, sociology, philosophy, etc.

Obviously, in the training process we will capitalize on the informal influences, which come from the family, the media, the community. The essential here, being their knowledge and the mastery of the educators in order to correlate interestingly, originally and efficiently the three general forms of education (formal - non-formal - informal), valorizing their general contents, concurrently with the values and contents of the new educations. As mentioned above, a possible evolution of the education and personality formation of the individual from the perspective of enhancing the new education, as an optimal response to the challenges of the contemporary world,

would be the orientation towards the holistic approach of the formal, non-formal and informal education.

3. Research methodology

The "new educations" are adaptable to the level of each dimension of education, depending on their particularities but also on the "cycles of life" and the specific conditions of each educational / educational system (for example, ecological education can be integrated into the level of moral education / in primary education; intellectual education / high school education; technological education / vocational education, etc.).

The integration of the "new education" in the school programs is realized / achievable on the basis of four approaches for designing the content of the training:

The methodological relationships opened between the dimensions of education and "new education" employs the following four pedagogical approaches institutionalized, already, at the level of modern education systems.

A) The "infusion" approach engages "new education" in the area of different school disciplines but also of different dimensions of education. For example, the problems of ecological education are addressed simultaneously in biology, chemistry, physics, geography, but also in the intellectual-moral-technological-aesthetic-physical (sanitary) education.

This type of approach raises two methodological problems of the greatest pedagogical and social importance: the need to integrate the information brought from the "ecological education" level into the structure of the school syllabus, eliminating the practice of its juxtaposition only as an annex, at the end of a chapter or manual; the need to effectively carry out a curricular synthesis between the two types and information circuits.

B) The modular / disciplinary approach engages "new education" within integrated study disciplines at the level of school steps but also at the level of some dimensions of education. For example, "ecological education" is approached as the "mode" in biology, in high school education, with specific objectives for the dimension of intellectual education.

This type of approach raises the problem of the correlation existing between the different "modules" introduced in some educational disciplines. It also raises the issue of the risk of unilateralization of specific objectives within the same dimension of education.

C) The disciplinary approach employs the "new education" within a distinct school discipline. For example, "ecological education" appears as a teaching discipline, integrated into the educational plan, designed at the level of the respective school system, with pedagogical objectives institutionalized at the level of the school program, which adequately processes the general and specific resources of all dimensions of education.

This type of approach has already enshrined in the curricula new school disciplines: ecological education, civic education, human rights education, health education, demographic education and especially technological education.

The methodological problem raised by the disciplinary approach is due to the special status of the school disciplines promoted in this way. They do not have the specific academic basis of the particular sciences, which also give the title of most of the school disciplines. Their design thus implies, in an objective way, the overcoming of the monodisciplinary tendencies in favor of multidisciplinary strategies focused simultaneously on the scientific contents taken informatively but also on the social effects, formatively processed applications, in the intellectual, moral, technological, aesthetic, physical sense.

D) The trans disciplinary approach employs "new education" at the level of "scientific summaries" proposed quarterly or annually by "teams of teachers". For example, the global and special problems of ecological education are addressed by a team of professors of philosophy, sociology, economics; biology, chemistry, physics, etc., in synthesis lessons, ethical seminars, thematic conferences, ideological debates, school competitions, etc.

This type of approach, "probably the most interesting, most promising, but also difficult to implement" (Vaideanu) responds to topics included in the content of "new education", which reflects the ideological and psychosocial tension of the problems of the contemporary world: democracy; economic development; the defense of the natural environment, the use of free time,

the relations between the sexes the role of religion, the relationship between national and international in political life; the relationship between national and universal in cultural creations; the culture of the postindustrial company of computerized type.

The methodological difficulties inherent in this approach involve the sensitivity and social responsibility of the educators: their ability to approach global (intellectual-moral-technological-aesthetic-physical) of the activity of training-development Personality: their attitude of openness towards the problems of permanent training: their will to self - continuous professional development. - Content of education, Dimensions of education.

4. Findings

The placement of any type of educational approach in time, so in historicity, necessarily implies the action of searching and deciphering the trends that are manifest in this area of vital importance for contemporary societies. This is because the trends are "bearers of suggestions, confirmations or answers. Depending on their strength and relevance they can announce possible or favorable futures".

Knowing the trends can help researchers and decision makers better situate their projects and methodologies, avoid possible errors and move more safely to the desirable future of the school.

There are three aspects to be deciphered in education trends: the trends as such, their play and the identification of the strongest trends (which should be encouraged if they serve social progress, or stopped or minimized if, on the contrary, they develop destructive, braking or insignificant directions).

On the other hand, obvious, manifest tendencies can be identified, as well as "hidden" tendencies, latent the latter manifesting in areas where measurement is difficult, at first weak, weak, trends evolve and in some cases become important or powerful.

At the global level, there is, of course, a game of trends. For example, the interest for foreign language learning, for the massive use of computers, for the programmed training could be considered as major trends of the contemporary education. It is well recognized that learning a foreign language (or more!) Are both a useful spiritual exercise and a means of openness to other cultural horizons, of dialogue and communication between cultures and not least of social improvement (mitigation) conflicting states, disorganization, etc.). Similarly, the use of computers in training is, with the specificity of this field, converging, in the same type of purposes stated above.

The trends could be grouped according to the levels of education or domains: objectives, contents, methods. Thus, in terms of content the major directions could be:

- both the contents of formal education and those of non-formal or informal education;
- both the systemized contents, in the form of plans, programs, courses and textbooks, as well as the "hidden" or latent ones, detached from the atmosphere of the school institution, from the culture and style of the educator;
- both the objectives and the knowledge and the ways of organizing the learning, considering that they are also message bearers and are part of the "path" of personality building.

Finally, the tendencies could also be grouped in relation to the ways of approaching the processes of oral education. The systemic approach of the educational processes produces positive effects such as:

- increases the coherence of the educational activities;
- ensures the variety and balance of the methods and means used;
- favors the articulation of different types of learning, etc;

The systemic approach to education "allows to highlight the functions and structures specific to the school organization / institution. This approach regards education as "the institutionalized totality" practically at the level of the whole society".

System analysis (of the education system) highlights the following four types of schools:

1. school-institution, whose purpose is socialization based on the internalization of social norms;

2. school-apparatus for reproducing social relations of power, which gives full power to the social system, legitimizing the differences between classes and categories (Bourdieu, Passeron);

3. multiple school, open to varied experiences, dependent to a greater extent on the activity of those involved in education (students, students);

4. school - "education market" which "aims at socialization based on" distance from norms "(conceived entirely on the postulate of rationalization of individuals who choose according to interests and resources" - and who, as we can see, promotes it and our current system.

These types / theories highlight the importance of the socialization function employed at the level of the education system in order to socially integrate the personality in different fields of activity. The methodological and practical opening made by the theory (but especially by the systemic method) of the systems allows the approach of the school from the perspective of the organization theory, defining the school as an organization based on a set of pedagogical resources (human, informational, financial, material-energetic, etc.) engaged in the realization of a common activity, oriented value towards the general aims (established on medium and long term) achievable within specific hierarchical structures that determine the quality of the school curriculum (objectives / plan-programs / methodology).

The structure of the education system also supports an evolution determined by the reforms carried out in the last decades in the world. There appears the tendency of articulating the three levels of schooling (primary - secondary - superior) provided on the one hand by the establishment of school stages and / or cycles, and on the other hand by the opening of the whole system, both vertically and horizontally towards lifelong learning. .

The reforms implemented in the last decades (especially after the events of 1968 in France) tried to solve the disfunctionalities that appeared in the context of the "world crisis of education" materialized, in the last instance, in the contradiction between the demand and the supply of training, between resources and results, reforms that mainly focused on the basic structure of the system, respectively the level of compulsory education.

Currently the compulsory education structures undergo the reforming transformations initiated in the years 1960-1970 in the following most important directions:

- redefining compulsory education;
- extension of its duration up to the age of 16-18 years;
- flexibilization of the relations between the levels and the steps (cycles of education);
- the concentration of the content around a common trunk of general culture, designed in most countries in terms of an identical basic program;
 - validation of compulsory education through graduation certificates obtained through examinations or by evaluating the results obtained during the course.

Higher secondary education / high school, usually organized as post-compulsory education, exploits the tendency of "prolonging a common trunk whose diversification by branches is realized later during the studies".

Its purpose is to ensure a common basic training and to diversify the study possibilities according to the variety of requirements and aspirations, while ensuring, at the same time, the effective equality of different types of education and training and mobility of students.

Higher education, oriented towards a balanced general education that pursues not only cognitive goals but also affective and moral development employs new tendencies such as:

- the social openness necessary for the training of graduates in an increased number of professions;
- restructuring the content based on the fact that in a dynamic society the specific competencies are quickly exceeded;
- professionalization through research meant to strengthen the university's ability to produce the fundamental knowledge necessary for the training of specialists;
- supporting the partnership between the university and the public authorities, especially in the case of large projects;
- promoting a new philosophy of education that allows the assertion of a curricular design capable of resolving the conflict between general and specialized education, not by offering the widest knowledge in different disciplines, but by adopting, in different areas of specialization, a style of education focused on assimilating some intellectual mechanisms and university values.

The education systems in Central and Eastern Europe, after 1990, try to respond to these challenges in the context of educational policies aimed at changing the relationship between state and universities, following on the one hand the countries of the old system (centralization, absence of autonomy, politicization, ideologization, uniformization etc.) and on the other hand, the achievement at a macro-social level of some pedagogical objectives of wide scope. At this level the following tendencies are manifested:

- expanding the network of higher education institutions, by setting up new institutions;
- restructuring of higher education in three stages: short-term education (2-3 years); long-term education (4-6 years), post-graduate education (masters, doctorate).
- diversification of higher education institutions (state, private, confessional, military, etc.) and their forms of organization (day, without frequency, at a distance).
- changing the relations between the higher education institutions and the government (Ministry of National Education), in the following senses: partial decentralization of the management of the system, increase of the institutional autonomy, establishment of national academic bodies of intermediation between the institutions and government, etc.

The curricular approach of the education promotes a new conception about the selection and organization of the contents, about the design and organization of the learning. This approach operates on an inversion of terms in the learning equation: if by far the most important was the content (what) of learning, at present it matters first for what purpose and with what results it is learned. The great advantage of the new approach is that "the methodology of curriculum development requires the educators to select, use and dose or articulate all the components and stages of the didactic activities according to objectives, avoiding the isolation or overriding of a component (method, means instrument) to the detriment of others".

The reform of the curriculum launched in 1977-1978 essentially follows the radical change of the conception about the role of the school: "The school was, in principle, the scene of a process of teaching-learning, that is to say, of assimilation of knowledge. It must become more and more the institution that ensures a complete development of the personality. The new programs will focus on the individual study and the development of the originality of thinking, the learning will be focused on fundamental concepts. "

Illustrative of this new way of understanding the purpose of the school is the program of measures adopted in 1976 by the Ministry of Education, Science and Culture of Japan, whose priority is not the objectives regarding the increase of the share of science and technology, but those aimed at:

- "Stimulating the ability of students to think independently and make appropriate decisions;
- A calmer and more enjoyable school life.
- Stimulating the students' love for nature and for people, developing sociability.
- Cultivating love for the family, for the birthplace combined with the openness to the contemporary world".

The curricular design promoted in the modern didactics is centered on the objectives of the instructive-educational activity, pursuing as a priority "the optimization of the pedagogical correspondence relations between the component elements (objectives - contents - methodology - evaluation), between the teaching-learning-evaluation activities subordinated", to the purposes committed to system and process level. The development of curricular design involves a pedagogical approach oriented to three types of decisions (Seguin, 1991):

I. decisions of philosophical and political nature that involve establishing both the fundamental options (the pedagogical ideal, the goals) that define the evolution directions of the system as well as the pedagogical resources (human, informational, etc.) needed for the educational system as a whole;

II. decisions of a pedagogical nature, dependent on (I) and involving, in their turn, three elements: establishing the criteria for the elaboration of the educational plans, establishing the profiles of formation-development of the personality of the student / student on the different stages of his formation, establishing the modalities global and partial evaluation of their level of preparation;

III. decisions that also involve: setting specific objectives on educational disciplines or modules, establishing the pedagogical resources necessary to achieve the specific objectives, establishing the modalities of partial evaluation of the students.

The curricular design does not exclude but on the contrary relies on the three ways of designing the teacher / student correlation at the three levels: front, in groups, individually but should focus more on the individual level. Under the current conditions, the individual education "evolves from the extreme, socially inapplicable solution (" each teacher works with a student at his own pace ") to the curricular inspiration procedures, integrated in different didactic strategies organized in front or in the group: worksheets individual work, homework assignments, learning tasks (play, work or creation) practiced in the classroom but also in the school or extracurricular environment".

The philosophical basis of the modular structure of education is holism (from holus = whole, everything), meaning "the attempt to conceive an informative totality as an integrated unit of elements that lose their sequential features". Modular structuring makes it easier to include special knowledge in logical assemblies that exceed quantitatively and qualitatively the characteristics of curricular divisions. The students / students are offered modular chains or suites depending on the instructional-educational objectives or in relation to their interests and skills. The modules may be different in terms of difficulty, level and pace of work. The student / student chooses or is proposed to follow one (or more) of the way he / she goes with the support of the teacher, and then evaluating the results. In case of failure it is recommended to go through a lower or complementary module.

Modular learning cannot be fully extended. As a rule, the basic disciplines are taught in a mono disciplinary perspective. The modular dimensioning of the content "is done for a group of disciplines (this does not mean that the modules overlap over the classical educational objects, but represent unique syntheses, new epistemic perspectives, accumulations of integrated knowledge, etc.) that seek differentiation even for professional orientation of the students."

Life, the experience of the modern man shows that learning to maintain, simple reproduction of the values of the past, tradition are not enough to "equip" the man of the society of the future. The old type of learning, based on "maintenance" learning, can no longer satisfy today when the changes are so fast and complex that they provoke true "shocks" to the contemporary man.

Unlike traditional learning, the new form of learning is anticipatory, that is, consistent with a vision in which the future must not only be expected or met, but also designed and constructed according to a set of desirable goals, in order to avoid undesirable effects. Also, this type of learning is characteristic and participatory dimension, thus creating two types of solidarity essential for the survival of the human species: in time (in anticipation) and in space (through participation).

There are three main directions in which to change education:

- a) notifying and welcoming changes;
- b) their evaluation;
- c) designing the change and intervening (controlling the changes) all three aimed at the formation of the human being so that he can cope with the changes to which he is subjected by his environment.

Particularly interested is aspect (c). It is not enough for today's man to just notice, welcome and evaluate the changes that take place in one area or another of society. In his capacity as subject of history, as a participant in social processes (and not as a spectator!), He must design changes himself, intervene in their flow to cause the desirable effects, limit or avoid the undesirable ones. That is why he must be educated in the spirit of alternative solutions, in the image of possible future scenarios. The intervention for change involves to some extent the planning of change (limited and precise objectives, realistic goals and terms).

In terms of the means of education for change, these are the stimulation of the anticipatory imagination, of the possibilities of choice and initiative, of the responsibility, by using all the resources and processes that create "images of the future", "alternative scenarios", "models of possible worlds", "Problems with multiple solutions" etc.

In the face of such desirable behavior of the contemporary man, education must give an appropriate and appropriate response. He should give up disciplinary work and focus on complex issues, becoming an inter- and cross-disciplinary education. He must, inter alia, adopt such a strategy that will allow the gradual introduction of new education into its "classical" structure.

The different challenges of the contemporary world were answered with specific education. Theoretical progress obtained is important, but the new contents are still slowly entering the structured (still) school frame by disciplines, in the form of syllabus plans. Progress is uneven (or even absent) when it comes to introducing curricular and modular approaches. They made it easier for you to find demographic, nutritional and ecological education.

5. Conclusions

In conclusion, "new education" implies a reconsideration of the contents and objectives of education in the contemporary world. Some authors believe that this renewal of education should be so profound that it will lead to the completion of the traditional components of education (intellectual, professional, moral-civic, aesthetic, physical) with what the "new education" represents. We consider such an opinion to be inconsistent with the general principles of determining the components of education.

Through structure, objectives and content, education must meet the demands of national and international evolution. The meanings and efficiency of the educational act are given by the availability of adaptive and self-regulating education in the face of the increasing challenges of the social space.

Human civilization goes through one of the most hectic stages, causing structural changes, profound in all areas of life: "nuclear age", "computer science age", "robot age", it creates a new living environment and a new consciousness in relation to it. The rapid pace of change has led to the creation of a complex problem of the contemporary world, which has brought humanity to an extreme alternative: an unprecedented human fulfillment or a final catastrophe; what will happen depends on human understanding and action.

The problem of the contemporary world has no national and particular character but universal and global and a complex, branched causality, which only global, holistic approaches can illuminate and solve.

Education today involves an approach that responds to the demands of contemporary values through the formula of "new education" corresponding to a paradigm shift in the educational act, making the dissociation between maintenance learning and innovative learning. Traditional societies have adopted a maintenance learning that emphasizes the acquisition of fixed methods and rules, in order to cope with known and recurring situations. This type of learning is meant to ensure the functioning of a known way of life. In the conditions in which existential shocks, changes, renewals, breaks, another kind of learning is needed - so-called innovative learning. It aims to prepare individuals and companies for new situations. The dimensions of personality formation are enriched and modified in relation to the new, priority values of the contemporary society: peace and cooperation, tolerance, participation and democracy, communication and media, change and development, etc.

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