# THE INTEREST OF THE TEACHERS IN THE PRIMARY EDUCATION FOR THE ACTIVITIES BASED ON THE THEORY OF MULTIPLE INTELLIGENCE

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**Abstract:** The term intelligence comes from the Latin intelligere, which means to relate, to organize, which involves establishing relationships between relationships. In psychology, intelligence appears both as a real fact and as a potential one, both as a process and as an aptitude or ability, both form and attribute of the mental and behavioral organization (Paul Popescu - Neveanu, Dictionary of psychology, wikipedia).

One of the most important and recent theories in the field of psycho-pedagogy is related to the American name: Howard Gardner, who published in 1983 a work that subsequently received the status of the bestselling book: "Frames of Mind". Here, but especially in the volumes published after it, Gardner outlines the idea that there is not a single type of intelligence, each of us being in fact the holders of an intelligence profile. Intelligence is not one type. In the author's view, today we can talk about nine types of intelligence. In the initial paper Gardner presented seven types of intelligence, and will add two other types of intelligence in the volumes published later. He also wrote the phrase: "Do not ask how smart you are, but how intelligent you are. "Intelligence is defined by Gardner as the ability or set of skills that allow a person to solve problems, or to make products that will be valued at a given time, in a certain culture. This represents a "biopsychic potential to process information, which can be activated in a cultural context, to solve problems or to create new products that are considered valuable in a culture" (Gardner, 1999, pp. 33-34). His theory comes as a result of long research into the study of the cognitive profiles of gifted children, autistic, idiot scientists, people with learning difficulties, people of different cultures. The conclusion to Gardner is that intelligence is not an innate trait that dominates the other abilities that students have. He does not question the existence of general intelligence, but he does provide evidence that the traditional definition of intelligence does not cover the newly revealed cognitive possibilities. The results of the research suggest that intelligence is localized on different areas of the brain that are connected to one but support one another but can function independently another. if needed. Also, these intelligences can be developed under optimal environmental conditions. People have certain types of intelligence: o intelligence involves the ability to solve problems or to make products that are important in a particular cultural context or in a community. The ability to solve problems allows the person to address a situation in which an objective must be reached and the most appropriate way to achieve it must be located. Creating a cultural product allows the person to capture and transmit knowledge or express their conclusions, beliefs or feelings. The problems that need to be solved vary from creating an ending to a story to anticipating a move to a chess mat or repairing a car or building a bird's nest. The products range theories compositions successful from scientific to musical and political campaigns. Howard Gardner's findings were taken with great interest by the educational community, accustomed to a perspective on intelligence: unique, measurable, an indicator of academic success. Multiple Intelligence Theory shows that each man has several types of intelligence, namely: verballinguistic, logical-mathematical, musical-rhythmic, corporal-kinesthetic, visual-spatial, intra-interpersonal, naturalistic intelligence. Multiple cognitive abilities can be recognized, stimulated and developed. They reflect various means of interacting with the world. The TIM pedagogy implies that teachers can teach and evaluate students differently, they can structure their activities every day to support them. Due to the combination of intelligences, some children are interested, thinkers and engaged in activities studying certain contents while the same children become irascible, impulsive and inattentive while browsing other contents. (adapted from Frames of Mind, 1993, reissued on the 10th anniversary).

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## PERSPECTIVE OF SCIENTIFIC THINKING DEVELOPMENT IN PUPILS AND UNIVERSITY STUDENTS IN KEY PRINCIPLE OF "FUTURE SCHOOL"

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Abstract: Scientific thinking development in pupils and university students is a priority of future learning strategies at national and international level. At first it is necessary to explain some aspects related with future school and conception of it. The first author who described the conception of Future School was Torson Husén [3]. The conception is based on what do you expect to have as a result from the children after a long period of time. Nowadays the new conception of Future School is outlined by STEAM education where students can ideally study anything in terms of STEAM strategy, applying mathematics, science and engineering skills to various projects that would have a socially useful purpose or practical applicability in everyday life. STEAM integrates science, technology, engineering, arts and mathematics. Academic fields include geography, environmental science, communication, art history, aesthetics and teacher education. The transdisciplinary methodology was integrated into a student-centered design. STEAM education has evolved from the STEM educational concept, which emerged as a movement that advocates moving away from segmented content areas, focusing on technology to connect subjects and make the connection of teaching according to the needs of everyday world and daily life. Nowadays STEM is focused on acquiring skills, so that students acquire the necessary skills in collaboration, interrogation, problem solving and critical thinking, the emphasis being on team collaboration and raising the research potential of the participants in the training process. [8] STEAM education in schools promotes life-relevant interdisciplinary knowledge and skills and prepares students for a knowledge-based economy. The general objective of STEM education is to rise the current generation in the spirit of innovative thinking, to develop scientific thinking in today's students who will become specialists tomorrow.

To understand what scientific thinking is and how it is related with secondary and higher education it was realized a literature review, we will try to conceptualize the key elements characteristic to scientific thinking. The first one is criticality and basics of science, refers to general principles of science, research practices and it is concentrated on basic scientific activities. [1] The second element is epistemic understanding that refers to development of beliefs about scientific knowledge and knowing. The third aspect is research skills that refer to understanding the research methodology and understanding the nature of scientific knowledge. The fourth aspect is evidence based reasoning that represents a basis of scientific knowledge building that are so important in driving process of thinking as a psychic process. [2] The fifth aspect is contextual understanding, ability to situate constructive knowledge in certain context, discipline specific thinking including the idea of expertise in connection to a wider context. [3] Our activity is socially conditioned and is built taking into account the social experience. The element of social experience is also the style of thinking, considers Seniko. Iu. V. In general, it manifests itself as a system of rules that conditions the approach to the activity and its results. In order to successfully achieve the knowledge activity and the practical activity, it is necessary to master the norms of the thinking style. Because these norms were elaborated in the process of social-historical practice. Often in the literature we encounter the term "sense of reality" but there are differences between the sense of reality perceived by people with socially historically conditioned life experience, in our case we will refer to scientifically proven experience. The scientific style of thinking is a methodological knowledge and reflects the logic of scientific research. The style of scientific thinking manifests itself as a system of characteristic methodological principles and results according to which researchers are guided in this era. Starting to research a certain problem, the researcher is convinced that it can be solved and explained. This explanation must be quite simple; it must correspond to the known theoretical representations of the given problem to be based on fundamental knowledge and to obtain confirmation in practice. Explanation, simplicity, correspondence, observability is based on scientific knowledge. The scientific style of thinking also

includes such characteristics as: discontinuity, continuity, approximation, randomization (chance), artificiality. [4, 5, 6] In this context, the European Union annually aims to deepen its innovation capacity to compete in global markets and to maintain and improve the European way of life, in line with the requests of the European Council of June 2018 and March 2019. Therefore, The Juncker Commission has set a new level of ambition for the EU, its Member States and regions, and has proposed Horizon Europe, the most ambitious research and innovation program ever. This will keep the EU at the forefront of global research and innovation. [9]

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# THE USE OF EDUCATIONAL FILMS IN PRIMARY SCHOOL NATURE SCIENCE LESSONS

#### Ilie Ana- Simona (Babeş-Bolyai University, Romania)

**Abstract:** Nowadays, in Romania, most of the students use digital technology and multimedia products in various contexts, for leisure or learning (Crăciun & Bunoiu, 2019). Pre-university and university students spend a great part of their time resources in activities on the Internet (Dulamă, Magdaş & Osaci-Costache, 2015) and social networks (Dulamă, Vescan & Magdaş, 2016). In order to adapt the educational process to the native digital students belonging to Z generation, the teachers show interest in developing their digital skills and in valuing the opportunities offered by the information technology for the teaching process of acquiring knowledge in different areas (Magdaş et al., 2018; Magdaş, Vereş & Dulamă, 2019).

From the analysis of more than one hundred videos posted on the ESA, ESO and NASA YouTube channels, it was found that the most popular ones were those based on animations and data representation, without explanations, with few explanations and those with a musical background. This was explained by the higher entertainment value of these videos (Roos & Van den Bulck, 2019). The videos comprising the asked questions were associated with the increase of the students' interest, while the informative ones, with authoritative speakers, were associated with the increase of the amount of self-reported knowledge (Wijnker et al., 2019). It was also found that a large amount of information in a video, presented in a short time, can have a negative effect on understanding and learning, causing the redundancy effect (Arias-Ferrer, Egea-Vivancos & Monroy-Hernandez, 2019). At present, the development of technology allows easy film making (Roos & Van den Bulck, 2019), at a low cost and using devices accessible to teachers and students (Dulamă et al., 2019; Dulamă, Magdaş & Chiş, 2019). Worldwide distribution of various kinds of films is made rapidly and easily through YouTube platform, Facebook and Twitter social networks (Roos & Van den Bulck, 2019; Magdaş, Ilovan & Ursu, 2018).

This study aims to investigate how the teaching process on the Natural Sciences class can be improved by using an educational film. The questions we intend to answer in this research are the following: What are the strategies through which we identify the most appropriate educational film for a topic? What are the criteria according to which educational films are classified? How can we effectively use an educational film in primary education, during natural science lessons? I carried out an action research with the second grade students, in Mathematics and environmental exploration, precisely with the Plant Life Cycle lesson. The main goal was to analyze the plant life cycle and also the results obtained. This was done by students while conducting several learning activities dealing with this topic and using an educational film as well as other teaching aids (study guides, drawings, worksheets). I have divided students into two groups, an experimental and a control group. I have applied an initial test to the pupils in both groups, and after watching the film, I have applied a second test. The pupils in the experimental group have previously received a study guide, i.e. before they watched the film. After they solved their test they watched again the film and they discusses together with their teacher its content using other visual aids, completing also other learning tasks.

In order to collect the data, I use the study guide and 3 test papers. The results of the tests were statistically processed.

The test scores were statistically processed. The students' answers to the questions in the study guide were subjected to content (numerical) analysis. The educational film was analysed through visual methods.

The planning to use the educational film in class is a long process in which the teacher has to spend a long time to select the film that meets the content and quality criteria listed, to watch and review it, to note the problems and the sequence of the frames, to identify the proper integrating methods and the optimal timing for playing the film.

The present action research led to the conclusion that it is not enough for the students to watch the educational film by themselves. Not even the use of the study guide can have an essential contribution to knowledge development if the students do not have some previous knowledge about the subject. The teaching process can be improved in Mathematics and Environmental Exploration by using an educational film if the students are involved in active learning activities, coordinated by the teacher, in which they may watch the film again and discuss its content with the teacher.

The understanding and achievement of correct representations are also facilitated by using other visual materials and texts. The students' level of knowledge in the field of Natural Sciences increases if the most appropriate educational film is used for the given topic and if the students are guided by the teacher in decoding the visual content.

The strategies based on watching an educational film and on the teacher systematically directing the learning process lead to shaping correct representations about the environment, to improving their observation and thinking (comprehension, reasoning) skills, to developing their knowledge and learning value in primary school.

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# SPIRITUAL INTELLIGENCE IN HIGHER EDUCATION

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**Abstract:** Over the last few decades, various theories of intelligences include, among others, the spiritual intelligence component. Our position on this topic is that spiritual intelligence SQ has as its primary attribute the consciousness; It is referred to the ability of human to direct and guide the other two types of intelligence, namely the cognitive intelligence IQ and the emotional intelligence EQ. Whereas cognitive intelligence and emotional intelligence refers on material and social capital, spiritual intelligence SQ emphasizes the abilities to predict functioning and adaptation to rapidly changing characteristics of the environment. Spiritual intelligence is a valuable in itself and include other two types of intellectual capacities. It is the primary intelligence of the human. Spiritual intelligence is necessary for discernment in making spiritual choices that contribute to psychological well-being and overall healthy human development.

As was noted by King and DeCicco (2009, p. 69), spiritual intelligence is a set of mental capacities which contribute to the awareness, integration, and adaptive application of the nonmaterial and transcendent aspects of one's existence leading to deep existential reflection, enhancement of meaning, recognition of a transcendent self, and mastery of spiritual states. The proposed viable model of spiritual intelligence describes four core components: critical existential thinking; personal meaning production; transcendental awareness; and conscious state expansion.

As were noted by Zohar and Marshall (adapted, 2001, p. 29), spiritual intelligence of academic staff includes: the capacity to be flexible (active and spontaneous adaptive); a high level of self-awareness; the capacity to cope and to use the pain; the capacity to confront and transcend the pain; the quality of being inspired by visions and values; the unwillingness to cause unnecessary damage; the tendency to see relationships between things (fire ,,holistic"); the tendency to look for fundamental answers with questions: "Why?" or ..What will happen, if?"; flexibility to be against the convention. The main conclusion is that spiritual intelligence can be considered a fundamental prerequisite for living personal and social - professional life experiences, which are fulfilling and healthy. Given the fact that the education system is going through a decisive moment in the rethinking schemes of communication, affective interaction, and instructive approach, we have consider a great responsibility of the teacher as the agent of education, in relation with the process of preparation the child for the life, and, especially for social integration through a profession.

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**Keywords:** spiritual intelligence, higher education, critical existential thinking, personal meaning production, transcendental awareness, conscious state expansion, academic staff.

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# TEACHERS' BELIEFS AND PERCEPTIONS ABOUT THE USE OF PHOTOGRAPHS IN NATURAL SCIENCE CLASSES

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**Abstract:** From the very beginning, the article presents the importance of using pictures in environmental education (Ilovan, Dulamă, Boţan, Havadi-Nagy, Horváth, Niţoaia, Nicula & Rus, 2018, 2019), by identifying and analyzing the natural risks Ciascai, Dulamă & Marchiş, 2007), so as to illustrate how, together with other visual materials, they play an important role in the study of mathematics and the exploration of environmental literacy (Dulamă, Osaci-Costache & Ciobanu, 2014; Dulamă & Magdaş, 2014; Magdaş, Dulamă, Ilovan & Crişan, 2017, 2018). Teaching with the aid of audio-visual means contributes both to the stimulation of interests in students and the consolidation of concepts, and, moreover, it helps them improve their studying skills (Adeianju, 1997). When students work with an image, they attempt to correlate it with previously taught information, and, in doing so, their critical thinking abilities are being further developed (Hindal, 2014; Ilovan, 2019a, 2019b). Alenizi (2015) encouraged the use of visual materials, such as images and photographs, so that students could learn with ease concepts from the domain of Science but, as a result of this research, it was observed that teachers did not have the ability to efficiently use photographs. The second part of the article presents the perceptions and beliefs of primary school teachers regarding the importance of using photographs during natural science classes.

The purpose of this research was to analyze the opinions shared by primary school teachers when using photographs in their teaching activity. For this purpose, primary school teachers were asked to answer nine questions in a focus group, so as to gain information regarding the use of photographs in natural science classes. They took notice that without the use of photographs in the teaching process, the students would find it difficult to make representations about reality and the environment, and they could even encounter difficulties in understanding reality. After gathering the responses provided by the teachers, it was observed that they downloaded photographs of the Internet although, in the building in which they taught, the internet connection was poor. Also, they used photographs from printed sources: map collections, magazines, school books, encyclopedias, almanacs, etc., or photographs they took themselves.

It was observed that they were preoccupied with offering the students various types photographs illustrating activities specific to people, pollution or the preservation of nature, or photographs that facilitate the formation of representations, in order to support natural phenomena and anthropic processes, and facilitate the understanding of the space, the solar system, or photographs relevant to the illustration of human collectivity associated with ethnicity or different continents. Also, an equilibrium between the use of traditional methods and methods that require active participation was noticed, being aware that the use of photographs in the teaching process develops the students' observation skills, engages their cognitive and operating structures, contributes to the development of reflexive and critical thinking, of imagination and creativity, language and visual memory. As for the criteria used in the selection of photographs, some teachers used photographs that made it possible for the students to identify natural process/phenomenon, groups of elements, structures of the elements presented in the photograph during the teaching activities, so as to organize the information, that is the photographs that address what the student had to know in accordance with the operational objectives formulated.

The teachers had the ability to use the photographs during the teaching process by assisting and analyzing demonstrative activities developed as part of the activities proposed for the methodic commissions of the teachers, at the schools where each of them taught, during the demonstrative activities presented at pedagogical circles, by individually studying specialty books or materials form the www.didactic.ro site.

They use photographs to motivate students, facilitate the perception and understanding of natural and anthropic processes, means taking into account the needs and the interests of the students, their style and their learning rhythm, age specificity, as well as the envisioned effects, such as: the understanding of the

subject presented, the identification of the natural process/phenomenon, the identification of the relations between the photographed elements, and the systematization of the information, in order to be able to make generalizations. The teachers highlighted that students could generate faulted representations and concepts about reality, which could lead to not being able to understand or have difficulty in understanding the concepts or in creating faulty representations of concepts. They would find it difficult to understand the cause-effect relations visible in a natural or anthropic environment, as well as the effects produced by natural phenomena, if photographs were not used in teaching natural sciences.

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## TECHNICAL-SCIENTIFIC ACTIVITIES WITHIN CHILDREN'S PALACES AND CLUBS, EDUCATIONAL ALTERNATIVES FOR THE FORMATION OF COMPETENCIES IN SCIENCE AND TECHNOLOGY

#### Kerekes Jenő (Babeş-Bolyai University, Romania)

**Abstract:** The extracurricular activities within the Children's Palaces and Clubs represent a valuable educational resource for the entire didactic approach and for the development of the students' personality. The complexity of educational purposes requires a combination of curricular and extracurricular activities (Bocoş, Jucan, 2017). The present Romanian education system legislation stipulates the need to organize extracurricular activities specific to students' age characteristics, their psychological needs, propensities and specific interests (Cucoş, 2017). The technical-scientific activities integrate all the fields involved in a coherent learning paradigm based on applications derived from reality (Albulescu, 2014). Nowadays students are much more motivated if the subjects are taught from various perspectives and if they are based on facts from everyday life (Ciolan, 2008).

The success of extracurricular activities depends on the correlation of a series of factors like the attractiveness of the approached topic, the good coordination of the activities, the involvement of as many school and community actors with relevant experiences for the activity (Albulescu, Catalano, 2019). The questionnaire investigates the role, importance and complementarity of technical-scientific extracurricular activities. It analyzes the students' view about the way clubs should look, the contents and the manner in which the activities should be carried out. The study was conducted at the national level among children and an online questionnaire was applied (N=3945).

The results show the important role of technical-scientific activities, that together with formal education help to improve the outcome and are complementary in the development of basic skills in science and technology. The study analyzes the strengths and weaknesses of extracurricular activities. The results highlight what are the requirements of students and to what extent the use of student-centered extracurricular educational strategy will help to achieve better results in education and reduce school dropout.

Keywords: skills, science, technology, extracurricular, complementarity

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## PSYCHO-PEDAGOGICAL REQUIREMENTS FOR ECONOMIC CULTURE FORMATION IN PREADOLESCENTS

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**Abstract:** Economic education, focused on the formation of economic culture is a reality today, because the phenomenon of excessive consumerism and the state of economic underdevelopment of society is observed in the mentality, intelligence and irrational behavior of every citizen. Obviously, in order to be effective, economic education must represent a continuous pedagogical process, organized and oriented towards the formation of knowledge, consciousness, thinking, attitude and rational economic behavior.

In education in general, and in the formation of economic culture, in particular, parents and teachers are obliged to take into account the age and individual characteristics of children, the fact that each age stage is characterized by defining features that differentiate it, the previous one by the next one. Thus, the educational actions exercised in the family and in the school must be unitary, rational, continuous, based on the fact that the formation and economic development of the child is carried out in close connection with his mental, moral and physical development.

Preadolescence is the period when the child's development of the world and life is developed, the desire to assert is stimulated, the interest for abstract and synthesis problems increases. At the same time, the motivation for learning intensifies, as preadolescents begin to realize that school performance will count in the future. The role of collaboration between parents and teachers in this period is extremely important, so operational conditions and rules must be created so that the process of forming economic culture in preadolescents is natural and effective.

In this sense, based on the analysis of theoretical landmarks on the formation of economic culture in the family, the investigation of the peculiarities of pre-adolescent age, approached in the context of family education, but also based on the results of a preliminary investigation on a group of 50 preadolescents and their parents. , we will present and describe the psycho-pedagogical conditions for the formation and capitalization of economic culture in preadolescents in the family and school setting. The conditions for the formation of the economic culture within the family are:

• Familiarization of preadolescents with economic values in the context of family life. Economic culture is inconceivable without vital values, of which economic values are part. They are of decisive importance in maintaining human life and, of course, family life. Economic values are those that meet the necessities of life. They are always middle values, because they serve as a means of satisfying human needs. Among the main values, which refer directly to the economic activity of a family we can mention: money, economic resources, price, work. But nowadays, economic science is more and more often conceived as a moral science, which seeks not only the formation of a rational economic personality, but also prudence. Thus, when we form the economic culture of children in family education through the prism of economic values, we refer primarily to moral values correlated with economic values. Starting from the Model of analysis of the functionality of socio-human values (elaborated and founded by the researcher Cuzneţov Larisa [3], we mention that the most essential moral values correlated with economic values are responsibility, perseverance, prudence, rationality, honesty, generosity, diligence , accuracy and self-control The formation of economic culture in the family by cultivating the mentioned values can mobilize the internal resources of the child's personality in the direction of streamlining economic education.

At the same time, parents should not forget that any exaggerated attitude is harmful and can be the cause of parasitic habits and economic non-values, such as: selfishness, laziness, greed, stinginess, disorder, etc. That is why parental education should be directed towards the formation of rational economic skills regarding the natural, material and financial resources of the family.

• Ensuring a positive family climate and capitalizing on the parental model of economic behavior For a harmonious development of preadolescents, including from an economic point of view, it is necessary for parents to ensure a positive and affectionate family climate. In this regard, adults need to mobilize their resources to be a role model for their children, because it is difficult to educate rational behaviors when parents themselves are messy, wasteful, lazy and irrational in their actions. In order to successfully accomplish the tasks of economic education in the family, it is necessary to model adults in terms of their attitude towards work, towards social problems, their successes in increasing labor productivity and the general well-being of the family. We must show children an example worthy of initiative, responsibility, diligence and organization at work, so that they from an early age can understand the reasons for the economic and work activity of adults; to know the sources of the family's income and the satisfaction of the needs of all its members. For this it is necessary for the family to dominate a certain way of behaving adults, they capitalize at the beginning a minimum of information, which will be communicated to children, provided that gradually (depending on age), it will be diversified and deepened. • Encouraging appropriate rational and economic behaviors of preadolescents in the family. Respecting the needs of preadolescents has a special importance in the process of family economic education, so the task of parents is to take them into account when forming a decent behavior in preadolescents. One of the most pronounced manifestations in preadolescence is behavioral independence. Along with the need for independence, there is also the need for self-determination, even if at the beginning, goals and objectives are formulated by parents and teachers, towards the end of the stage, the preadolescent tries to formulate goals, make decisions and act alone. Likewise, the child wants a certain financial autonomy. He wants to spend money at will and often makes mistakes because of irrational and incompetent behavior. To cope with these changes in the personality structure of children, parents must choose the most appropriate educational strategies, including: stimulating the child's independence by encouraging practical initiatives, for example: preparing dishes according to their own recipes; decorating the room with posters, paintings, changing wallpapers, furniture; shopping, choosing clothes, shoes, accessories; observing one's own opinion regarding spending free time, visiting certain persons, provided that the moral-ethical norms and certain limits are observed; encouraging initiative and entrepreneurship in decision making.

• The unity of the requirements, compared to the education of preadolescents regarding the economic behavior.

The norms, principles and rules of conduct, relationships and family education must be observed by all family members [Apud 2, p. 95]. Thus, the unity of requirements is manifested by the unity of the objectives planned by the parents and the requirements regarding the economic education of the children. The maternal and paternal roles are adequately and constantly capitalized; the unity between word and deed is respected in the case of family actions; support and help are provided, the child's freedoms and responsibilities are clearly defined. This principle ensures the manifestation of individuality and develops the ability to live balanced, with others. In this sense, the collaboration but also the involvement of parents in various school activities facilitates the training, socialization, integration of children and helps to respect the unity of the requirements of economic education.

The psycho-pedagogical conditions for the formation of the economic culture within the school are: • Providing teachers with materials in accordance with economic education.

In the pedagogical experiment, the surveyed pedagogues noticed a series of deficiencies, which persist and hinder the quality of economic training. These include:

the insufficiency of methodological materials, textbooks and guides is perceived by 71% of subjects;
the lack of qualification / requalification courses for teachers, mentioned by 30% of subjects;
the lack of standards that establish the expected performances in economic education, are perceived by 18% of subjects;

- the lack of qualified economics teachers, perceived by 53% of subjects; - the negligent attitude of the parents towards the economic disciplines was designated by 58% of the subjects. Therefore, an enormous difficulty in teaching economic subjects is the insufficiency or even lack of teaching materials. Teachers who do not have a basic economic training do not have the necessary skills to select and adapt economic content to different age groups. At the same time, the information on which they are based in teaching economic subjects is much too outdated and does not correspond to the students' reality, which leads to a decrease in interest and motivation to learn for these extremely important disciplines.

• Carrying out the actions and activities of forming the students' economic culture (open doors, competitions).

The formation of economic culture in preadolescents must be done formally, informally and informally. If we refer to formal economic education, there are several ways to integrate economic education into curricula and curricula. Thus, the infusion approach is proposed; the modular approach; the disciplinary approach and the transdisciplinary approach [1]. Non-formal economic education includes all activities carried out outside the school system and can be achieved through radio or television shows, the experience of parents and teachers, the activity of newspapers and magazines, etc. Among the extra-curricular activities practiced with students in the pedagogical experiment we list: elaboration of the newspaper with economic content of the Theoretical High School "Petru Rareş", whose purpose is economic literacy, formation of economic thinking, consolidation of economic culture through educational partnership, etc. Also, a positive impact in the non-formal actions had the Economic Literacy Week, in which students were actively involved in making wall newspapers, placards, information leaflets, competitions and in various round table discussions. Informal economic education completes the students' knowledge and can be done in the most diverse environments: in the family, on the street, in shopping, watching the news on TV, etc.

• Increasing motivation and interest for studying optional economic education courses. The economic field arouses the curiosity of preadolescents, because it has penetrated all spheres of social life. Economic concepts are often encountered in the family, at school, in the store, in the media, etc., which argues the timeliness and necessity of studying economic disciplines. However, the learning of economics must not be reduced to the assimilation of economic language and calculation techniques, but must ensure the formation of the spirit and the rational economic behavior of the student [Apud 4, p.47]. In this sense, the methods of teaching economic subjects have a special importance in capturing and maintaining the students' curiosity. In addition to the traditional working methods, among which we list: storytelling; conversation; the description; the game; the exercise; problem solving; case study; and so on it is welcome to capitalize on active-participatory methods such as: brainstorming, synectics, structured exercise, practical tasks; untying some economic misdeeds, etc.

Involvement of economic agents in activities dedicated to economic education. One of the problems of the education system, including the school system, is the discrepancy between the training of students and the demand on the labor market. Likewise, insufficient professional orientation, outdated information on the professions required on the market, the lack of economic culture that is manifested by students' indifference to education and work condition major problems and imbalances in the economy of society. An improvement of the situation would be the collaboration between the education system and the economic agents by inviting the specialists from companies, banks, enterprises, etc. for conducting classes with students; establishing classes with economic profile in middle school and high school; elaboration of standards on economic training and formation; continuous and systemic training of teachers who teach economic disciplines; etc. [5]. In this order of ideas, based on the conditions identified and described above, we conclude that: in the Age of Information and Globalization, economic education based on the formation of economic culture has become more important than ever. An effective partnership between family and school has a decisive role in the formation of economic culture in preadolescents, each party having the responsibility to come up with proposals, initiatives and to be open in the sense of change and lifelong learning with students. As children are the ones who assimilate new information much faster, parents need help and guidance in increasing the quality of family economic education and at the same time, teachers need investment to improve economic training in educational institutions.

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