STUDIA UNIVERSITATIS MOLDAVIAE, 2021, nr.5(145) Seria "Stiinte ale educatiei" ISSN 1857-2103 ISSN online 2345-1025 p.3-9

CZU: 374.7:165:37.015.3

DOI: http://doi.org/10.5281/zenodo.4883120

PEDAGOGY FOR ADULTS: CONCEPT AND EPISTEMOLOGY

Vladimir GUŢU

Moldova State University

This article addresses the issue of establishing and developing adult pedagogy from the perspective of epistemology: to establish the factual categories and guidelines of adult pedagogy. The psychological and philosophical-pedagogical approaches to adult learning and education and the connection of adult pedagogy with other sciences are extensively analysed. The concept produced contributes to the elaboration of a Reference Framework of adult education in formal, non-formal and informal plan.

Keywords: adult pedagogy, adult learning and education, andragogy, epistemology, psychological concepts, philosophical-pedagogical models, formal education, non-formal education, informal education.

PEDAGOGIA PENTRU ADULȚI: CONCEPT ȘI EPISTEMOLOGIE

În prezentul demers științific este abordată problema privind constituirea și dezvoltarea pedagogiei pentru adulți din perspectiva epistemologiei, anume: stabilirea categoriilor factuale și orientărilor pedagogiei pentru adulți. Pe larg sunt analizate demersurile psihologice și filosofico-pedagogice ale învățării și educației adulților și legătura pedagogiei pentru adulți cu alte științe. Conceptul produs contribuie la elaborarea unui Cadru de referință al educației adulților în plan formal, nonformal și informal.

Cuvinte-cheie: pedagogie pentru adulți, învățarea și educația pentru adulți, andragogie, epistemologie, concepții psihologice, modele filosofico-pedagogice, educație formală, educație nonformală, educație informală.

Introduction

In the education sciences two tendencies can be identified with reference to the epistemological status of pedagogy: one is represented by the visions of T. S. Kunu, Pn. H. Coombs and others, which can be formulated as pessimistic and which places pedagogy in the area of uncertainty; the second tendency characterizes the status of pedagogy in the socio-humanistic sciences as a science about legitimacy, essence, principles, educational technologies and the development of the social subject. In the context of this trend, the object of study of pedagogy is clearly outlined, which, on the one hand, determines the general-educational objective, and, on the other hand, establishes the connections/interconnections, its educational characteristics, its properties - evident category in the objective world.

The question of whether pedagogy is an art is also answered. P.F. Capterev wrote: "... Science and art cannot be opposed. And both create something new, something that has not existed before. Restoring scientific laws to the demands of life is an art" [1, pp.51-52].

The art of education consists in the educator's ability to creatively valorise on the resources of pedagogical science in concrete educational situations, oriented towards adapting the mechanisms of educational influence to the specifics of the educator's contribution and to the participation of the educated [2, pp.16].

In our view, pedagogical art is seen as a high level of pedagogical mastery, of professional concepts based on the beliefs of the pedagogue. One of the conditions for the realization of pedagogical art is communication and pedagogical techniques. Therefore, pedagogical art = competencies + techniques + communication correlated with beliefs, passions and pedagogical improvisation. "Pedagogy is an art in the sense of infinite individual resources, specific to any educational situation - only insofar as it previously clarifies its practical approach, the functional-structural core of educational activity that has a general character subject to scientific rigor" [3, pp.22].

The steps taken to define the object of pedagogy and its epistemic status are reflected in its various definitions. In most specialized dictionaries, pedagogy is defined as the science of education or as the science of education and training seen as an integrated educational process.

In this context, adult pedagogy as a category of educational sciences is based on the same epistemological approaches as general pedagogy and is defined by M.S. Knowles as "the art and science of adult education", "the system of provisions on adult education that must be applied differently depending on the context" [4].

STUDIA UNIVERSITATIS MOLDAVIAE, 2021, nr.5(145)Seria "Științe ale educației" ISSN 1857-2103ISSN online 2345-1025p.3-9

At the same time, the pedagogy for adults is highlighted by the specifics of the subjects, the outcomes and the learning and education process.

Conceptual Approaches to Adult Pedagogy

Several researchers have contributed to the establishment of the theoretical bases of Adult Pedagogy. Thus, J. Dewey proposed the concept of centring on the one who learns, on their experience. F. Pittkler, emphasizes the priorities of interaction between an adult and individuals and educational institutions: the independence of individual and adaptation of the activities of educational institutions to their needs, and not vice versa - P. Furter [5, pp.23] believes that pedagogy for adults is a science on the formation of a person throughout life [6]. At the same time, most scientists identify a number of conceptual provisions that largely predetermined the formation of pedagogy for adults, namely:

- the position of an adult as an active subject of the educational process, which determines the motivation in educational activity;
- the ambiguity of the term "adult education", covering social, psychological, economic, didactic aspects;
- conditionality of adult education by a variety of factors that are not always amenable to control and management;
- inclusion of the problems of various social sciences in the "research field" of andragogy;
- understanding the need to expand experimental work and interpret the findings;
- strengthening of the humanistic orientation of education as a factor of self-realization of adults;
- awareness of adult education as a means of social and cultural development of countries [7, pp.11-12]. These provisions reflect the diversity of approaches and the diversity of educational needs of adults.

Therefore, adult pedagogy is a scientifically-applied field, which researches and establishes the legitimacy of adult learning and education.

This presentation includes theoretical and practical spheres, assumes a purposeful and organized nature of the learning and education processes, and the development of an adult personality, especially focusing on the problems of their self-improvement.

The subject of adult pedagogy is the upbringing and education of an adult personality.

Adult pedagogy comprehensively embraces the process of a person's development throughout their adult life, revealing their intellectual, physical, emotional, moral and spiritual abilities.

The process of teaching adults is organized and purposeful with their constructive participation at all stages [8, pp.15].

The driving force of this process is the person's awareness of the discrepancy between real opportunities and the level of needs, the gap between the desired level of education and the actually achieved.

The peculiarity of the process lies in the fact that, firstly, we are talking not about one, but about three subjects: the student, pedagogy and the study group; secondly, priority is given to their partner, dialogue-oriented interaction in the educational process; thirdly, not only adults - teachers, but also adult learners are carriers of knowledge.

The full functioning of pedagogy for adults is ensured by the adequacy of its research to the needs of practice. Therefore, one of its main functions is explanatory and research, involving the study, analysis, description, explanation and design of processes, patterns and conditions in the broad sense of adult education.

No less important is the *practical* function, which translates ideas and concepts of pedagogical theory and technology of adult learning into a real educational and cognitive process.

The predictive function makes it possible to scientifically predict the development of the theory and practice of adult education.

Personal-developmental function is significant both for the student and for researchers involved in the formation of science of adult pedagogy [9, pp.16-17].

Epistemology and Philosophical Conceptions of Adult Learning and Education

The epistemology of adult education is based on the following:

1) conceptual provisions:

- modern ideas about the phenomenon of Man as a complex open space-social-natural system that interacts with the world in different planes of being;
- a new understanding of the world based on the combination of different cultures, the interaction of which gives an integrative, polyphonic view of the world and a person's place in it;

- the idea of equality and equivalence for culture and individual development of a person of various forms of reality comprehension: science, art, mythology, philosophy, religion, folk culture, technology, etc.;
- ideas about the development of culture and the educational process as a complex phenomenon based on the dialogue of cultures;
- understanding of the educational process as an open, flexible, integrative system developing on the basis of activity approach theory, which presupposes the development of all spheres of personality in the educational process: cognitive, axiological, creative, emotional, etc. [10, pp.19].

2) philosophical approaches/theories:

Humanistic (from Lat. *humanus* - human) or organic theories are based on the uniqueness of man and are aimed at maximum disclosure and development of a genetically given potential. These include the philosophical trends of pragmatism, positivism, existentialism. A person, even being an object of influence, should act as an active subject, assessing the situation and choosing a method of behaviour, since they bear full responsibility for what happens to them. In the centre are the problems of personality, its development, activity, autonomy, self-actualization and self-improvement, freedom of choice, responsibility and striving for higher values. These theories are characterized by individual training programs focused on self-education. So, K. Rogers defined as a condition of learning "freedom of education", due to the specific life situation of the individual and his/her need for education.

Pragmatism (from the Greek *pragma* - activity, action, deed) comes from the practical usefulness of knowledge as a source and the main criterion for its truth. The process of education and training is built, as the American philosopher and teacher J. Dewey (1859-1952) suggested, proceeding from the needs, interests and abilities of the student and on the basis of their practical activities. Dewey saw the goal of training in the development of general and mental abilities, a variety of skills. Learning is not memorization and reproduction of ready-made knowledge, but their "discovery", "acquisition" by students in the course of spontaneous activity.

Positivism (from Lat. *positivus* - positive) attaches exceptional importance to experimental knowledge ("the credo of objectivism"), uses the methods of natural scientists, studies facts, and not their causes, refuses the value approach when analysing the material under study. Representatives of neopositivism propose to separate upbringing from ideological ideas that supposedly interfere with "rational thinking", which is the only thing necessary in the era of scientific and technological progress.

Today, for the pedagogy of adults, *existentialist* (from Latin *existentia* - existence) theories are very significant, which proceed from the priority of the unconscious attitude of the individual, its inner being (existence), understanding of the uniqueness and the highest value of one's self.

The *behaviouristic* (from the English *behavior*) model is addressed to the formation by means of developing behavioural reactions of a "controlled individual" - a citizen, a patriot, a responsible and disciplined person. It is imperative to have clear goals of education. This allows you to develop certain personality traits with the help of training courses.

Non-behaviourists consider it necessary to create an atmosphere of intense mental activity, controlled by rational algorithms, to stimulate individual activity and competition. An "industrial person" must have such qualities as efficiency, organization, discipline, and enterprise.

Each of the philosophical theories has the right to exist and be used in accordance with specific conditions [11, pp.19-22].

Philosophical-Pedagogical Concepts of Adult Learning and Education

There are several approaches/models of training, including the one of adults: some are detached or based on one or another psychological conception of learning; some are deduced from different philosophical currents (neopositivism, existentialism, neotomism, etc.); some are based on the pedagogical theories themselves.

I. Cerghit, a well-known Romanian researcher, proposes the following models of training in general [12]:

The logocentric model is the most widespread model for carrying out training, starting from the premise that science is a finite product of truths embodied in a corpus of knowledge. The training consists in the transmission of the essential information by the teacher and in the reception of them by the educated. The teacher fulfils the essential role in training, and the emphasis is on the logical, notional and, especially, quantitative aspects. The models used are usually analytical.

STUDIA UNIVERSITATIS MOLDAVIAE, 2021, nr.5(145) Seria "Științe ale educației" ISSN 1857-2103 ISSN online 2345-1025 p.3-9

The advantages of the model are that a large volume of knowledge can be transmitted in a relatively short time to a considerable number of learners. Also, there is knowledge (cultural acquisitions, spiritual values, etc.) that can only be transmitted in this way. The disadvantages are that the learners are little involved in the training process, and the formative aspect is low. This model is less applicable to the training of adults, who are mostly active in the instructional framework, representing rather the subjects of the educational act.

The empiriocentric model emphasizes the formative character of training, considering that science is a field that must be "discovered" by the educated. They are familiar with the logic of scientific investigation and research techniques, which they use to develop their operations and intellectual processes. Discovery learning and problem solving are the basic strategies in an empiriocentric approach to the training process.

Adult education/learning is not only cognitive, but, first of all, it is oriented towards the subject's experiences (actional, affective, individual and social). The educated self-evaluate and discover new current problems for themselves. The advantages of this model consist in the fact that it activates to a great extent the educated ones, developing their competitiveness and competencies.

The technocentric model involves the strict rationalization of the training process, in the sense of breaking down learning into component operations, in order to obtain maximum efficiency. Thus, training becomes a chain of learning procedures and techniques. The advantages of the model are: the operational definition of the objectives, the thorough analysis of the contents, the analysis of the learning difficulties, the instrument-talization of the didactic methodology, the operational evaluation and feedback. The model is applied in the process of adult training in case of rapid need to retrain or assimilate a volume of concrete knowledge, determined by the situation (learning new technologies).

The sociocentric model is based on cooperative learning, in groups or on small groups of learners. This model emphasizes the interactional side of the instructive activity, the cooperation and co-operation between the educable ones, the joint development of the learning activities. Sociocentric methods are used for the study of educable communities, and the training is carried out through cooperation, self-management, debate, team research, etc. The advantages of this model are that it develops the learners' communication and social and professional interaction skills.

The psychocentric model focuses on exploring the psychosocial, social, individual developmental needs of adults. Training methods are used, such as: self-employment, problem solving, individual projects, simulation, etc. The teacher is concerned with the individualization of training. Personalization of training is the main advantage of the model. This model, along with other models, provides specific learning conditions for each adult.

S. Cristea tries to present different models of training, in the context of postmodernity, within three types of social paradigm: cultural, critical and organizational [13].

Within *the cultural paradigm*, the following models are identified:

The *rational education* model promotes a *mechanistic* vision on the process of forming the human personality that gives priority to the intellectual cognitive resources within a unidirectional or unilateral approach. The model is less applied in the process of adult training.

The *technical education* model promotes a *static systemic* vision of education, which gives priority to procedural structures, standardized at the methodological level.

The *humanistic education* model promotes a dynamic, *organistic* systemic vision, which gives priority to the psychological resources of the learner's personality and of the teacher, which must be respected and capitalized in a social and professional context.

The *interactionist education* model promotes a dialectical vision, based on the continuous reconstruction of *the teacher-learner correlation*, conceived at the level of pedagogical self-management. The model is actively applied in adult training and education.

The *innovative education* model promotes a superior creative vision, located between the inventive and synergistic resources of the teacher and the educated, based on self-training-self-development [14, pp.121-122].

Within *the critical paradigm*, the following models are identified:

The *romantic education* model, located on the border between traditional/postmodern pedagogy and modern pedagogy, promotes a certain "philosophical naturalism", which gives priority to heredity in the process of personality development. It is effectively applied in the field of arts, sports.

The *behaviourist/behavioural education* model, promoted by modern pedagogy, is based on a certain empirical philosophy. It is oriented towards the management of stimulus-response relationships, which give priority to the techniques of design and standardized achievement of learning objectives.

STUDIA UNIVERSITATIS MOLDAVIAE, 2021, nr.5(145) Seria "Științe ale educației" ISSN 1857-2103 ISSN online 2345-1025 p.3-9

The *progressive education* model, located on the border between modern pedagogy and postmodern pedagogy, promotes a certain pragmatic philosophy (J. Dewey), which gives priority to the motivational dimension of the educated personality, as a source of effective action, capitalizing on genetic psychological structures favourable to learning in *constructivist* perspective.

Within *the organizational paradigm*, several categories of models are identified: oriented towards a certain type of education system (1), towards a certain type of organizing education (2).

The first category of education models is the one that guides the construction of education systems in a reproductive or innovative sense. Both are historically promoted at the level of education policy in the perspective of modern pedagogy or postmodern pedagogy.

The *reproductive education* model of is based on the direct, mechanical causal relationship between society and education. The development of education, designed at the scale of the education system, depends on the development of society, is subordinated to the requirements of society, economic, political, cultural, religious, etc. The education system reproduces the main functions and structures of society. The quality of education will reflect the quality of society, its advantages and disadvantages. This blocks the possibility of using education as a lever for social progress, as a strategic solution needed especially in countries with limited development (economic, political, etc.), due to historical and cultural causes. It should be noted that this model is no longer current, but its practices are still taking place in the educational process, including adults.

The *innovative education* model is based on the commitment of education in the development of society, as a global strategy with synergistic effects in the medium and long term. This model allows education to anticipate the development of society. It was designed by UNESCO in the 1970^s in response to the demands of the rising post-industrial society. It emphasizes the prospective function of education, which, for the first time in history, tends to precede the level of economic development. Adult learning and education fit perfectly into this model.

The model of didactic practice is also of interest, which in postmodern pedagogy aims at rebalancing the relations between information and (positive) training at the level of training activities organized within the educational process.

The didactic practice model promoted by postmodern pedagogy aims in particular to overcome the limits of the "bureaucratic school" through the following strategic initiatives:

- Replacing the explanatory models, which encourage the standardization of education/ training, with the interpretive ones, based on a humanistic and interactionist approach to education/training. This postmodern approach capitalizes on: a) the potential role of education actors as authors of education;
 b) the structure of efficient functioning of education only through the permanent reconstruction of the pedagogical, psychological and social correlation teacher-learner.
- 2) The revalorization of the subjective dimension of the education/training activity, engaged at the level of pedagogical and process finalities (objectives) that ensure the pedagogical foundations of any curricular project. This postmodern approach presupposes the optimal reconstruction of education/training by: A) the permanent reporting of the finalities (the subjective dimension of education) to the general functions (the objective dimension of education); B) rebalancing the (co)relations between the dimension: a) psychological (individual) social of education; b) objective/causal subjective/teleological of pedagogical knowledge; c) cognitive non-cognitive (affective, motivational, volitional, characteristic) of the personality of education actors/ authors.
- 3) The full valorisation of the learner in the space and concrete time of the formal, non-formal and informal education/ training in the context of the "culture resulting from the professional and the school sociallization". This postmodern approach involves: A) "a resurrection of the learner as an actor in the educational space" with the potential of author of his/her own formative process (in the perspective of self-education); B) a reconsideration of the educational relationship as "interaction with a symbolic and interpretive dimension in which the teacher and the learners are constructors of meanings and significances (...), in which the teacher works with the learners and for them"; C) a communication based on didactic transposition by elaborating the common repertoire (teacher-learner) at cognitive, affective, motivational level, in order to receive, internalize and fully capitalize on the pedagogical message [15, pp.124-125].

The problematised training model. The founder of this training model is considered M. Mahmutov, although we can find different variants/ meanings of the concept in other authors (A. Bandura, R. Rogers and others).

The problematised training model represents a way of active interaction between teachers and learners through a problematically presented content, in which the learner is familiar with the objective contradictions

STUDIA UNIVERSITATIS MOLDAVIAE, 2021, nr.5(145)Seria "Științe ale educației" ISSN 1857-2103 ISSN online 2345-1025 p.3-9

of scientific knowledge, as well as with the means to achieve them; the learner learns to think, to creatively acquire knowledge.

Problem-based learning is based on a system of problem-solving situations, which must be aware, accepted and resolved in the process of interaction between learners and teachers, the emphasis being on the autonomous/ individual activity of learners.

Problem-based learning is aimed at: training educators in the system of knowledge, skills, attitudes, conceptual and necessary for an adult; ensuring a high level of learners' development and, first of all, self-training, self-education, self-assessment skills; the formation of a special style of the mental activity of the learners through research, solving specific problems and necessary for the adult individually.

Therefore, the problem-based learning model is based on two dominant principles: the elaboration of the system of problems that reflects the social, professional and individual needs of adults; valorisation of problem situations is achieved through dialogue in which the teacher and learners show initiative and cognitive activism, both being interested in analysis and discussions on variants of problem solving. The means of leading cognitive processes is the problematic question.

Heuristic training model. This model, fundamented by A. Hutorskoi, is oriented to the transmission of past experiences of learners and priorities to produce their own experience, oriented in the future. This model differs from the training problematised by the complexity of the objectives, which provide not only the training-development of the learner, but also the vector of his/her development, in relation to their context and needs.

Principles of heuristic training:

1. The principle of personalised objectives

The training is based on and through personalised objectives.

This principle is based on the ability to advance the objectives of own activity. This principle presupposes the awareness of the objectives of the creative activity, both on the part of the learner and on the part of the teacher. If the objectives of both subjects are different, the teacher does not try to make the learner change their objectives, but helps him to become aware of them.

2. The principle of choosing the individual learning trajectory

The learner has the right to choose, consciously and in agreement with the teacher, the learning units, the task system, teaching strategies, ways of evaluating their own results. In this sense, the teacher not only offers the learners the freedom to choose the learning trajectory, but also helps the learners to assimilate their respective instruments in order to make conscious and efficient choices.

3. The principle of metadisciplinary contents

The heuristic learning model puts the learner in the situation of leaving the strictly disciplinary framework and brings him/her to move to learning at the metadisciplinary level (more recently - cross-curricular). In this case, the multitude of notions and problems is reduced to a relatively smaller number of fundamental information, which reflects different dimensions of reality. This approach involves the construction of so-called metadisciplines.

4. The principle of productive learning

The basic indicator of learning becomes the result obtained individually, which was formed by the internal and external products of the learning activity.

Heuristic learning is focused not so much on what is already known, but on what does not yet exist. In other words, the activity of the learner is oriented to the production of the new/own result.

5. The primary principle of the learning product

The product created by the learner in the learning process exceeds the educational standards and the performances in the respective fields. This principle highlights the priority of the internal development of the learner in relation to the predominant learning from the outside.

6. The principle of situational learning

The learning process is carried out on the basis of situations that involve the heuristic search to solve them. In this case, the teacher is the facilitator of the learner. In order to achieve the heuristic activity of the learner, the teacher creates or uses heuristic situations that aim to motivate this situation and ensure the learning of the learner in the appropriate direction.

Situational learning technology is more real and closer to the personality of the learner and the teacher.

7. The principle of reflection

Reflection - a necessary condition for the learner (and the teacher) to see/be aware of the scheme of organising their own learning activity, to build this activity in relation to their own objectives, to have heuristic learning methods [16, pp.330].

STUDIA UNIVERSITATIS MOLDAVIAE, 2021, nr.5(145) Seria "Stiințe ale educației" ISSN 1857-2103 ISSN online 2345-1025 p.3-9

Conclusions:

- 1. The constitution of Pedagogy for adults has a history of at least two hundred years. In 1833, the German researcher Alexander Knapp (2) introduced the term "andragogy" - pedagogy for adults - which refers to science, which deals with the problems of adult learning and education. For some reasons, this term has not been spread and accepted by many specialists in education. At the same time, it should be noted that at the current stage, adult pedagogy is part of the sciences of education as a non-existent branch, having its own scientific-categorical apartheid, its own epistemological basis and rich experience and practice.
- 2. Adult pedagogy, on the other hand, adapts the provisions of general pedagogy and its categories. The application of common terminology in most cases contributes to the conversion of scientific categories. At the same time, adult pedagogy is related to several sciences:
 - *Philosophy* serves as a theoretical and methodological basis for building concepts of adult education, focused on the laws of development of the individual, the world, society, the theory of knowledge.
 - Psychology is especially important for the pedagogy of adults, since the processes of upbringing and education of adults are based on the results of studies of consciousness and behaviour of an adult.
 - *Economics and politics* have a direct impact on the processes of education and upbringing of adults. •
 - *Physiology* provides teachers with knowledge about the functioning of the vital systems of adults and the peculiarities of their higher nervous activity.
 - Sociology, exploring the social environment, social relations, patterns of building social groups and communities, allows you to plan and implement the process of socialization of the individual, to regulate relationships in the study group (team), etc.
- **3.** Psychological and philosophical-pedagogical concepts as epistemological approaches to adult learning and education is a conceptual frame of reference for adult pedagogy, which has as object of research and study four directions of adult learning and education: compensatory, satisfaction of educational needs, activating the social, personal sphere. The realization of these directions can be organised in the formal, non-formal and informal framework.

References:

- 1. КАПТЕРЕВ, П.Ф. Педагогика наука или искуство? Москва, 1982.
- 2. НОЙНЕР, Т. Педагогика. Москва, 1984.
- 3. CONSTANTINESCU, M. Competența socială și competența profesională. București: Editura Economică, 2004.
- 4. КАПТЕРЕВ, П.Ф. *Op.cit*.
- 5. FURTER, P. Grandeur et miselre de la pedagogie. Neuchatel, 1971.
- 6. Обучение в вечерней школе/ под ред. Е.П. Тонконогой. Москва, 1976.
- 7. ВАСИЛЬКОВА, Т.А. Основы андрагогики. Москва: Кнорус, 2009. 256 с.
- 8. Ibidem.
- 9. Ibidem.
- 10. Ibidem.
- 11. Ibidem.
- 12. CERGHIT, I. Sisteme de instruire alternative și complementare. Structuri, stiluri și strategii. București: Aramis, 2002.
- 13. CRISTEA, S. Fundamentele pedagogiei. Iași: Polirom, 2010.
- 14. CONSTANTINESCU, M. Op.cit.
- 15. Ibidem.
- 16. GUŢU, VI., VICOL, M.Iu. Tratat de pedagogie între modernism și postmodernism. Iași: Performantica, Institutul Național de Inventică, 2014.

* The article was made within the Applicative Institutional Project "Conceptual, Methodological and Managerial Framework of Non-Formal Education in the Republic Of Moldova", reference number 20.80009.0807.23.

Author's Data:

Vladimir GUTU, Doctor Habilitatis in Pedagogy, University Professor, Faculty of Psychology and Educational Sciences, Sociology and Social Work; Scientific Research Centre "Educational and Social Policies", Moldova State University. E-mail: vladimir.gutu@yahoo.com

ORCID: 0000-0001-5357-4217

Prezentat la 27.04.2021