

ANNOTATIONS OF THE PRESENTED MATERIALS INCLUDING SELF-ASSESSMENT OF CONTRIBUTIONS

**of Chief Assistant Doctor NIKOLINKA ALEKSANDROVA ATANASOVA
for participation in a contest to be appointed the academic position of
Associate Professor
in the area of higher education: 1. Pedagogic Science,
professional field: 1.2. Pedagogic
(Theory of Bringing-up and Didactics)**

** The order of the annotations of the presented materials corresponds the order of the publications in the list of scientific works for participation in the contest.*

MONOGRAPHS

1. Atanasova, N., The mind maps as an innovative technique for studying and teaching, page 181, FastPrintBooks, Plovdiv, 2015, ISBN 978-619-7034-74-5

In the contemporary information century the need arises of improvement of the activities of studying and teaching in such a way that studying can be combined with understanding and be accepted as intriguing, captivating and motivating by the students. The mind maps are a possible way of transforming both activities in the desired direction. The usage of mind maps is a current issue because they:

- Are still insufficiently familiar or are used rarely as techniques of studying and teaching here;*
- Stimulate studying with understanding, which in many cases is replaced by mechanical learning;*
- Support interactive teaching;*
- Contribute to educating competent and creative people in different professional fields etc.;*

This monograph is consistent with the topicality and the significance of the mind maps as techniques of studying and teaching.

In the first chapter are revealed the essence, the theoretical-empirical foundations, the kinds of mind maps as well as the stages of individual and group construction of such maps. A special emphasis is put on the rich variety of computer programs and web applications for complying computer mind maps, which are among the most preferred ones by the students. The possible pedagogic barriers are presented for effective use of the mind maps in the educational institution, the advantages of this technique for the activities of

studying and teaching and last but not least the rich range of opportunities for applying the mind maps in and out of the educational area.

In the next chapter is described the design of the conducted finding study based on the survey as a method of diagnostics, which is focused on researching the contemporary process of studying in higher schools and the possibility of applying mind maps as an innovative technique for Bulgaria for studying and teaching. The analysis of the received results and the conclusions made from it are presented in details.

The third chapter is dedicated to the possibilities for applying mind maps in four interactive technologies of education in higher schools. A number of tasks and exercises with mind maps are suggested in the subject Didactics which are designated for students in pedagogic subjects and these tasks can easily be adapted for other subjects.

2. Atanasova, N., Interactive group and project education face to face. Theoretical-applied aspects, page 119, FastPrintBooks, Plovdiv, 2018, ISBN 978-619-236-034-4

The monograph is intended to clarify and stimulate the positive change regarding the following facts from the pedagogic practice in Bulgaria:

- *The effective interactive face to face education is still rare in practice and insufficiently familiar in theory.*
- *The group-based education as a variant of the interactive one is performed mainly through differentiated individual work in rows in the class room, which turns it into a traditional education.*
- *The project education as a variant of the interactive one is one mainly regarding the activity of clubs of interests and other extracurricular activities and it is rarely combined either with the lesson as a leading external form of education or with the spontaneous initiatives of the students.*
- *The group-based and project-based education very often remains incomplete because the logical end is not reached, which concerns the evaluation of the achieved results.*
- *The evaluation of the group work and the project education, where it exists, is associated mainly with the material products which are produced by the students and there is no clarity about any other possible aspects of assessment and the criteria and indexes of diagnostics connected to them.*

The interactive group-based and project-based education are extremely topical also because they are an important part of the content of the new school programs and schools sets in the subjects, as well as they are in the bases of the procedures for monitoring and attestation of each acting pedagogue.

Each of the three chapters in the monograph is complied by following this structure: introduction, main part and conclusion. Due to this fact they represent relatively independent entities.

In the first chapter are presented significant theoretical-applied aspects of the effective interactive education which are the basis of quality accomplishment not only of the group-based and project-based education as its variants but also of all others, among which are the problem-orientated, animation one etc.. a special emphasis is put on the successfully functioning principles and methods of interactive education supported with examples from the practice also on the effective external and internal learning environments.

In the second chapter the group-based education is presented successively from its appearance in the educational practice to its contemporary variants and possibilities for assessment. A critical analysis is made of the phenomenon “quasi” group work.

The third chapter reviews the project education from its historical roots, its transformation in a technology of education for one class to its development to a project technology for a whole school (project week). A significant place is dedicated to the opportunities for effective assessment of the process and the results from this variant of interactive study.

In the book there are a lot of hidden ideas for effective interactive study in general.

PUBLISHED BOOKS ON THE BASIS OF DESSERTATION FOR BEING APPONTED THE EDUCATIONAL AND SCIENTIFIC DEGREE OF DOCTOR

1. Atanasova, N., The challenge interactive methods of education, page 108, University Publishing House “Paisii Hilendarski”, Plovdiv, 2012, ISBN 978-954-423-757-8

The interactive methods are one of the contemporary pedagogic challenges. The contribute to developing a quality process of education and fully correspond to both the social needs of building creative personalities and the need of socialization and communication of each student. This is a reason for seeking the most favorable ways of educating students who will be not only knowledgeable but also capable people.

The monograph considers the contemporary pedagogic need of clarity and more detailed information about the interactive methods of education and gives an answer to the question: which methods are interactive and where they originate.

The essence and the types of interactive methods of education are presented. A number of foreign and Bulgarian classifications are described and analyzed. More than fifty interactive methods of education are characterized. The origin of this large group of methods is made clear through the connection: philosophies of education – reformist pedagogy – interactive methods of education. The peculiarity of the contemporary interactive study is shown concerning the process of education, variants of education, positive sides and problems which are connected to its implementation in the school practice.

2. Atanasova, N., Interactive methods of education in primary stage of General Education School. Methodological Guide for interactive education in 4th grade, page

212, University Publishing House “Paisii Hilendarski”, Plovdiv, 2012, ISBN 978-954-423-754-7

The book presents an approbated technological model of interactive education which corresponds to the pedagogical need of particular examples of implementing the interactive study in primary classes and also gives answers to current questions which include:

- *Which interactive methods can be applied with ease in the process of education in the primary school?*
- *Is it suitable the interactive methods to be used in the lessons for new knowledge?*
- *Where should they be used in the lesson as a dominating form of education and how many of the interactive methods are the most appropriate to be included?*

The model includes five interactive methods, integrated in pairs in ten sequentially alternating combinations. They are an easily implemented variant of systematic, various and flexible development of the interactive process of education and at the same time they are a source of generating new creative ideas.

SCIENTIFIC ARTICLES AND REPORTS

1. Atanasova, N., Learning environment as a stimulus for building digital competence of the students in the modern school, in: Collection of scientific reports from the scientific practical conference “Mathematics, Informatics, Information Technologies, Implementation in Education”, Information technologies in education. Challenges and opportunities, Plovdiv, 2019, page 164 – 175, ISBN 978-619-202-437-6

Digitization is one of the fastest changing areas in the modern world. In this publication an analysis is made of the possibilities for digitization which are provided by the school curriculum in all school grades, the connection between the favorable interactive learning environment and the digital competence of the students is shown; the ways of creating effective pedagogic practices from the primary to the high school stage of education in Bulgaria presented.

2. Atanasova, N., The mind map as an innovative technique for education and assessment of students at Plovdiv University “Paisii Hilendarski”, Bulgaria, 10th International Conference on Education and New Learning Technologies, Palma, Mallorca, Spain, 2nd – 4th July 2018, page 2530 - 2536 , ISBN 978-84-09-02709-5

This publication concerns the topicality and the significance of mind maps in higher education as well as the need of updating the activities of teaching, studying and assessment in Bulgaria. Experience is presented from practical study of students in the subject “Interactive methods of education” in the Master Degree Program “Pre-school and

primary school pedagogy” of Plovdiv University “Paisii Hilendarski”. There is emphasis on the connections group work – mind maps and assessment – mind maps. Regarding the first connection an approbated effective model is shown of a group-based technology of education with mind maps. With regard to the connection assessment – mind maps, summarized results are presented from assessment of 456 students. The assessment of each mind map is based on a system of criteria and indexes suggested by Tony Buzan. The pedagogical experience describes in this publication aims to publicize the mind maps as an alternative of the traditional education, examination and assessment.

3. Atanasova, N., K. Cherneva, Models of innovative technologies of education with mind maps, in: Collection of reports of participants in project “Innovative learning environment” of Pedagogic Faculty of Plovdiv University “Paisii Hilendarski”, “Prospects for creating innovative learning environment”, Plovdiv, University Publishing House “Paisii Hilendarski”, 2017, page. 57 – 67, ISBN 978-619-202-297-6

Globally mind maps have wide application not only in the area of education but in the areas of economics, insurance business, information technologies etc.. In Bulgaria mind maps are still slightly known. For this reason in this publication presents the innovative authoring technological variants of education with mind maps at kinder garden, school and university. It aims to show and prove the suitability of these cards as a technique for active study in the Bulgarian educational system.

4. Atanasova, N., B. Poshtova - Nikolaeva, The child as something valuable in the progressivism constructivism and humanist philosophies of education, in: Collection of reports intra-curriculum scientific conference of Pedagogic Faculty of Plovdiv University “Paisii Hilendarski”, “Social-pedagogic aspects of children’s development”, Plovdiv, 2017, page 21 – 32, ISBN 978-619-202-279-2

(Margaritova, B., T. Burdeva, N. Atanasova, V. Stoeva, O. Koychev, E. Cherneva, H. Terlemezyan compilers of Collection of articles by teachers from conference of Pedagogic Faculty of Plovdiv University “Paisii Hilendarski”, “Social-pedagogic aspects of children’s development”, Plovdiv, 2017, ISBN 978-619-202-279-2)

The child in the modern world face a number of challenges which include the huge information flow coming from the media, Internet, street etc., affecting the fragile child’s personality negatively frequently. This fact shows the need of implementation of such kind of education which in a entertaining, attractive, practical way prepares children for successful dealing with life. Democratic philosophies of education are an adequate answer to this need of the society. The purpose of this publication is to show the implementation of three chosen philosophies in the activity of contemporary language schools for children at the age from 5

to 10 as a positive examples which can be used for modernizing the educational practice of all kind of schools and kindergarten in Bulgaria.

5. Atanasova, N., MozaBook and EdrawMax 7.7. as alternative means of education, in: Collection of reports of the participants in the project “ Alternatives in Education”, Part II, Pedagogic Faculty of Plovdiv University “Paisii Hilendarski”, Plovdiv, 2016, page 36-44, ISBN 978-619-202-194-8

The means of education are an important factor which affects directly the quality in the educational institution. They are linked to the principles, methods, technologies and forms of education. MozaBook and Edraw Max 7.7. are means of education from a new generation which have proved their efficiency worldwide. In Bulgaria they are an innovation which is an alternative of the classic didactic boards, schemes and other means for visualization. This publication presents the fundamental opportunities of creating electronic resources in the e-platforms MozaBook and Edraw Max 7.7 with the aim to optimizing the process of education at schools and universities.

6. Atanasova, N., T. Naydenova, The mind map in the project-orientated technology of education and students' initiatives, in: Collection of reports of participants in the project “Alternatives in education”, Pedagogic Faculty of Plovdiv University “Paisii Hilendarski”, Plovdiv, 2016, pages 218 – 228, ISBN 978-619-202-159-7

The mind map is an innovation for the Bulgarian universities. My personal experience in this problems determines that it can be integrated successfully with interactive technologies of education and the students' initiatives. This publication presents the stages of individual or group construction of the mind map and the possible places for using it in the project-orientated technology f education and the different kinds of students' initiatives which include conferences, competitions, campaigns on social topics etc.

7. Atanasova, N., Mind Maps as a technique for more effective study in the higher school, in: Collection of articles by teachers from a conference of the Pedagogic Faculty of Plovdiv University “Paisii Hilendarski”, “Education, development, art. Education and development.”, Plovdiv, 2015, pages 61-70, ISBN 978-619-202-076-7

(Tsokov, G., N. Atanasova compilers of Collection of articles by teachers from the conference of the Pedagogic Faculty of Plovdiv University “Paisii Hilendarski”, “Education, development, art. Education and development.”, Plovdiv, 2015, ISBN 978-619-202-076-7)

The quality of higher education is tightly connected to students' skills for effective education. Nowadays in Bulgaria dominates mechanical learning which does not lead to lasting accumulation of knowledge and competences. With this regard the main idea of the publication concerns the publicity of the mind maps as an innovative technique for study here, which makes this activity positive for the students. It presents results and conclusions from conducted survey with students from professional fields: Pedagogy, Pedagogy of education in ... and Philology of Plovdiv University "P. Hilendarski" about their notions and experience of applying mind maps as an untraditional study technique. As a response to the revealed needs here it suggests particular exercises for students, focused on creating skills for composing mind maps and making learning more efficient.

8. Atanasova, N., Studying in the process of acquiring university degree, in: Collection of scientific works of Plovdiv University "Paisii Hilendarski", 30 years Pedagogical Faculty, "Education, society, personality", Plovdiv, 2015, pages 304 – 313, ISBN 978-619-202-032-3

The university process of education is directly connected to the opinion and needs of the society. This unbreakable connection suggests its constant improvement. This publication popularizes data from a survey of 245 students in 13 subjects in three professional fields of Plovdiv University "Paisii Hilendarski" which reveal the weak and strong sides of the contemporary process of studying in higher schools at home. Through the analysis made of the received data from the survey possible ways are considered for optimizing both the activity of study and the activity of teaching in Bulgarian universities.

9. Atanasova, N., Problem-based education in school – archaism or innovation, in: E-magazine "Bulgarian Teacher", 2014, №2, pages 45 – 54, ISBN 1314-9482, E-magazine "Education and Development", ISSN 2603-3577

The publication is a response to the following challenges:

- ✓ *Problem-based learning is one of the contemporary types of education which contribute to stimulating research thinking in the class room;*
- ✓ *In Bulgaria problem-based learning is used too limited because it is not known very well by the pedagogues and that is the reason why there are incidental attempts for its implementation in schools;*
- ✓ *Frequently the focus of the topics of the problem-based learning is replaced with questions for discussion with students leading to pedagogic barriers which the teacher has to deal with.*

Considering the described challenges the emphasis of this publication is on showing the specifics of the problem-based learning as an entirely practice-orientated type of

education which is easy to be used in the class room. Also approbated practical examples are presented.

10. Atanasova, N. A., The qualification course in interactive education. Program for pedagogic training, in: Collection of scientific works of Plovdiv University “Paisii Hilendarski”, Pedagogic Faculty, “Prospects in Education”, Plovdiv, 2014, pages 133 – 142, ISBN 978-954-423-942-8

The qualification of the pedagogic specialists in Bulgaria is very topical issue. This publication aims to present approbated program for pedagogic training connected with the interactive study at school. The program offers a wide variety of opportunities for effective practical training of pedagogic specialists which responds to the need of teaching placing the student in a position of an active discoverer of different truths about the world in the process of studying. It includes discussions, role-games, case study and other dialogue methods of pedagogic qualification. The program complies with the goals of the European educational policy, orientated to ensuring quality education at all educational stages.

11. Atanasova, N.A., Inclusive education in the exercises of didactics of students from the pedagogic specialties, in: Collection of scientific works of Plovdiv University “Paisii Hilendarski”, “Well-being in the context of social identity.”, Plovdiv, 2013, pages 21-31, ISBN 978-954-423-852-0

Inclusive education is one of the contemporary challenges in Bulgarian schools. Its effective implementation requires a number of important steps which include adequate training of students who are the future pedagogues about competent participation in the process of joining the students in school and society in general. For this reason this publication offers a wide range of approbated tasks and ideas for building competences in the area of inclusive education which can be successfully integrated in the school content in didactics as fundamental subject in the school curriculum of the pedagogic specialties.

12. Atanasova, N. A, The normative didactic test in education, in: E-magazine “Bulgarian Teacher”, 2013, №1, pages 66 – 78, ISSN 1314-9482, E-magazine “Education and Development”, ISSN 2603-3577

The increasing popularity of the test in Bulgaria as an objective tool for diagnostics caused the occurrence of a lot of questions about its composition, as well as the appearance of a number of tests with questionable quality. Due to these facts this publication presents a technology for creating normative didactic test containing tasks with multiple choice of

answers. It targets all specialists in the area of education which are interested in these problems.

13. Atanasova, N., The History Museum and the facilitation as factors for effective study in didactics, in: Collection of scientific works of Plovdiv University "Paisii Hilendarski", "Contemporary education: strategies, directions, values", Plovdiv, 2012, pages 185 – 191, ISBN 978-954-423-827-8

Education in didactics is of fundamental importance at the education of students from pedagogic subjects. For this reason it is necessary for it to comply with the modern necessity of education which has to be attractive, intriguing and efficient at the same time. the combination of history museum and facilitation is an interesting challenge for the students and the teacher in Didactics because both of them are rarely used in the educational practice. This publication shows the characteristics of facilitation as an alternative of teaching and on this basis experience is presented from conducting a seminar in didactics on topic "School content", in a house-museum in the city of Plovdiv. This publication reveals an alternative for optimizing the process of study in higher school.

14. Atanasova, N. A, Intercultural Bringing-up and Education of Students in Pedagogic, Subject "Civil Education and Euro-Integration", 3 International Balkan education congress, Shtip, Republic of Macedonia, 22 – 24 September, 2005, pages 423 – 426, ISBN 9989-2260-2-2

Considering the topicality of the issue of intercultural education, civil education and Euro-integration, this publication presents effective author technological model for education of students in pedagogic subjects, which is characterized with an easy application, flexibility and universality. The model stimulates students to study actively and to build a well-grounded civil position.

15. Atanasova, N. A, Heuristik methods of education for a fourth class bi "European lessons" programme, 2 International Balkan education congress, Edirne, Republic of Turkey, 8 – 10 October, 2004, pages 671 – 674

The appearance of the school program "European Lessons" and the discussions concerning heuristic modeling methods of education in the Bulgarian education are the bases of creating this publication. It presents experimental research with 40 students from two 4th grade classes, which aims to show a variant for unconventional study in Bulgaria responding to the needs of the primary school teachers of practical examples for systematic application of dialogue study methods. In the system of 12 hours in the class, the following

heuristic methods of education are used in pairs: brainstorming, panel discussion, method of the multiple why, the method of development of idea tree. Through situational tests results are achieved regarding: the knowledge of students about Bulgaria and Europe, skills for making independent decisions and expressing personal opinion, skill for self-organization and being part of team.

16. Atanasova, N., School Program “European Lessons” – specifics and prospects for implementation in the primary stage of education, in: Collection of reports from a science conference with international participation, Pazardzhik, 2003, pages 171 – 178;

This publication presents the normative prerequisites for creating school programs such as “European lessons” which are one of the alternative ways of positive change in Bulgarian schools. The essence of the peculiarity of the program for 4th grade is described, the advantages of this program for optimization of the process of up-bringing and education are shown and on this basis ideas and prospects for its application in the contemporary school are presented, which are supported with practical examples.

17. Atanasova, N., The didactic games for building mathematical notions – opportunity for intellectual development of the 5-6-year-old children, Magazine “Pre-school Bringing-up”, 2003, №2, pages 27 – 32

The didactic games for grading as part of the games for building mathematical notions are a real opportunity for intellectual development of five-six-year old children. This publication reveals the connection between them and the development of thinking process, which is directed to the manifestation of its abstract-logical form and is an important foundation of intelligence. A pedagogic experiment is described herein which includes and efficient author system of gradually becoming more complicated didactic games for grading, which the pedagogues could successfully use in their work.

DEVELOPING AND PUBLISHING ELECTRONIC MATERIALS FOR STUDENTS IN BACHELOR AND MASTER PROGRAMMES OF THE PEDAGOGIC FACULTY OF PLOVDIV UNIVERSITY:

1. E-course “Interactive Education at School”

This course has a theoretical and applied purpose. It is consistent with the contemporary requirement of implementation of interactive study “face to face” at school. It is designated to reveal the essence and specifics of this type of education, its origin, also the diversity of interactive methods and technologies, as well as the possibilities of assessment of results from interactive study.

The e-course is developed in compliance with LOM, SCORM, ECTS and the system of criteria of the National Agency of Assessment and Accreditation.

STUDENT’S BOOKS IN SCHOOL EDUCATION

Electronic student’s books in Bulgarian Language and Reading for the primary stage of education, with authors Professor Doctor of Pedagogic Science R. Tankova and team of assistants, Publishing House “Prosveta”.

1. Primer, 1 st grade http://www.e-chebnik.bg/book/viewBook/5077	2. 1 st grade Reader http://www.e-uchebnik.bg/book/viewBook/5079
3. Bulgarian Language 2 nd grade http://www.e-chebnik.bg/book/viewBook/5481	4. 2 nd grade Reade http://www.e-chebnik.bg/book/viewBook/5483
5. Bulgarian Language 3 rd grade http://www.e-chebnik.bg/book/viewBook/6052	6. 3 rd grade Reader http://www.e-chebnik.bg/book/viewBook/6054

The developed electronic learning contents in the six student’s books include a range of electronic resources for language and literature study, based on the communication-speech approach in the primary grades. The resources provide a number of opportunities for inter-curriculum relation, as well as for group and project-based learning. They are created with the software product MozaBook and are design to build skills for learning and reading with understanding also to support teaching and make it a more-attractive activity. The electronic student’s books comply with the contemporary tendencies of digitalization in education.

SELF-ASSESSMENT OF SCIENTIFIC CONTRIBUTIONS OF CHIEF ASSISTANT DOCTOR NIKOLINKA ALEKSANDROVA ATANASOVA

The presented scientific products are of theoretical and applied nature. They are mostly connected to technologies of study in school and university education.

The contributions from them can be differentiated in the following topic directions:

1. Digitalization of education;
2. Interactive methods and techniques of study;
3. Innovative technologies of study in school and university education;
4. Optimization of the activities of learning and teaching at school and at university;
5. Efficient assessment of results from studying of school and university students.

Main scientific contributions in these directions are as follows:

Contributions in the directions of *Digitalization of education*:

- A wide range of suitable software products has been tested, analyzed and described for construction of computer mind maps and an algorithm for developing maps through matrix is shown. Emphasis is put on the possible weak and strong sides which exist when creating computer of handmade maps [monograph 1].
- More than 700 electronic resources have been created in a team which are designed for education of students in 1st – 3rd grades [student's books: 1, 2, 3, 4, 5, 6 for pupils in 1st – 3rd grade].
- Possibilities and variants of construction and use of electronic resources by teachers or students through software products MozaBook and Edraw Max 7.7 are presented [publications 5 and 11].
- Author's study contents for e-course *Interactive education at school* has been created, designed for education of students from the pedagogic subjects of Pedagogic Faculty of Plovdiv University "Paisii Hilendarski" which use the e-platform *Moodle* [e-resource 1].

Contributions in the directions of *Interactive methods and techniques of education*:

- The issue of the mind maps as an innovative technique of studying and teaching has been thoroughly researched. Theoretical analysis is made of existing names of technique and what completely corresponds to the goals of monograph 1 work is pointed out in a grounded way.

Together with the qualifications of the types of mind maps, which are mainly foreign, an own author's qualification is offered. The basic stages for individual or team compilation of mind maps are shown. Conclusive research has been conducted and the information from it has been thoroughly analyzed about the opinion of students on the issue of being familiar with and using the mind maps

outside the university process of education as well. As a result of this study, original and efficient variants for interactive technologies of education with mind maps have been created and offered in the university educational practice [monograph 1].

- Interactive techniques of education are described which are slightly familiar in Bulgaria [monograph 2] and which develop the existing range of already popular interactive tools [book 1].
- Personal and partners' experience is summarized from experimental practices for applying interactive methods of study of university students, school students and children at pre-school age [publications: 2, 3, 4, 6, 7, 14, 15, 17, book 2].
- The efficient author's program has been publicized for pedagogic training regarding interactive study at school, which is a consequence of conducted qualification courses with teachers [publication 10].

Contributions in the directions of *Innovative technologies of study in school and university education*:

- Innovative technologies of study have been created (such as lesson, project-orientated, group, animation and problem-based ones) with: mind maps, brainstorming, idea tree, method of exposure and other unconventional methods of study. [monograph 1, monograph 2, book 2, publications: 2, 3, 4, 13, 15]. These technologies stand out with a clear structure, opportunities for variation, choice and creativity of the participants in education, easy implementation in practice.
- Author's technological variant is described for implementation of inter-curriculum project study at school [monograph 2].

Contributions in the directions of *Optimization of the activities of learning and teaching at school and at university*:

- Author's system of principles is presented for creating a favorable internal interactive educational environment, a wide-range system of criteria is described for project activity, author's classification of the different groups and suitable techniques for separating students in groups randomly are offered [monograph 2].
- A number of particular author's practical examples are described for optimizing study and teaching at school and university: using educational software of a new generation, group work, work on projects, use of great variety of unconventional methods, formulating and solving study problems etc. [monograph 1, monograph 2, book 2, electronic student's books: 1, 2, 3, 4, 5 and 6, publications: 1, 3, 4, 5, 7, 8, 9, 11, 13, 14, 15, 16].

Contributions in the directions of *Efficient assessment of results from studying of school and university students*:

- An innovative diagnostic procedure is presented for assessing university students through mind maps, which is an alternative of conventional assessment through tests, written development of a question from a conspectus etc. It aims stimulating study with understanding and developing positive attitude of the students to the activity of assessment [publication 2].
- Mainly foreign systems of criteria for assessment of the process and results from group and project study are described, but personal systems of criteria for assessment of results are added also to them (PowerPoint presentation, poster, portfolio) in order that these variants of interactive study can be organized more effectively and implemented. Since it is not rare for them to stay incomplete here in Bulgaria in the pedagogic practice. A scale for assessment of the activity in the process of project study is offered [monograph 2].
- A technological variant for complying normative didactic tests is described in details which is approbated with students in primary school classes. It aims achieving higher degree of competence of pedagogues when complying or choosing tests, since it is proven by practice that there is shortage of quality didactic tests [publication 12].

03.07.2019
The city of Plovdiv

Complied by:
/Chief Assistant Doctor Nikolinka Atanasova/