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**НА СЪЮЗА НА УЧЕНИТЕ - СЛИВЕН**

**ТОМ 17, 2010 г.**

**50 ГОДИНИ  
ПЕДАГОГИЧЕСКО ОБРАЗОВАНИЕ В СЛИВЕН**

***Announcements of Union of Scientists - Sliven***

# **ИЗВЕСТИЯ**

## **НА СЪЮЗА НА УЧЕНИТЕ – СЛИВЕН**

***НАСТОЯЩИЯТ ТОМ СЕ ПОСВЕЩАВА НА  
НАЦИОНАЛНАТА КОНФЕРЕНЦИЯ  
С МЕЖДУНАРОДНО УЧАСТИЕ  
„ОБРАЗОВАТЕЛНИ ТЕХНОЛОГИИ 2010”  
НА ТУ – СОФИЯ, ИПФ - СЛИВЕН***

***50 ГОДИНИ ПЕДАГОГИЧЕСКО ОБРАЗОВАНИЕ В СЛИВЕН***

В настоящия том 17 на сп. "Известия на Съюза на учените - Сливен" са публикувани доклади, изнесени на Националната конференция с международно участие "Образователни технологии 2010", проведена 8-9 октомври 2010 г. в гр. Сливен.

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8800 Сливен, бул. „Бургаско шосе” № 59, тел.: 044 / 66 75 49 ISSN 1311 2864

#### Union of Scientists – Sliven

8800 Sliven, Blv. Bourgassko Shaussee No 59, tel.: +359 44 / 66 75 49 ISSN 1311 2864

[www.tu-sliven/sub](http://www.tu-sliven/sub)

e-mai: [sub\\_sliven@abv.bg](mailto:sub_sliven@abv.bg)

Предпечат: Милена Спиrowa

Печат: БМ – ТРЕЙД, тел. 02 / 971 8447

## С Ъ Д Ъ Р Ж А Н И Е

<b>доц. Андреас Ставру Хараламбус, маг. Ирена Гаврилова Соколова, Нина Д. Лазарова</b> 50 ГОДИНИ КОЛЕЖ – СЛИВЕН .....	9
<b>Красимир Спиров</b> ЕВРОПЕЙСКАТА КВАЛИФИКАЦИОННА РАМКА – ОТ ВЕРТИКАЛНО КЪМ ХОРИЗОНТАЛНО ОРГАНИЗИРАН УЧЕБЕН ПРОЦЕС.....	16
<b>Николай. А. Лобанов</b> РОССИЙСКАЯ ВЫСШАЯ ШКОЛА: НЕКОТОРЫЕ УРОКИ ЭКОНОМИЧЕСКОГО КРИЗИСА ...	21
<b>Светлозар П. Вацов</b> ЗА УПРАВЛЕНСКАТА КОМПЕТЕНТНОСТ НА УЧИЛИЩНИТЕ ДИРЕКТОРИ .....	25
<b>Ивелина А. Христова</b> МОДЕЛ НА ПОДБОР И НАЕМАНЕ НА ЧОВЕШКИ РЕСУРСИ В УЧИЛИЩНИТЕ ОРГАНИЗАЦИИ.....	30
<b>Екатерина И. Петкова</b> БЪЛГАРСКАТА ОБРАЗОВАТЕЛНА СИСТЕМА СЛЕД ОБЩЕСТВЕНИТЕ ПРОМЕНИ ОТ НОЕМВРИ 1989 ГОДИНА - РЕФОРМИТЕ В ГИМНАЗИАЛЕН ЕТАП НА СРЕДНОТО ОБРАЗОВАНИЕ .....	35
<b>Елена Й. Халова</b> ДНИТЕ НА ФИЗИКАТА – ФОРУМ ЗА ИЗЯВА НА ТАЛАНТИ.....	42
<b>Анета П. Койчева, инж. Мария М. Георгиева</b> МОДЕРНОТО СТРОИТЕЛСТВО С ГРИЖА ЗА ПРИРОДАТА - ВАРИАНТ ЗА УЧЕНЕ В КОНТЕКСТА НА ИЗБРАНАТА ПРОФЕСИЯ. ....	46
<b>инж. Галя Г. Попова, Анета П. Койчева</b> УЧЕНЕТО ПО БИОЛОГИЯ И ИНФОРМАЦИОННИ ТЕХНОЛОГИИ – ЗАБАВНО И УСПЕШНО ...	50
<b>Антоанета Н. Чобанска</b> ПЕДАГОГИКА НА ТВОРЧЕСКОТО ВЗАИМОДЕЙСТВИЕ В ОБУЧЕНИЕТО ПО УЧЕБНИТЕ ПРЕДМЕТИ ОТ ЦИКЪЛ „ФИЛОСОФИЯ” .....	53
<b>Антоанета Хинева, Валери Лилов, Евелина Геловска, Нина Димова</b> ИДЕЯ ЗА ПРОВОКИРАНЕ ИНТЕРЕСА НА УЧАСТНИЦИТЕ В ПРОЦЕСА НА ОБУЧЕНИЕ ПО ХИМИЯ И ОПАЗВАНЕ НА ОКОЛНАТА СРЕДА ЧРЕЗ ИЗПОЛЗВАНЕ ВЪЗМОЖНОСТИТЕ НА СЪВРЕМЕННИТЕ ИНФОРМАЦИОННИ И МРЕЖОВИ ТЕХНОЛОГИИ.....	58
<b>Николай Ив. Петров, Радостина В. Петрова, Петя П. Копанкова, Бойка В. Карачевиева, Силвия Вл. Дечкова</b> ЕКИПЪТ КАТО ОБЕКТ НА ИНФОРМАЦИОННО УПРАВЛЕНИЕ ПРИ ОБУЧЕНИЕ.....	60
<b>Николай Ив. Петров, Марина К. Николова, Гани Тр. Стамов</b> ФИЛОСОФСКА ЗНАЧИМОСТ И СИСТЕМНОСТ НА ОТРАЗЯВАНЕТО – ХРОНОЛОГИЯ И ДИНАМИКА .....	64
<b>Николай Ив. Петров</b> ФИЛОСОФСКО-КИБЕРНЕТИЧНИ АСПЕКТИ НА ПОНЯТИЕТО „ИНФОРМАЦИЯ” .....	70
<b>Пенка В. Драганова</b> ВЪЗПИТАТЕЛНИТЕ ЦЕЛИ В УРОКА ПО УЧЕБНА ПРАКТИКА АРГУМЕНТИРАНЕ .....	76
<b>Стефан Л. Гиргинов, Радка Ж. Бъчварова</b> ВЪЗРАСТОВА ДИНАМИКА НА РАЗВИТИЕ НА ФИЗИЧЕСКИТЕ КАЧЕСТВА НА 11-12 ГОДИШНИ УЧЕНИЦИ .....	82

<b>Сергей А. Новоселов, Борис Мих. Игошев</b> ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ В СФЕРЕ ОБРАЗОВАНИЯ: ЭКСПЕРТИЗА И ОХРАНА ПЕДАГОГИЧЕСКИХ ИННОВАЦИЙ .....	87
<b>Курдаш Намазбаевич Адинаев</b> ФАКТОРЫ СОВЕРШЕНСТВОВАНИЯ МЕТОДИКИ ПРОИЗВОДСТВЕННОГО ОБУЧЕНИЯ ЭКОНОМИЧЕСКИХ ПРОФЕССИЙ .....	95
<b>Радостина В. Петрова, Маргарита И. Тенева</b> ИНТЕРАКТИВНОСТТА В ЛАБОРАТОРНИТЕ УПРАЖНЕНИЯ ПО СЪПРОТИВЛЕНИЕ НА МАТЕРИАЛИТЕ .....	101
<b>Марина К. Николова</b> СОЦИАЛНАТА ЗРЕЛОСТ – ЕЛЕМЕНТ ОТ ФОРМИРАНЕТО НА ЛИЧНОСТТА .....	105
<b>Елена Й. Халова</b> ОСОБЕНОСТИ ПРИ ПРОВЕЖДАНЕ И ОЦЕНЯВАНЕ НА ЛАБОРАТОРНИ ЗАНЯТИЯ.....	109
<b>Нели Л. Колева</b> ДОЦИМОЛОГИЧЕСКОТО МАЙСТОРСТВО И ИЗТОЧНИЦИ НА СУБЕКТИВИЗЪМ.....	113
<b>Наргиза А. Фатхуллаевна</b> ПОДГОТОВКА ИНЖЕНЕРНО-ПЕДАГОГИЧЕСКИХ КАДРОВ В СИСТЕМЕ НЕПРЕРЫВНОГО ПЕДАГОГИЧЕСКОГО ОБРАЗОВАНИЯ .....	118
<b>Семен Я. Баев, Александр С. Мищенко</b> НЕПРЕРЫВНОЕ ОБРАЗОВАНИЕ ПЕДАГОГОВ КАК УСЛОВИЕ РАЗВИТИЯ ИХ ЦЕЛЕВОЙ СТРУКТУРЫ ДЕЯТЕЛЬНОСТИ.....	121
<b>Александр А. Безносюк</b> НЕПРЕРЫВНОЕ ОБРАЗОВАНИЕ: МАТЕМАТИЧЕСКАЯ МОДЕЛЬ .....	125
<b>Ш.С. Джавлонов</b> РАЗВИТИЕ СИСТЕМЫ НЕПРЕРЫВНОГО ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ НА ПРИНЦИПАХ ДИВЕРСИФИКАЦИИ .....	130
<b>Е. И. Добринская, С. П. Чернышева</b> ИНФОРМАЦИОННО-КОММУНИКАЦИОННЫЕ ТЕХНОЛОГИИ В ОБРАЗОВАНИИ ПОЖИЛЫХ ГРАЖДАН: ЦЕЛИ И ЦЕННОСТИ .....	133
<b>Петинка Р. Галчева, Антоанета, И. Хинева</b> ФОРМИРАНЕ НА ПРОФЕСИОНАЛНИ КОМПЕТЕНЦИИ ЗА ИЗПОЛЗВАНЕ НА ИНОВАЦИОННИ ТЕХНОЛОГИИ ОТ БЪДЕЩИТЕ УЧИТЕЛИ ПО ХИМИЯ.....	137
<b>Ryszard Gerlach</b> LIFELONG EDUCATION AS A FACTOR SHAPING THE CIVILIZATION COMPETENCE OF A CONTEMPORARY MAN.....	142
<b>Шахноза Тург. Халилова</b> НЕПРЕРЫВНОЕ ОБРАЗОВАНИЕ КАК ФАКТОР ФОРМИРОВАНИЯ КУЛЬТУРЫ ЛИЧНОСТИ.....	146
<b>Б. Х. Исмаилова</b> МЕТОДИЧЕСКИЕ ОСНОВЫ И ДИДАКТИЧЕСКИЕ СРЕДСТВА ФОРМИРОВАНИЯ ПРОФЕСИОНАЛЬНО-ЯЗЫКОВОЙ КОМПЕТЕНЦИИ СПЕЦИАЛИСТА СЕСТРИНСКОГО ДЕЛА .....	150
<b>Димитрина Каменова</b> ОБРАЗОВАТЕЛНО-ЦЕННОСТЕН МОДЕЛ ЗА РАЗВИТИЕ НА ИНОВАТИВЕН ЧОВЕШКИ ПОТЕНЦИАЛ .....	153

<b>А. Л. Казин</b> ХРИСТИАНСКАЯ СВОБОДА И ОБРАЗОВАНИЕ ВЗРОСЛЫХ: К ВОПРОСУ О ДУХОВНЫХ ЦЕЛЯХ ОБРАЗОВАТЕЛЬНОГО ПРОЦЕССА.....	156
<b>Ева Т. Куля</b> ТЕХНИКА В СРЕДНИХ ШКОЛАХ В ПОЛЬСКОМ КОРОЛЕВСТВЕ НА РУБЕЖЕ СОВРЕМЕННОСТИ (1860 – 1900).....	159
<b>Aleksandra Kulpa -Puczyńska</b> CONTINUING EDUCATION FOR PEOPLE WITH SPECIAL NEEDS – BASED ON THE EXAMPLE OF DISTANCE EDUCATION CENTRES IN VILLAGES.....	163
<b>М. Ю. Лобанова</b> ТЕХНОЛОГИЯ ПСИХОЛОГО-ПЕДАГОГИЧЕСКОГО СОПРОВОЖДЕНИЯ ПРИЕМНОЙ СЕМЬИ.....	167
<b>Renata Tomaszewska-Lipiec</b> EMPLOYING ESTABLISHMENT AS A LEARNING ORGANIZATION.....	170
<b>Галина В. Марченко</b> ИННОВАЦИИ В ВЫСШЕМ ПЕДАГОГИЧЕСКОМ ОБРАЗОВАНИИ УКРАИНЫ .....	174
<b>Н. З. Мамедова</b> ОСНОВЫ ПЕДАГОГИЧЕСКОГО ПРОЕКТИРОВАНИЯ СОДЕРЖАНИЯ НЕПРЕРЫВНОГО ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ.....	180
<b>Екатерина В. Новикова</b> РАЗВИТИЕ ПРОЦЕССА ВЫЯВЛЕНИЯ И ПОДДЕРЖКИ ОДАРЕННОСТИ В США .....	182
<b>Т. Прок</b> НЕГОСУДАРСТВЕННЫЙ СЕКТОР ВЫСШЕЙ ШКОЛЫ В СИСТЕМЕ НЕПРЕРЫВНОГО ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ РОССИИ .....	188
<b>Ольга Л. Петренко</b> МОДЕЛЬ НЕПРЕРЫВНОГО ОБРАЗОВАНИЯ НА ОСНОВЕ ИНТЕГРАЦИИ НАУКИ И ПРОИЗВОДСТВА .....	191
<b>Илиана Огн. Петкова</b> ВЪЗМОЖНОСТИ ЗА КАРИЕРНОТО РАЗВИТИЕ – СТАНОВИЩЕТО НА УЧИТЕЛИТЕ.....	195
<b>Ольга В. Плахотник</b> ФОРМИРОВАНИЕ ЭКОЛОГИЧЕСКОЙ КУЛЬТУРЫ В СИСТЕМЕ НЕПРЕРЫВНОГО ОБРАЗОВАНИЯ .....	198
<b>Яна В. Полякова</b> ЕВРОПЕЙСКИЙ ОПЫТ ОРГАНИЗАЦИИ ДИСТАНЦИОННОГО ОБРАЗОВАНИЯ .....	203
<b>Хикматулла Раш. Фатхуллаевич</b> РОЛЬ СТАНДАРТОВ КВАЛИФИКАЦИИ В ФОРМИРОВАНИИ СОДЕРЖАНИЯ НЕПРЕРЫВНОГО ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ .....	207
<b>А.В. Шин</b> СРАВНИТЕЛЬНЫЕ ПЕДАГОГИЧЕСКИЕ ИССЛЕДОВАНИЯ НЕПРЕРЫВНОГО ОБРАЗОВАНИЯ.....	210
<b>В. Н. Скворцов</b> РАЗВИТИЕ РОССИЙСКИХ УНИВЕРСИТЕТОВ КАК УСЛОВИЕ ИНТЕГРАЦИИ МОЛОДЫХ СПЕЦИАЛИСТОВ В ПРОФЕССИОНАЛЬНЫЕ ТРАДИЦИИ ЕВРОПЫ.....	213



<b>Маргарита И. Тенева</b> ЛИЧНОСТНАТА ИНТЕЛИГЕНТНОСТ – НЕОБХОДИМ ЕЛЕМЕНТ В ПРОФЕСИОНАЛИЗМА НА ПЕДАГОГА.....	218
<b>Sobir Tursunov</b> MODELING THE HEALTH-SAVING TECHNOLOGY IN VOCATIONAL COLLEGE.....	223
<b>Roman Tomaszewski</b> TECHNOLOGY IN AID OF EDUCATION 1939-2000.....	227
<b>Лидия. Д. Тюличева</b> ВЛИЯНИЕ ОБРАЗОВАТЕЛЬНЫХ ИННОВАЦИЙ НА ПОТЕНЦИАЛ СИСТЕМЫ НЕПРЕРЫВНОГО ОБРАЗОВАНИЯ.....	231
<b>Farida Z.Umarova</b> SELF-LEARNING PEDAGOGICAL STAFF AS A FACTOR OF REALIZATION OF STUDENT-CENTERED EDUCATION.....	234
<b>Алла Б. Возняк</b> ПРОБЛЕМЫ ОБРАЗОВАНИЯ ЛЮДЕЙ С ОГРАНИЧЕННЫМИ СПОСОБНОСТЯМИ.....	239
<b>Севара З. Закировна</b> ТЕХНОЛОГИЯ ПЕДАГОГИЧЕСКОГО ОЦЕНИВАНИЯ В СИСТЕМЕ ПРОФЕСИОНАЛЬНОГО ОБРАЗОВАНИЯ.....	242
<b>Сергей. А. Новоселов</b> АССОЦИАТИВНО - СИНЕКТИЧЕСКИЕ ТЕХНОЛОГИИ РАЗВИТИЯ ТВОРЧЕСТВА СТУДЕНТОВ.....	245
<b>Jove D. Talevski, Violeta Janusheva, Milena Pejchinovska</b> LEARNING THROUGH RESEARCH, A POSSIBILITY FOR PERMANENT PROFESSIONAL IMPROVEMENT OF THE TEACHING STAFF IN THE ELEMENTARY EDUCATION.....	252
<b>A. Tatarinceva</b> THE INFLUENCE OF A STUDENT' LEARNING STYLE ON HIS/HER ACHIEVEMENTS IN A HIGHER SCHOOL.....	257
<b>Георги Милушев, Васил Василев, Пламен Цветков, Николай Гуров</b> СИМУЛЯТОРИ НА НЕСЪОТВЕТСТВИЯ ПРИ ЗАХРАНВАНЕ С ПРОМИШЛЕНА ЧЕСТОТА, ПРИЛОЖИМИ В ОБРАЗОВАТЕЛНИЯ ПРОЦЕС.....	262
<b>Елисавета П. Недялкова</b> ВИДОВО ОПРЕДЕЛЯНЕ НА ЩАМ М-12 ИЗОЛИРАНОТ СУРОВО-СУШЕН МЕСЕН ПРОДУКТ.....	267
<b>Калоян П. Димитров</b> ДИДАКТИЧЕСКИ ТЕСТ – СРЕДСТВО ЗА КОНТРОЛ НА ПРОВЕДЕНИ ЛАБОРАТОРНИ УПРАЖНЕНИЯ ПО ДИСЦИПЛИНАТА ”ТЕХНИЧЕСКО ДОКУМЕНТИРАНЕ”.....	271
<b>Магдалена Цв. Павлова, Радка Ж. Бъчварова</b> CORELDRAW X3 В КОМПЮТЪРНОТО ПРОЕКТИРАНЕ НА ПРОЦЕСА НА ТЕХНОЛОГИЧНА ОБРАБОТКА НА ДЕТАЙЛИ ОТ ОБЛЕКЛОТО.....	278
<b>Маргарита И. Тенева, Радостина В. Петрова</b> ОБРАЗОВАТЕЛНА ТЕХНОЛОГИЯ ЗА КОМПЮТЪРНА СИМУЛИЦИЯ НА ДВИЖЕНИЕТО НА РАВНИННИ МЕХАНИЗМИ.....	284
<b>Маргарет В. Сивова</b> КОМПЮТЪРНА ТЕХНОЛОГИЯ ЗА ФОРМИРАНЕ НА РАЗМЕРКАТА В УНИВЕРСАЛНАТА ГРАФИЧНА СИСТЕМА AUTOCAD.....	290



<b>Стоянка К. Моллова, Силвия А. Лецковска, Павлик Р. Рахнев</b> WEB-БАЗИРАНА СРЕДА ЗА ОБУЧЕНИЕ НА СТУДЕНТИ В ИНЖЕНЕРНИТЕ СПЕЦИАЛНОСТИ .....	295
<b>Павлик Р. Рахнев, Силвия Ал. Лецковска, Ст. К. Моллова</b> ПРОБЛЕМИ НА ДИСТАНЦИОННОТО ОБРАЗОВАНИЕ .....	298
<b>Маргарет В. Сивова</b> ЕТАПИ ПРИ ГРАДИРАНЕ НА ДЕТАЙЛИТЕ ОТ ОБЛЕКЛОТО ПО МЕТОДА МАЩАБИРАНЕ .....	300
<b>Ивелин Р. Рахнев</b> ТРАДИЦИОННО ИЗЛОЖЕНИЕ НА ЛЕКЦИЯТА ПО ТЕКСТИЛНА ТЕХНИКА .....	305
<b>Веселка М. Иванчева, Радостина В. Петрова, Щастлив И. Табаков</b> МЕТОД ЗА ИНТЕЛИГЕНТНИ ИЗМЕРВАНИЯ ПРИ ИЗСЛЕДВАНЕ НА НЕЕЛЕКТРИЧНИ ВЕЛИЧИНИ .....	308
<b>Andreja Rudolf, Simona Jevšnik, Zoran Stjepanovič</b> THE APPAREL TECHNOLOGY MODULE AS A ART OF THE ELITA (E-LEARNING IN TEXTILES & APPAREL) PROJECT .....	314
<b>Сашко Ив. Ламбов, Надя Ив. Илиева</b> ОЦЕНЯВАНЕ НА РЕЗУЛТАТИТЕ ОТ ПРОВЕДЕНИТЕ ИЗПИТИ ПО ХИМИЯ НА РЕДОВНАТА СЕСИЯ ПРЕЗ УЧЕБНИТЕ 2008/09 И 2009/10 ГОДИНИ В ИПФ – СЛИВЕН ...	319
<b>Стоян Г. Георгиев, Марияна Сл. Иванова</b> ХАРАКТЕРИСТИКИ НА РОТОРНО-РАЗПРЕДЕЛИТЕЛНА ГНП С ДОЗИРАНЕ НА ГОРИВОТО ЧРЕЗ ДРОСЕЛИРАНЕ НА ВХОДА .....	325
<b>Димитър Г. Стоянов</b> ИЗПОЛЗВАНЕ НА СИМЕТРИЯТА И АДТИВНОСТТА НА ПОТЕНЦИАЛА В ТЕОРИЯТА НА ЕЛЕКТРИЧНОТО ПОЛЕ .....	329
<b>Димитър Г. Стоянов</b> ЕЛЕКТРИЧНО ПОЛЕ НА КРАЙНА ЗАРЕДЕНА НИШКА .....	334
<b>Павлик Р. Рахнев, Силвия А. Лецковска, Д. Парашкевов</b> ТЕМПЕРАТУРНИ ЗАВИСИМОСТИ ПРИ СОЛАРНИТЕ КЛЕТКИ .....	338
<b>Радостина В. Петрова, Веселка М. Иванчева, Щастлив И. Табаков</b> ПРИЛОЖЕН МОДЕЛ ЗА ИЗПОЛЗВАНЕ НА НЕВРОННИ МРЕЖИ ПРИ ИЗСЛЕДВАНЕ НА НЕЕЛЕКТРИЧНИ ВЕЛИЧИНИ .....	341
<b>Щастлив И. Табаков, Живко Д. Касъров</b> ПРИЛОЖНА ТЕСТОВА СИСТЕМА В ОБУЧЕНИЕТО .....	346
<b>Димитър Е. Василев, Стоян К. Стоянов</b> МЕТОД ЗА ОПРЕДЕЛЯНЕ НА ПРИОРИТЕТИТЕ И ТЕГЛОВНИ КОЕФИЦИЕНТИ ЗА ПОКАЗАТЕЛИТЕ ЗА КАЧЕСТВОТО НА УПРАВЛЕНИЕ НА ПРОИЗВОДСТВОТО .....	351
<b>Иван Величков</b> ПРЕПОДАВАТЕЛЯТ – УЧЕН, ПЕДАГОГ, ПОЛИТИК .....	355
<b>Драгомир Г. Добруджалиев, Петко С. Петков, Илиян Колев, Златоцвет Б. Цонев</b> ТЕХНОЛОГИИ И КОМУНИКАЦИИ ПРИ WEB-БАЗИРАНОТО ОБУЧЕНИЕ В ОКС „МАГИСТЪР” НА СПЕЦИАЛНОСТ „ТЕХНОЛОГИЯ НА НЕФТА И ГАЗА” В УНИВЕРСИТЕТ ”ПРОФ. Д-Р АСЕН ЗЛАТАРОВ” - БУРГАС .....	358
<b>Роза А. Желева, Драгомир Г. Добруджалиев, Илиян В. Колев</b> НОВИ ПОДХОДИ В ОБУЧЕНИЕТО ПО “ЕЛЕКТРОНИКА” .....	364

<b>Пейчо Х. Попов, Красимира И. Кърджилова</b> РАЗРАБОТКА НА СИНХРОНЕН ДЕТЕКТОР ВЪВ FPGA.....	367
<b>Аспарух К. Спиртов</b> АСПЕКТИ НА ДУХОВНАТА ОСНОВА НА СЪВРЕМЕННАТА ПЛАНЕТАРНА ЦИВИЛИЗАЦИЯ .....	371
<b>Екатерина И. Петкова</b> БЪЛГАРСКАТА ЛИТЕРАТУРНА КЛАСИКА В ГИМНАЗИАЛЕН ЕТАП НА ОБРАЗОВАТЕЛНАТА СИСТЕМА ПРЕЗ ПЕРИОДА 1944-1950 Г. ....	377
<b>Пламен Т. Русев</b> ПРОЕКТИТЕ В УПРАВЛЕНИЕ НА ОБРАЗОВАНИЕТО .....	384
<b>Сашко И. Ламбов, Петър Г. Кръстев, Надя И. Илиева, Димитър А. Дечев, Николай П. Иванов, Панайот Н. Чобанов, Веселин Р. Райчев</b> ИЗСЛЕДВАНЕ НА НЯКОИ МЕХАНИЧНИ ХАРАКТЕРИСТИКИ НА ТЪНКИ СЛОЕВЕ ОТ NiCr СПЛАВИ, ОТЛОЖЕНИ ЧРЕЗ МАГНЕТРОННО РАЗПРАШВАНЕ ВЪРХУ ДИЕЛЕКТРИЧНИ ПОДЛОЖКИ .....	388
<b>Веселина Ст. Чобанова</b> МОТИВАЦИЯ НА ПЕРСОНАЛА ВЪВ ФИРМАТА .....	391
<b>Петър Недев, Стоян Георгиев, Марияна Иванова</b> ОТНОСНО ОПАЗВАНЕ НА ОКОЛНАТА СРЕДА ПРИ ОБСЛУЖВАНЕ И ЕКСПЛОАТАЦИЯ НА АВТОМОБИЛНИЯ ТРАНСПОРТ .....	396
<b>Юрий А. Балев, Цветана Н. Балева</b> ОПТИМИЗАЦИЯ НА ФИЗИЧЕСКАТА ДВЕЕСПОСОБНОСТ НА ПОДРАСТВАЩИТЕ – 12-15 ГОДИШНА ВЪЗРАСТ .....	398
<b>Юрий А. Балев, Момчил Ю. Балев, Константин Ив. Басанов</b> НЕСТАНДАРТНИ КОНТРОЛНИ НОРМАТИВИ И ФУНКЦИОНАЛНИ ПРОБИ – НОВА МЕТОДИКА В ИПФ – СЛИВЕН. АДАПТИРАНИ ХАРВАРДСКИ СТЕП – ТЕСТОВЕ .....	401

## LEARNING THROUGH RESEARCH, A POSSIBILITY FOR PERMANENT PROFESSIONAL IMPROVEMENT OF THE TEACHING STAFF IN THE ELEMENTARY EDUCATION

Jove D. Talevski, Violeta Janusheva, Milena Pejchinovska

**ABSTRACT:** *The aim of the program Learning through research is an in-depth cognition with teachers for the importance and the role of the research tools<sup>1</sup> in the educational process and the professional improvement of the teachers for their effective use. The idea for this kind of education came as a result from the need of the teacher to organize the curricula in an optimal way, to make the right choice for the research tools depending on the content that is being taught and with that, to improve the activity and the participation of the students in the Educational Process (EP), and that is part of the tenets of the permanent improvement of the teaching staff. The program, in its core, amounts to the improvement and professional improvement of the teaching staff which will be able to effectualize the process of learning, and with that the students will be actively involved in the process of learning, will develop their creativity, independence, critical thinking, will plan by themselves, evaluate, improve the communication through mutual interaction relations, will take initiatives and est., which will further on, influence their motivation and making bigger their interest for the curricula in general.*

**KEYWORDS:** *research tools, improvement of the teachers, active learning*

### INTRODUCTION

How much attention is being paid to the professional improvement of the teachers? How much effort is being put into the professional improvement of the teachers by themselves? Whether and how much the management takes care for the professional improvement of the teacher? Is the professional improvement planned or spontaneous? How much is the professional improvement connected to the needs of the teachers, the students and the improvement policy of the school in general? And at the end, how much is being invested in the professional improvement of the teachers by the Ministry of Education and the Bureau for improvement of the education as key factors in prompting the professional improvement of the teachers<sup>1</sup>.

The professional improvement of the teachers is the most important segment of a wholesome and systematic reform<sup>1</sup>. The number of experts that

examine the factors that influence the success and the students' achievements is great and they all agree that the teacher has the key role. The schools in their improvement plans have to take into consideration the necessity of continuous professional improvement of the teachers, as the need for creating a stimulative environment both for the students and the teachers. The professional improvement of the teachers is a continuing process that does not need to ever stop. The pledge for effective, efficient and qualitative professional improvement of the teachers should be an imperative for the activities of all of the people involved in the teaching process.

In this sense the Ministry of Education and the Bureau for educational improvement in the Republic of Macedonia, with the continuant organization for training programs for professional improvement of the teachers that reflect directly on the melioration of students' achievements, as for the promotion of the work of the teachers, in all segments of the educational process, shows that it makes great efforts for making the professional improvement of the teachers more and more efficient. These activities reflect the vision that they have for the education as a crucial segment and a

<sup>1</sup> The research methods (RM) underline setting certain questions or problems that need finding answers for; through the research methods students face authentic situations similar to those in the real life, and can later handle the situations much easier; with the RM every intellectual capacity of the students is put into work through placing the students in real situations, students learn how to learn critically, to research, to seek answers for their questions, to collaborate mutually, to work in teams, etc.

<sup>1</sup> Teachers' development in relation to evaluation, Talevski, J., Janusheva, V., Pejchinovska, M., Stojchevski, V. 2010, Faculty of Education, Bitola, in writing

pillar of every modern society that has as its goal an education that will have its base on its own specific values, and educational system compatible with those in the highly developed countries, and education that will recognize the spirit of the European and world trends in itself.

The professional improvement of the teachers organized through workshops with various themes and realized by the most reputed service bidders<sup>2</sup>, really fulfils its role and has all of the characteristics of the new approaches towards the professional improvement: implements a whole new process of changes in the school; includes all of the teachers in the professional improvements in this way and its implementation; it is an organized type of professional improvement; it is being concentrated around cooperative and collaborative problem solving; it is concentrated on great number of sources for information for the teachers knowledge, it is being organized and realized in the work environment of the teachers and etc.

In the framework of the project Modernization of the education, initiated by the Ministry of Education and the Bureau for educational improvement of the Republic of Macedonia, the program *Learning through research*<sup>3</sup> is being realized. The contents of the Program for improvement are a reflection for the strive to melioration of all the segments of the teaching process and reflect the pledge through didactic-methodological making of the curricula by implementing the research techniques, to continue with the process for professional improvement of the teachers and to enlarge their capability to actively enroll the students in the educational process.

At the same time, the contents of the Im-

<sup>2</sup> The Ministry of Education and the Bureau of educational development of the Republic of Macedonia, in the framework of the project Modernization of the education, with the financial support of the Holland Government, there is an open call for realization of trainings, for the teachers in elementary education, with different contents that are relevant for the teaching process (the contents are set according to previous analysis for the needs of the teachers and students). The schools have freedom in the choice of the bidder of the service and in the choice of the contents that reflect their needs for working with students, so the needed attention that is being paid to the professional development is obvious. In November 2009, there was such a call, and in 2010 the bidder of the program, The Faculty of Education from Bitola, got the accreditation for several programs, among which *Learning through research*.

<sup>3</sup> The program included seven elementary schools and 87 teachers from the elementary education in the Republic of Macedonia.

provement program are a support in the thrive of every school to be able to respond to the challenge of the new time in its work, to enable its students to develop the creativity, independence, critical thinking, communicative skills, to solve concrete problems and to be put in a authentic experience situations, that is, all of the skills that will need a future citizen to be competitive and ready to answer the needs in the labor market.

### **1. Learning through research-a possibility for a continuing professional improvement**

The program *Learning through research* is realized through theoretical and practical work with the teachers in the elementary education by the following content: research process, characteristics and implementation of the research, goals of the research acts in the curricula; tasks of the teacher and the students in the research acts in the curricula; retrospection on the mentoring role of the teacher in the research; the significance and the role of the types of the teaching work in the process of the research- individual and group approach in the implementation of the research acts; observation in the curricula - components, phases and types of observation; questionnaire and interview and their implementation in the curricula; case study - who, when and where can one use case study?; role play and experiment and its implementation in the curricula. The more appropriate the teacher can model the curricula in a didactic-methodological manner using these tools, the more the results will be much more satisfactory and in that sense, the accent is put on the significance of these acts in the curricula. With the teachers that were a part of the training, the need for better in-depth knowledge from this area of study was very obvious and, in the light of the implementations of these contents in the curricula with a special attention paid to their practical use.

It was of an utmost important that the teachers through group discussions and exchange of experience and ideas, they came to some responses about the methodological-theoretical problems that they have been facing with in everyday practice, especially related to defining the hypothesis and dependant and independent variables. The project was presented as an opportunity to pass forward the acknowledgements from the science theory and the practice from the Faculty of Education to the target groups that represent the staff employed at the faculty and from nearness faculties. In that way there was continuity in the acknowledgements in

order to improve the overall educational practice.

## **2. Objectives of the program *Learning through research***

The aim of this whole project and of this training in the framework of the project came out of the further improvement of the competencies of the teachers that are already a part of the educational system with new strategies and techniques of the active learning and with didactic-methodical and methodological answers of certain problems in the active learning for improvement of the work teachers do, and with that improvement of the process of learning of the students and their achievements.

The basic aims of the training are:

1. The participants to learn, and to deepen their existing knowledge for the research method in the curricula as strategies of learning and teaching so that the students can be actively involved in the process of learning;

2. The participants to be able to implement the different research methods in everyday practice;

3. The participants to be become capable didactically and methodologically to model the everyday practice by implementing the research methods (observation, questionnaire, interview, experiment, case study, role play, research project, etc.).

In this light, the active involvement of the participants in the process of learning, the development of the creativity, independence, critical thinking through facing and solving the concrete and practical problems is towards what is the today school leaning to. The students have to be able to develop skills and characteristics that will enable them to enter in a competitive society where self-conscience, the critical attitude and the active practical acting will give them a qualitative life. The best knowledge, the development of the capabilities is a "fruit" right from the active involvement of the students in the process of learning, and in that process, the greatest role is that of the optimal implementations of the research methods, that start from the most simple encouragement of the children to ask questions and to seek answers, using certain source information, until they come up to some serious forms of questioning that include setting hypothesis and variables, gathering information, analyzing, confirming or negating the hypothesis and eliciting conclusions, with the possibility of practical implementation of the gained knowledge.

The curricula through implementation of these methods sum up to much more satisfying results. Therefore, the main objectives of the implementations of the research methods are for the teachers to become capable of placing their students in an active position to be able to face the changes and the problems and to enable them to be able to plan and estimate by themselves, for better communication through the interaction relations, to take initiatives etc.

## **3. Principles and methods of teaching adults implemented in the training of the teachers**

The contents of the Program are based, foremost, on the principles and methods for adult teaching- everybody learns from everyone because everyone has knowledge (cooperative learning), the contents come out from life experiences that are relevant for the participants, everybody is changing through joint experience, self-confidence and respect is being built within the participants. The adults have a strong inner urge and motivation to learn something and are urged to use their own experiences as a source of information. They are put in front of problem situation where they are put in the active role. The techniques for teaching the adults included: experience techniques (group discussions, simulation exercises, activities that aimed towards solving problems, case study, etc.).

The techniques for training and the teaching methods included the following: presentations, brain-storming, demonstration, discussion in big groups (reflections, analyzing and implementation), simulation, role play, work in pairs, work in small groups, going round in circles; teaching methods: dialogue, working with text method, solving problems method, oral demonstration method.

## **4. Teachers' attitudes in relation to the training program *Learning through research***

The group discussions, the individual interests with the teachers in relation to the result of this program, and of programs from this kind in general, their reflections in the answer sheets and the evaluation of this Training program show that the attitudes of the teachers for this kind of training are in positive sense. Great numbers of teachers have emphasized the capability for having better results in their work. The teachers are highly motivated to enrich and to promote their educational practice through deepening their knowledge for the offered contents from the training program. They have



shown their readiness to implement the research methods in the everyday practice and are surer that with the research methods they will be able to motivate students. In that sense the pledge of the Ministry and the Bureau for educational development for professional improvement of the teachers and for implementing the system life-long learning into the educational system are being evaluated as more that satisfactory.

Further on, we are stating some of the statements that reflect the attitudes of the teachers re-

lated to the reasons for choosing this training program:

<sup>1</sup> The Ministry of Education in the Republic of Macedonia and the Bureau for educational development have the necessary competencies and expertise to start systematic activities for the professional development of the teachers because also for them, as relevant factors, involved in the teaching process, it is an imperative of the new age for the process of life-long learning to become a part of the mental capacity and a part of the everyday practice of every citizen.

**Table 1. Reasons for choosing the training program *Learning through research***

Teachers' statements	frequency
For better results in the teaching	2
Enriching the knowledge for solving problems in the educational practice	4
Enriching the knowledge for using the research methods in the curricula	5
Decision of the teaching body	1
The competence and professionalism of the trainers	1
Offers an opportunity for the teacher to be creative and to work with all the students	2
Enables easier and more familiar studying with the help of a research	3
For more qualitative and more interesting classes	1
Reminding of the research as a method	1
New aspects in the curricula/ quality trainers	1
Reminding of the knowledge about the research method in the practice, especially for the phases of the research method	2
Selected from the school as a whole unit	1
The more frequent recommendations for using the research in the process of learning	1
Gaining new knowledgements through the process of research	1
The need for professional development on this subject	1
More thorough and more in depth knowledge on this subject	10
A more qualitative teaching, motivating and an approach to the students	5
The need for in-depth knowledge of the knowledge	1
Connecting the theory with practice	3

## CONCLUSION

The conclusion has imposed itself upon us. As it can be seen, the most frequent statements are the ones that highlight the pledges of the Ministry of Education and the Bureau of educational development, as the one of the trainers, the offered contents to find its implementation in the everyday practice. The quality of the realized program is of the highest level and it is characterized with a solid structure and wholeness of the organization. The fact that most teachers evaluate that the content of the Training program is useful for their further work is very satisfying. Most participants have highlighted the connection of the theory with practice as a very important component, which confirm the pledges of the Ministry of Education for revival of the training programs in the practice and the necessity of this kind of professional improvement. The contents of the training program have contributed to widening the knowledge of the

teachers and there is a possibility which is highlighted for implementing the learned in the everyday educational work. In that way, the motivation of the teachers for didactic-methodological modeling of the curricula is shown, that is, for using the research methods in different segments of their everyday educational work. Generally speaking, the training program has come up to the participants' expectations.

Through this type of professional development, offered by the Ministry of Education and the Bureau of educational development, it more that clear that the teachers can function in their schools as teams for learning and with that, they can improve the model of professional improvement. The professional development organized and realized in this way represents a merit for the teachers and contributes for improvement of students' achievements, for improvement of the quality of the teacher's work and for improving the whole work-

ing climate in the school.

First of all, the learning teams are concentrated in the work atmosphere of the teachers. The learning teams represent a possibility for continuing professional development that is directly connected with the different needs of the teachers and the students. Actually, the needs of the teachers and the students direct their aims that the teams have to reach. They have a potential to secure a maintainable development because the culture of mutual research that is being passed on to the new teachers is being built with them.

We consider that this model of professional development offers a great deal of effectiveness and efficiency. The professional development of this kind is being realized in the work environment of the teachers. In the same time, we would like to highlight that the professional development of this kind requires a strong internal motivation from the teachers, a wish and a need for professional development with the purpose to improve students' achievements and to respond to the requirements of the new market society.

We once more, highlight that the schools in their development plans have to consider the necessity of the continuing professional development of the teachers and to encourage the teachers to make their own action plans. The action plans are a basis of the professional development of the teacher. It is very important for the action plans to be a part of the action plans of the learning teams in the yearly programs of the schools with the purpose for ensuring effective professional development and to improve the quality of the curricula in general. The action plans include possible activities that will take place for effective professional development, the reason for which these actions will take place, the way in which these actions will be carried out, an adequate role division between the team members as related to the activities and the time frame.

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