

УНИВЕРЗИТЕТ „ГОЦЕ ДЕЛЧЕВ“ – ШТИП
ФАКУЛТЕТ ЗА ОБРАЗОВНИ НАУКИ
UNIVERSITY “GOCE DELCEV” SH TIP
FACULTY OF EDUCATIONAL SCIENCES



**ОБРАЗОВАНИЕТО ВО XXI ВЕК
– СОСТОЈБИ И ПЕРСПЕКТИВИ –**

**МЕЃУНАРОДНА
НАУЧНА КОНФЕРЕНЦИЈА
– ЗБОРНИК НА ТРУДОВИ –**

**EDUCATION IN XXI CENTURY
– CONDITIONS AND PERSPECTIVES –**

**INTERNATIONAL SCIENTIFIC
CONFERENCE
– PROCEEDING BOOK –**

Штип, 24 – 25 Септември, 2015
Shtip, September, 24-25, 2015

fesconference@ugd.edu.mk

УНИВЕРЗИТЕТ „ГОЦЕ ДЕЛЧЕВ“ – ШТИП
ФАКУЛТЕТ ЗА ОБРАЗОВНИ НАУКИ
UNIVERSITY “GOCE DELCEV” SHIP
FACULTY OF EDUCATIONAL SCIENCES



**ОБРАЗОВАНИЕТО ВО XXI ВЕК
– СОСТОЈБИ И ПЕРСПЕКТИВИ –**

**МЕЃУНАРОДНА
НАУЧНА КОНФЕРЕНЦИЈА
Штип, 24 – 25 Септември, 2015**

– ЗБОРНИК НА ТРУДОВИ –

**EDUCATION IN XXI CENTURY
– CONDITIONS AND PERSPECTIVES –**

**INTERNATIONAL SCIENTIFIC
CONFERENCE
Shtip, September, 24-25, 2015**

– PROCEEDING BOOK –

Штип, 2016

Издавач / Publisher

Универзитет „Гоце Делчев“ Штип University "Goce Delcev" - Stip
Факултет за образовни науки Faculty of Educational Science

За издавачот / For publisher

Проф.д-р Соња Петровска, декан / PhD Sonja Petrovska, Dean

Издавачки совет / Publishing council

проф. д-р Блажо Боев Prof. Blazo Boev, PhD
проф. д-р Лилјана Колева Гудева Prof. Liljana Koleva Gudeva, PhD
проф. д-р Кирил Барбареев Prof. Kiril Barbareev, PhD
проф. д-р Дејан Миравовски Prof. Dejan Mirakovski, PhD

Главен и одговорен уредник / Editor in chief

Проф.д-р Соња Петровска PhD Sonja Petrovska

Технички уредник / Technical Editing:

Доц. д-р Верица Јосимовска Ass. Prof. Verica Josimovska, PhD
Доц. д-р Билјана Попеска Ass. Prof. Biljana Popeska, PhD
Доц. д-р Деспина Сивевска Ass.Prof. Despina Sivevska, PhD
Славе Димитров Slave Dimitrov

Јазично уредување / Language Editor:

Виолета Карагунова / Violeta Karagunova (Macedonian language)
Снежана Кирова / Snezana Kirova (English language)

Дизајн / Design:

Славе Димитров

CIP - Каталогизација во публикација
Национална и универзитетска библиотека "Св. Климент Охридски", Скопје

37"20"(082)(048.3)

МЕЃУНАРОДНА научна конференција (2015 ; Штип)

Образованието во XXI век [Електронски извор] : состојби и
перспективи : книга на апстракти / Меѓународна научна конференција,
Штип, 24-25 септември, 2015 = Education in XXI century : conditions
and perspectives : book of abstracts / International scientific
conference, Shtip, September, 24-25, 2015. - Текст во PDF формат,
содржи 100 стр.. - Штип : Универзитет "Гоце Делчев", Факултет за
образовни науки = Shtip = University "Goce Delcev" Shtip, Faculty of
educational sciences, 2015

Начин на пристап (URL): <https://e-lib.uqd.edu.mk/naslovna.php>. -

Наслов преземен од екранот. - Опис на изворот на ден 29.12.2015. -
Фусноти кон текстот

ISBN 978-608-244-275-4

1. Насп. ств. насл.. - I. International scientific conference
(2015 ; Shtip) види Меѓународна научна конференција (2015 ; Штип)

а) Образование - 21 в. - Зборници - Апстракти

COBISS.MK-ID 100254474

Organizers:

University "Goce Delcev" - Stip
Faculty of Educational Sciences
Republic of Macedonia

Organizing Committee:

Sonja Petrovska, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Todor Cepreganov, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Nikola Smilkov, Art Academy, University Goce Delcev Stip, Republic of Macedonia

Kiril Barbareev, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Despina Siveska, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Biljana Popeska, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Traje Stojanov, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Irena Kitanova, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Oliver Cackov, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Jadranka Runceva, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Verica Josimovska, Faculty of Educational Sciences, University "Goce Delcev" in Stip, Republic of Macedonia

Editorial board:

Ph.D Leonid F. Chuprov, Russian Academy of Natural History (RANH, Moscow), Chernogorsk, Russia

PhD Mark R. Ginsberg, College of Education and Human Development at George Mason University, Fairfax, Virginia, USA

Ph.D Ivan Prskalo, Faculty of Teacher Education, University of Zagreb, Croatia

PhD Milan Matijević, Faculty of Teacher Education, University of Zagreb, Croatia

Ph.D Sinisa Opic, University of Zagreb, Croatia

Ph.D Tamara Gazdic-Aleric, Faculty of Teacher Education, University of Zagreb, Croatia

PhD Zaharnytska Iryna Ivanivna, Institute of the Child Development, National Pedagogical Dragomanov University, Kiev, Ukraine

PhD, Lutsenko Iryna Oleksiivna, Department of Children's Creativity, Institute of the Child Development, National Pedagogical Dragomanov University, Kiev, Ukraine

PhD Sukhorukova Halyna Viktorivna, Department of Children's Creativity, Institute of the Child Development, National Pedagogical Dragomanov University, Kiev, Ukraine

- PhD Kot Nataliia Mykhailivna**, Department of Theory and History of Preschool Pedagogy, Institute of the Child Development, National Pedagogical Dragomanov University, Kiev, Ukraine
- PhD Anna Studenska**, Faculty of Ethnology and Educational Science, University of Silesia, Poland
- Phd Alina Szczurek-Boruta**, Faculty of Ethnology and Educational Science, University of Silesia, Poland
- PhD Stojan Bogdanovic**, University of Nis, Serbia
- PhD Stojan Cenikj**, Teaching Faculty, Vranje, University of Nis, Serbia
- PhD Stana Smiljkovikj**, Teaching Faculty, Vranje, University of Nis, Serbia
- PhD Emina Hebib**, Faculty of philosophy, Belgrade, Serbia
- PhD Živorad Milenovic**, Teaching Faculty, Ieposavic, University of Kosovska Mitrovica, Serbia
- PhD Prof. Iliana Petkova**, Faculty of Education, Sofia University "St. Kliment Ohridski", Sofia, Bulgaria
- PhD Trayan Popkochev**, Sout-West University "Neofit Rilski" Blagoevgrad, Bulgaria
- PhD Krasimira Mutavchieva**, Trakiski Univerzitet, Faculty of Pedagogy, Stara Zagora, Bulgaria
- PhD Eleonora Mileva**, Teaching Faculty, National Sports Academy "Vasil Levski", Sofia, Bulgaria
- PhD Anzhelina Yaneva**, Sports Department, Sofia University "St. Kliment Ohridski", Sofia, Bulgaria
- PhD Veselina Ivanova**, Faculty of Education, Trakia University, Stara Zagora, Bulgaria
- PhD Elka Kirilova Yanakieva**, Faculty of pedagogy, Southwest University of Neophyte Rilski, Blagoevgrad, Bulgaria
- PhD Margarita Koleva**, Faculty of pedagogy, Southwest University of Neophyte Rilski, Blagoevgrad, Bulgaria
- PhD Nino Mihajlov**, Faculty of pedagogy, Southwest University of Neophyte Rilski, Blagoevgrad, Bulgaria
- PhD Tatjana Novovic**, Faculty of Philosophy, University of Niksic, Montenegro.
- PhD Sonja Petrovska**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Emilija Petrova Gorgeva**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Snezana Mirascieva**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Snezana Stavreva Veselinovska**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Stevan Aleksoski**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Blaze Kitanov**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Nikola Smilkov**, Art Academy, University Goce Delcev Stip, Macedonia
- PhD Todor Cepreganov**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Snezana Jovanova Mitkovska**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Kiril Barbareev**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Despina Sivevska** Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Biljana Popeska**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Trajce Stojanov**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Trajce Nacev**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- PhD Stojko Stojkov**, Faculty of Educational Sciences, University Goce Delcev Stip, Macedonia
- MSc Snezana Kirova**, Faculty of Philology, University Goce Delcev Stip, Macedonia
- MSc Lence Nasev**, Academy of Music, University Goce Delcev Stip, Macedonia

LADIES AND GENTLEMEN, DEAR GUESTS!

With great honor and pleasure I welcome You on behalf of all teachers, associates, employees and students of the Faculty of Educational Sciences at the University "Gotse Delchev" in Shtip and I wish You pleasant moments during this solemn event organized to mark 20 years of university education of teachers.

But in fact, the Faculty of Educational Sciences basis its twenty years of existence on 146 year continuous development of formal education of teachers and preschool teachers in the region. The achievements of the Pedagogical-Seminary school founded in 1869, the existence of which is linked to the name of the creator of the first primer and the first textbook for teachers - School Pedagogy - Josif Kovachev, and to the name of the great teacher Gotse Delchev, followed by the School for Teachers established in 1946, Higher Pedagogical School founded in 1959, and the Pedagogical Academy (1961) are woven into the tradition and development of our Faculty.



In 1995 the two-year formal education of teachers and preschool teachers developed into four-year university studies.

In 2007 the Pedagogical Faculty became part of the State University "Goce Delchev" in Shtip, said to be the fastest growing university in Macedonia.

Following the global trends in teacher education, modern trends in education policymaking in Europe and in the world, respecting the knowledge of the history of civilizations as an important intellectual resource for social development, as well as scientifically and experientially diagnosed educational challenges that have emerged as a result of deep changes of values in our society and globalization trends (scientific, educational, technological, and economic) the Faculty of Educational Sciences has designed study programs for I, II and III cycle of studies in accordance with the organizational - pedagogical quality standards in compliance with the principles of the Bologna Declaration and European credit-transfer system with a high level of recognition in the area of European Higher Education.

If 20 years ago our Faculty started to implement teaching with 5 PhDs and 3 masters as regular employees, today we can proudly say that our academic community is comprised of 20 PhDs and one master.

Today our students have the opportunity to educate themselves at the faculty which sees its future as a continuous development aimed at:

- Strengthening and expanding international partnerships
- Popularization of mobility of students and staff,
- Internationalization and improvement of scientific research work,
- Improvement of pedagogical approaches to teaching and links with practice, putting students at the center of the educational process.

Ladies and Gentlemen,

I take this opportunity to thank you for coming today to celebrate with us the teaching profession and our contribution to it.

We are quite aware that the road to success is long and winding and it is easier to travel with joint forces. That is why we wanted to mark this celebration by organizing a scientific conference dedicated to education in the 21st century. Let us share our knowledge, understanding and experiences regarding the situation and perspectives and suggest possible ways of modernization. 89 papers have been submitted and there are authors from 8 countries. This is really promising!

Once again, I wish you all a warm welcome and successful work.

Dean,
Prof. d-r Sonja Petrovska
24. 09. 2015., Stip

ПОЧИТУВАНИ ...

Со голема чест и задоволство, Ве поздравам во името на сите наставници, соработници, вработени и студенти на Факултетот за образовни науки при Универзитетот Гоце Делчев во Штип и Ви посакувам пријатни моменти во текот на оваа свечена манифестација организирана по повод 20 годишно факултетско образование на наставници и воспитувачи.

Факултетот за образовни науки своето постоење го темели на 146 годишниот континуиран развој на формалното образование на наставници и воспитувачи на овие простори. Во традицијата и развојот на нашиот факултет се вткаени достигнувањата на Педагошко-богословското училиште основано во 1869 год. Со чие постоење се врзува името на творецот на првиот буквар и првиот учебник за наставници – Школска педагогија – Јосиф Ковачев, и името на големиот учител Гоце Делчев, па Учителската школа основана во 1946 год, Вишата педагошка школа формирана во 1959 год, Педагошката академија (1961 год.).

Во 1995 година формалното двегодишно образование на наставници и воспитувачи прераснува во четиригодишно факултетско образование.

Во 2007 година Педагошкиот факултет стана дел на државниот Универзитет „Гоце Делчев“ во Штип, кој го носи епитетот најбрзорастечки Универзитет во Р Македонија.

Следејќи ги глобалните тенденции во образованието на наставници, современите тенденции во креирањето на образовните политики во Европа и во Светот, респектирајќи ги знаењата за историјата на цивилизациите како значаен интелектуален ресурс за општествениот развој, како и научно и искусствено дијагностицираните воспитни предизвици кои се појавија како резултат на длабоките вредносни промени во нашето општество и глобализациските тенденции (научни, образовни, техничко-технолошки, економски) ФОН дизајнираше студиски програми за I, II и III циклус на студии согласно организациско –

педагошки стандарди за квалитет, согласно принципите на Болоњската декларација и Европскиот кредит-трансфер систем, со високо ниво на препознатливост во Европскиот високообразовен простор.

Ако пред 20 години нашиот факултет започна да ја реализира наставата и вежбите со 5 доктори на науки и 3 магистри, како редовно вработени, денес со гордост можеме да кажеме дека оваа академска заедница ја сочинуваат 20 доктори на науки и 1 магистер.

Денес нашите студенти имаат можност да се образуваат на факултет кој својата иднина ја гледа како континуиран развој во насока на:

- зајакнување и проширување на меѓународните партнерства,
- омасовување на мобилноста на студентите и на вработените,
- интернационализација и подобрување на научно-истражувачката работа,
- унапредување на педагошките пристапи во наставата и врските со практиката, поставувајќи ги студентите во центарот на образовниот процес.

Почитувани присутни,

Ја користам оваа прилика, да ви се заблагодарам што дојдовте денес заеднички да го чествуваме учителското дело и нашиот придонес во него.

Ние сме сосема свесни дека патот до успехот е долг и кривулест но и дека полесно се патува со заеднички сили. Затоа ова наше празнување сакавме да го одбележиме со Научна конференција посветена на образованието во 21 век, да ги споделиме нашите знаења, разбирања и искуства во врска со состојбите и перспективите како и да предложиме можни начини за негово осовременување.

Уште еднаш, На сите Ви посакувам топло добредојде и успешна работа!

Декан,

Проф. д-р Соња Петровска

24. 09. 2015. година Штип

TABLE OF CONTENTS

1. СО КВАЛИТЕТНИ ПРОМЕНИ ДО ПОКВАЛИТЕТНО УЧИЛИШТЕ Блаже КИТАНОВ	5
2. LANGUAGE CULTURE – A SEGMENT OF LANGUAGE EDUCATION Violeta NIKOLOVSKA	9
3. RESEARCH TRENDS IN EDUCATION IN MULTICULTURAL ENVIRONMENTS IN THE REPUBLIC OF MACEDONIA Elizabeta TOMEVSKA-ILIEVSKA, Emilija SIMONOVSKA JANACKOVSKA, Sadudin SADIKI	15
4. USING AUTOMATIC TEXT CATEGORIZATION TECHNOLOGIES IN THE MODERN EDUCATIONAL PROCESS Anna GLAZKOVA	23
5. THE ROLE OF BUSINESS SCHOOL IN THE POST-GRADUATE EDUCATIONAL SYSTEM Nikita RAVOCHKIN	27
6. FORMATION OF ETHICAL RULES (CODE) IN PRESCHOOLERS THROUGH THE BULGARIAN CHILDREN'S FOLKLORE GAMES Julia DONCHEVA	32
7. FORMATION OF HUMAN POTENTIAL: INSTITUTIONAL MECHANISMS AND POLICIES Stanka RINKOVA	36
8. THEORETICAL FORMULATION AND SCIENTIFIC JUSTIFICATION OF THE PROBLEM OF TRAINING TEACHERS IN TECHNICS, TECHNOLOGY AND ENTREPRENEURSHIP Tsvetana KOSTADINOVA ANTIPESHEVA	41
9. INTERACTIVITY IN TEACHING STUDENTS MODERATORS Kosta KOSTOV, Silvia KYUCHUKOVA, Hristina MILCHEVA	45
10. EVALUATION OF STUDENTS' LEARNING UNDER THE PRISM OF EXPECTED OUTCOMES Teuta SHABANI, Suzana NIKODINOVSKA BANCOTOVSKA	49
11. COMMUNICATION IN THE TEACHING PROCESS. INTERACTIVE NATURE OF COMMUNICATION Valentina VASILEVA	57
12. PHYSICAL ACTIVITY OF 3-4 YEARS OLD CHILDREN IN KINDERGARTEN Filip SHABANSKI	60
13. MACEDONIAN LANGUAGE IN SECONDARY EDUCATION Liljana MAKARIJOVSKA, Zhaklina GJORGIJOSKA	64
14. STUDENTS' ATTITUDES TOWARDS TEACHING GRAMMAR IN THE FOREIGN LANGUAGE CLASSROOM Vesna KOCEVA, Marija TODOROVA	69
15. FOREIGN LANGUAGE CLASSROOM ANXIETY Marija TODOROVA, Vesna KOCEVA	75
16. TEACHERS AS A FACTOR FOR THE DEVELOPMENT OF KEY COMPETENCE CULTURAL EXPRESSION AMONG STUDENTS Svetlana PANDILOSKA GRNCHAROVSKA, Fadbi OSMANI, Gordana STANKOVSKA	82
17. INTRODUCTION OF THE DUAL SYSTEM IN THE BULGARIAN VOCATIONAL EDUCATION – REALITY AND CHALLENGES Svetlana NIKOLAEVA	86

18. THE VALUES OF EDUCATIVE FUNCTION IN RELATION PARENT-SCHOOL Ardita CEKA, Rabije MURATI	89
19. ELECTRONIC VERSUS TRADITIONAL TEST FOR MATHEMATICS IN PRIMARY SCHOOLS Katerina PANEVA	93
20. THE SIGNIFICANCE OF LOCALLY DEVELOPED EDUCATIONAL SOFTWARE IN THE PROCESS OF SCHOOLS' COMPUTERIZATION Olga SAMARDJIKJ JANKOVA	99
21. THE ACTIVITY OF MUSICAL GAMES FOR CHILDREN Mujeser ILJAZI	105
22. THE PATIENT IN THE PROCESS OF LEARNING IN HIGHER MEDICAL SCHOOL Silvia KYUCHUKOVA	110
23. INFORMATION AND COMMUNICATION TECHNOLOGIES IN TEACHING MUSIC EDUCATION Lence NASEV	113
24. LEISURE TIME AND SPORT ACTIVITIES OF STUDENTS FROM THE FACULTY FOR PRESCHOOL AND PRIMARY SCHOOL EDUCATION AT SOFIA UNIVERSITY "ST. KLIMENT OHRIDSKI" – BULGARIA Georgi IGNATOV	116
25. PLACE OF LIVING AS A FACTOR IN ORGANIZING STUDENTS' LEISURE TIME Despina SIVEVSKA, Biljana POPESKA	122
26. METHODOICAL APPROACH TO LEARNING ABOUT THE HOLOCAUST BY THE MODEL OF YAD VASHEM SCHOOL Zhivorad MILENKOVIC	129
27. A HERMENEUTIC READING OF A POETIC LITERARY WORK DURING IMPLEMENTATION OF A LESSON Milena RISTOVA-MIHAJLOVSKA	136
28. SOME GUIDELINES FOR INTELLECTUAL PREPARATION DURING PHYSICAL CONTACT BETWEEN THE INSTRUMENT AND THE PIANIST Angele MIHAJLOVSKI	142
29. IMPLICATION OF EFFECTIVE SCHOOL MANAGEMENT FOR THE CONTINUING PROFESSIONAL DEVELOPMENT OF TEACHERS Kristinka OVESNI, Emina HEBIB, Vera RADOVIĆ	148
30. THEORIES, SOCIAL EXPERIENCES AND PRACTICE IN INTERCULTURAL PEDAGODY Alina SZCZUREK-BORUTA	157
31. TEACHERS' ASSESSMENTS OF CERTAIN CURRICULAR DETERMINANTS IN PRIMARY SCHOOL Milan MATIJEVIĆ, Siniša OPIĆ, Goran LAPAT	162
32. THE SOCIO-POLITICAL IMPACT OF THE NEW SCIENTIFIC AND EDUCATIONAL TRENDS IN ARCHAEOLOGY, HISTORY AND RELATED FIELDS Ljuben TEVDOVSKI	172
33. THE PRACTICE OF TAEKWONDO AS A PREDICTOR OF MOTOR ABILITIES Ivan PRSKALO, Anamaria RADIĆ	178
34. THE RELATION MOTIVE - TEACHING CONTENT IN STIMULATING COGNITIVE ABILITIES THROUGH ARTISTIC ACTIVITIES AT PRESCHOOL AGE Maja RAUNIK KIRKOV	182
35. CONTEMPORARY ADULT LITERACY MODELS Elena RIZOVA, Zoran VELKOVSKI	188

36. COMPARATIVE ANALYSIS OF PROGRAMS FOR PRE-SCHOOL EDUCATORS IN EUROPE Kiril BARBAREEV, Alma TASEVSKA	196
37. INCLUSIVE EDUCATION - ROLE OF THE TEACHER AND BENEFITS Sonja PETROVSKA	203
38. THEORETICAL APPROACHES TO MODERN INTERPRETATION OF PEDAGOGY OF PHYSICAL EDUCATION AND SPORTS Eleonora MILEVA	210
39. POSTMODERN CONCEPTS OF FOUCAULT'S EDUCATION AND ITS RELATIONSHIP WITH DISCIPLINE Kushtrim AHMETI	215
40. ECOLOGY – A NECESSARY FACTOR IN TEACHING METHODS FOR NATURE AND SOCIETY STUDIES FOR FORMING A RESPONSIBLE PERSON Oliver CACKOV, Tatjana GREGOVA	219
41. THE ISSUE OF RESPECTING THE DEVELOPMENTAL POSSIBILITIES AND ACTIVITY-PLANNING IN EARLY CHILDHOOD DEVELOPMENT Alma TASEVSKA, Kiril BARBAREEV	223
42. INTEGRATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES INTO PRESCHOOL EDUCATION Tatyana V. NIKULINA	228
43. WHAT SHOULD MODERN SCHOOL LEARN Snezana KIROVA, Dragana KUZMANOVSKA, Biljana IVANOVA	233
44. EDUCATIONAL FUNCTION OF THE SCHOOL IN CONTEMPORARY SOCIETY Emilija PETROVA GORGEVA, Mitko KOCEV	238
45. SOME METHODS IN TEACHING PHYSICAL AND HEALTH EDUCATION Marjan MALCEV	243
46. REVIEW OF ADOLESCENT LITERATURE THROUGH COMPARATIVE ANALYSIS OF THE NOVELS "THE BLUE PATH OF LOVE" BY METODI MANEV AND "VOICE OF LOVE" FROM GROZDANA OLUJIC Jovanka DENKOVA	247
47. INTERPRETATION OF A LYRIC POEM IN IV AND V GRADE Blaze KITANOV, Irena KITANOVA	253
48. TRAINING EFFICIENCY OF CYCLISTS SPECIALIZED IN ROAD CYCLING Ivan KOLEV	258
49. PHYSICAL EDUCATION AND DIAGNOSTIC PROCEDURES Veselina IVANOVA, Galena TERZIEVA	262
50. PROTECTION OF IMMOVABLE CULTURAL HERITAGE THROUGH EDUCATING STUDENTS OF PRIMARY AND SECONDARY EDUCATION Trajce NACEV, Dragan VESELINOV	265
51. FORMATION OF TOLERANCE IN ADOLESCENTS Valentina VASILEVA	271
52. NEW EDUCATIONAL POLICIES AND THEIR REFLECTIONS ON SOCIAL DEVELOPMENTS Daniela KOCEVA, Snezana MIRASCIEVA	275
53. PRESENCE OF ENTREPRENEURSHIP IN PRIMARY EDUCATION IN MACEDONIA Lulzim MEHMETI	280
54. CONSONANT /J/ IN COLLOQUIAL SPEECH AND ITS IMPACT ON WRITING Blaga PANEVA	284
55. METHODOLOGICAL STRUCTURE OF A LESSON FOR INTERPRETATION OF A FAIRY TALE Irena KITANOVA	289

56. THE INFLUENCE AND THE EFFECTIVENESS OF FORMATIVE ASSESSMENT AND THE FEEDBACK IN STUDENTS' SUCCESS AND ACHIEVEMENTS Valdeta ZENUNI-IDRIZI	294
57. AESTHETIC EDUCATION OF EDUCATORS AS A FUTURE CHALLENGE Valentina PAJAZITI, Vlora MARKU-TUQI	299
58. SOCIAL AND COMMUNICATIONAL-INTERACTIVE COMPETENCES OF TEACHERS AND STUDENTS IN EDUCATION Florina SHEHU	302
59. INFLUENCE OF MEDICINES ON THE COGNITIVE SKILLS OF CHILDREN WITH CHRONIC DISEASES Elena IVANOVA BUYUKLIEVA	308
60. THE SPIRITUAL ASPECT OF HUMAN DEVELOPMENT AND THE EDUCATION IN XXI CENTURY Eleonora PENCHEVA	312
61. RESEARCH IN TEACHING PRACTICE Snezana JOVANOVA-MITKOVSKA	316
62. HOW ARE PEACE AND TOLERANCE REPRESENTED IN HISTORY TEXTBOOKS FOR PRIMARY AND SECONDARY EDUCATION Todor CEPREGANOV, Sonja NIKOLOVA	324
63. ETHICS AS TEACHING Trajce STOJANOV	330
64. RISK ASSESSMENT OF HYGIENIC AIR QUALITY UPON PRESCHOOL CHILDREN'S HEALTH IN KINDERGARTEN "VERA CIRIVIRI TRENA" IN SHTIP Snezana STAVREVA VESELINOVSKA	335
65. ABOUT SOME EDUCATIONAL GOALS IN TEACHING-SOCIO-CULTURAL PROBLEM OR A CHALLENGE MODERN EDUCATION Snezana MIRASCHIEVA, Emilija Petrova GJORGJEVA, Daniela KOCEVA	339
66. ESCAPE FROM THE WAR –TIME IN THE UNCERTAINTIES OF LIFE TO REFUGEE IN BULGARIA. FUNDAMENTAL RIGHTS OF PERSONS SEEKING INTERNATIONAL PROTEKTION IN TERMS OF THE BUREAUCRATIC SYSTEM IN BULGARIA Pavlin PETROV	344
67. HIGHER EDUCATION IN THE PERIOD OF TRANSITION Verica JOSIMOVSKA	353
68. RESEARCH OF THE CONFLICT ZONES IN THE SYSTEM OF INTERPERSONAL RELATIONSHIPS OF THE CHILD BY THE METHODOLOGY OF RENE GILLE Julia DONCHEVA	356
69. CLASSROOM SOCIAL CLIMATE Despina SIVEVSKA	360
70. COMPATIBILITY OF PRESCHOOL AND PRIMARY SCHOOLA IN R. MACEDONIA Snezana JOVANOVA-MITKOVSKA, Biljana POPESKA	366
71. THE IMPORTANCE OF THE CAREER CONSELING PROCESS Tanja ATANASOSKA, Biljana CVETKOVA DIMOV, Ana GJORGJEVA	376
72. ROLE OF MANAGEMENT IN IMPLEMENTING EDUCATION INCLUSIVE POLICIES Sadete TERNAVA-OSMANI, Voglushe KURTESHI	380
73. WHICH FACTORS ACCORDING TO THE PARENTS AFFECT THE EDUCATION OF CHILDREN Voglushe KURTESHI	385

74. THE PHILOSOPHICAL PARADIGM OF SIGMUND FREUD Slobodan MARKOVIC	370
75. EDUCATIONAL NEEDS AND ACHIEVEMENTS OF ROMA CHILDREN AND OTHER CHILDREN FROM MARGINAL ETHNIC GROUP IN RM Stevan ALEKSOVSKI	377
76. COMMUNICATIVE-PEDAGOGICAL FEATURES OF COMMUNICATION IN THE EDUCATIONAL PROCESS-COMMUNICATIVE COMPETENCE Biljana GRAMATKOVSKI, Jasminka KOCHOSKA	387

TEACHERS' ASSESSMENTS OF CERTAIN CURRICULAR DETERMINANTS IN PRIMARY SCHOOL

Milan MATIJEVIĆ¹
Siniša OPIĆ
Goran LAPAT

Abstract

There is a clear prevalence of equipment and spatial arrangements for traditional teaching from the front of the class in Croatian classrooms. During such instruction, pupils mostly sit, listen and watch. Further, it is evident that primary school classrooms feature several elements pointing to the use of constructivist didactics, and include attempts at adjusting the space and equipment to the developmental needs of pupils in middle childhood. A research team called "School and Classes for the Net Generation" organised several examinations of the assessments of curricular determinants in Croatian primary and secondary schools.

The aim of this study is to examine the assessments of changes that happen in school and in classes (or those that could happen) under the influence of new didactic understandings and digital education technology. A specifically constructed questionnaire was used on a sample of primary education male and female teachers (N=214), which is representative for Central Croatia, since the data were collected through individual surveys in schools located in the City of Zagreb and in eight counties. The questionnaire contained 50 statements that the respondents had to assess on a Likert-type scale. In this paper, we shall present only part of the results relating to the pedagogical and curricular characteristics of the teaching methods and didactics of primary education. Differences in assessments were tested in terms of the working experience of primary education teachers.

Primary education teachers recognise the characteristics of constructivist didactics and modern developments in the theory of education and the theory of school quite well. Most agree that it is important to organise classes in which the pupils are more active than the teacher, and that any curriculum is regarded as implemented if pupils are actually active. Most respondents hold that classic textbooks will soon be replaced by modern digital multimedia sources of knowledge. Teachers agree that all pupils should be provided with an opportunity to exercise their abilities in the best possible way, bearing in mind that everyone has different talents.

Keywords: *digital media, curriculum, net generation, primary education, primary education teachers*

1. Introduction and theoretical starting points

Each year, pupils in Croatian compulsory education spend 175 days at school, and another 190 days are free of school². This means that digital media and informal learning play an important role in the raising and development of the net generation. Informal learning provides great competition to school learning. Consequently, the question increasingly arises about who or what has the greatest effect on the learning and development of the net generation?

More and more families in Croatia have three or four members, and divorce is increasing, so that the number of children growing up with one parent is also on the rise. In view of the given facts and the IT revolution of the past thirty years, learning and development today deserve serious attention from scientists and experts in education. Unfortunately, didactic scenarios in school today are more reminiscent of the past than a learning environment appropriate for the net generation. Classes are dominated by teaching from the

¹ Faculty of Teacher Education, University of Zagreb, Croatia, milan.matijevic@ufzg.hr

² This paper is a part of the results of a research project: SCHOOL FOR NET-GENERATION: INTERNAL REFORM OF PRIMARY AND SECONDARY SCHOOL EDUCATION, financed by Croatian Science Foundation (2015-2017).

front, which is organised in classrooms that have the same architectural characteristics and layout as those that existed over a hundred or more years ago. Despite the findings of constructivist, curricular and multimedia didactics and neuroscience, schools still function on the basis of didactics that have long been the subject of scientific criticism (Hermann, 2009; Kerres, 2013; Reich, 2006; Reece & Walker, 2011).

Teachers are facing tough challenges in the selection of methodical scenarios that could and should satisfy the development needs of the net generation in compulsory education. There are many books on these issues, but they do not always provide clear-cut answers. Studies conducted also frequently open up new questions, but they do not offer specific answers to those already raised.

There has always been great interest in the USA concerning the quality of classes in compulsory education, in particular relating to the teaching of mathematics and the natural sciences. The most quoted work relating to the problem is most certainly Jerome Bruner's *The Process of Education* (1959), which is the starting point for discussions on science education in American compulsory education. The book has been translated into many languages and has been one of the most quoted pedagogical works in the past half a century. Interest in teaching the natural sciences in compulsory education is not declining even today. A study entitled *High Hopes — Few Opportunities: The Status of Elementary Science Education in California* includes the results of research on high-quality elementary education which should introduce pupils to the world of science (Dorph, Shields, Tiffany-Morales, Harry, McCaffrey, 2011: 11). It reports that there is a great amount of studying from textbooks (48%), a lot of group work (65%), and sufficient hands-on work. There is little own research (as claimed by around 60% of respondents) and too sparse field work (around 80%). The results of initial public opinion research on science education in schools in California show that high-quality science education should be a priority for state schools. In addition, the results show that there is a great gap between what is said about the importance of science education and the ability of teachers and schools to actually provide high-quality science education to pupils.

Bruner (1999) warned that, apart from the question WHAT to learn, the question HOW to learn was also very important, i.e., the importance of learning and teaching strategies. He emphasises the advantages of learning by discovery in natural science education (Bruner, 1999). Experts in education in many states are interested in studying teaching and learning strategies (see, e.g., Çalişkan & Sünbül, 2011; Bishop, Caston & King, 2014; Robitaille & Maldonado, 2015). Çalişkan & Sünbül (2011) studied the effects of learning strategies on the quality of metacognitive knowledge and metacognitive skills, and achievements on a sample of primary school pupils. Their experiment showed that it is possible to successfully develop learning strategies important for the acquisition of metacognitive skills. Bishop, Caston & King (2014) deal with the issue of relationships within the educational environment, in particular, in classrooms for learner-centred instruction (learner-centred environments), and the development of strategies that can affect the expected learning outcomes in such an environment, specifically those relating to opinions and standpoints. In their study, they examine the functionality of the theory previously published by Terry Doyle (2008). Robitaille & Maldonado (2015) examined how pupils and teachers perceive the teaching environment, especially the connection between the organised educational environment and the possibility of organising discussion. An organised and encouraging educational environment has a significant impact on the quality of teaching and teacher-led discussions that should encourage pupils to use critical thinking. Gary Thomas, professor of pedagogy at the University of Birmingham (Thomas, 2015), has very many well-founded questions and doubts in relation to the curricular theories and teaching practices in the schools of the USA and the United Kingdom.

The topics and research issues mentioned above are equally relevant in Croatian schools. They will be specifically elaborated below.

2. Certain characteristics of today's compulsory education in Croatia

Advocates of constructivist didactics emphasise the need to change the relationship and the roles of the main actors in the teaching process: the pupil and the teacher (Reich, 2006; Terchart, 2003). What the pupils do and how they work in this process are important for learning outcomes. Listening and watching are not activities that can result in the expected outcomes of education. Adherents of constructivist didactics point out that schools should be more about learning, and less about teaching. This would include pupils' activities where they use their head, heart and hands (and not only their head!). However, school curricula in Croatian compulsory education are very much geared towards head learning, while hands-on learning has been marginalised for years.

Teachers at all education levels often say, "I must carry out the programme all the way through!" If we ask them what exactly they mean, we usually receive the response which implies the obligation to talk pupils through certain topics and to give something as an illustration (usually a film, drawing, photograph, object) to complement their talk. With this type of implementation, pupils will obviously watch, listen, take notes, draw..., which are all quite monotonous activities, yielding modest profit, in particular in terms of the self-actualisation of the pupil. Such activities in general do not satisfy the developmental needs of children and adolescents. Developmental needs that can contribute to the best possible self-actualisation of every child (and adult) are movement, conversation, research, creativity, building activities, and the resolving of actual or simulated problems, etc.

A great deal of time passes in school without any opportunity for the clear specification of the benefits of the outcomes of education foreseen in the curricula. Based on interviews with pupils and parents, we often hear how too much time is spent in school on unnecessary content or information, and that there is too much wasted time in school.

Teachers and pedagogues agree that there is no absolutely untalented child. Further, everyone agrees that all children can and love to learn. Children, however, do not like to be forced to learn through inappropriate methods, and they also do not like to participate in activities where they are exposed to unpleasant emotions. Such unpleasant emotions are often the result of competition where individuals achieve poor results. In Croatian schools, there appears to be too much competition. There are constant proclamations of the best pupil, the fastest pupil (in various fields and activities), the selection of the best singer, the best painter, etc. Most didactic games are also competitive, and not collaborative! There are few situations in adult life where competition and the everyday testing of one's abilities are advocated to the same extent as in school. More and more experts caution against the harmful consequences of too frequent and excessive testing, examination, and ranking of pupils (Gatto, 2009; Liessmann, 2006). Despite the awareness that every pupil is an individual who deserves special treatment in school and in any teaching situation, most school events are planned for the non-existent average pupil.

In primary education in Croatia, teachers grade pupils on a five-point scale (1-5); however, a high percentage of teachers use only grades 3, 4 and 5, and therefore they use only a three-point scale. Primary education teachers teach six subjects in the curriculum of primary education. Foreign languages and religious education are taught by subject teachers. In Croatia, it is still popular to present the final success of a pupil at the end of each school year in the form of an average grade obtained by calculating the arithmetic mean of all the numerical grades received for particular subjects. Of course, in view of the reliance on a three-point scale, such an average grade is between 4 and 5 for most pupils, so the point of such statistical indicators is often questioned. Still, in view of its long tradition, it can hardly be expected that teachers and parents will agree to abandon such grading practice.

In the study of teachers' attitudes towards change in school, respondents always have ideas of what should change, but the changes occur slowly, because most people do not like and do not want change.

In Croatian schools, the amount of pupils' aggressive behaviour and of disagreements between parents and teachers is also on the rise. The vocational and professional autonomy of teachers is frequently brought into question, so that actions are presently underway by teachers' trade unions for laws to be passed to protect the teacher as an official person whose work place is the school. Teachers are dissatisfied with their social status, which is connected with their low monthly salary, and which they usually compare with other professions in the civil service where the same or a similar level of education is required.¹ We checked the above statements about the situation in Croatian schools on a representative sample of primary education teachers.

3. Empirical research

The aim of this study was to obtain a deeper insight into the pedagogical and curricular characteristics of primary education teaching methods and didactics based on teachers' assessments.

On the total sample of 214 primary education teachers, the authors examined teachers' assessments of the pedagogical and curricular characteristics of primary education teaching methods and didactics. The sample was representative for Central Croatia (around one third of the population) given that the respondents work in more than one hundred schools in this part of the county. Considering the size of the project, for the

¹ At the time of writing this text, the average monthly salary of teachers in Croatian schools was around EUR 800.

purpose of this study we used 25 variables relating to teachers' assessments of the said characteristics. The variables are ordinary/discreet with quantified characteristics: 1 – completely disagree; 2 – somewhat disagree; 3 – somewhat agree; 4 – completely agree. The main descriptive statistics are shown in Table 1.

Table 1 - descriptive statistics

variable	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Std. Error	Stat	Std. Error
1	1.0	4.0	2.803	.8208	-.514	.159	-.073	.317
5	1.0	4.0	2.877	.9707	-.483	.158	-.746	.316
7	1.0	4.0	2.948	.9900	-.568	.159	-.745	.318
8	1.0	4.0	3.199	.7370	-.784	.158	.639	.316
9	1.0	4.0	2.581	.9664	-.216	.158	-.907	.316
10	1.0	4.0	2.919	.7830	-.396	.159	-.180	.316
11	1.0	4.0	1.584	.9299	1.375	.159	.610	.318
12	1.0	4.0	2.545	.7743	-.234	.159	-.324	.316
13	1.0	4.0	2.352	.9585	.132	.159	-.931	.318
14	1.0	4.0	3.613	.5690	-1.295	.159	1.471	.316
15	1.0	4.0	3.141	.7066	-.649	.159	.650	.317
16	1.0	4.0	3.637	.7060	-2.156	.159	4.414	.317
18	1.0	4.0	2.685	.8491	-.403	.159	-.363	.316
20	1.0	4.0	2.540	.9436	-.194	.159	-.861	.316
21	1.0	4.0	3.055	.7798	-.588	.159	.076	.316
22	1.0	4.0	3.059	.7967	-.616	.158	.039	.316
26	1.0	4.0	3.186	.8037	-.748	.158	.011	.316
31	1.0	4.0	1.958	.9970	.553	.158	-.966	.316
36	1.0	4.0	2.292	.8375	.018	.158	-.698	.316
39	1.0	4.0	3.691	.6150	-2.276	.159	5.589	.318
41	1.0	4.0	2.847	.7235	-.374	.159	.137	.316
43	1.0	4.0	3.648	.5828	-1.703	.158	3.157	.316
44	1.0	4.0	1.872	.9315	.676	.159	-.659	.317
45	1.0	4.0	2.678	.8975	-.293	.159	-.629	.318
47	1.0	4.0	3.668	.6206	-2.231	.159	5.754	.316
49	1.0	4.0	2.979	1.0041	-.675	.159	-.626	.317

Legend – 1 – The curricula include too much content and activities that are worthless for subsequent education and life; 5 – Experts who claim that there should be more learning and less teaching in classes are right; 7 – Every pupil deserves treatment as a person with special needs; 8 –The curriculum is achieved to the extent that pupils are really active; 9 – Teachers should be able to have everyday communication with parents via email and text messages; 10 – Pupils spend too much intellectual power and abilities on a lot of worthless activities; 11 – If I had the opportunity, I would stop teaching; 12 – Test tasks mostly require pupils to know information and definitions that are worthless; 13 – Today's pupils like school where there is work and discipline; 14 – Classical textbooks will soon be replaced by modern digital multimedia sources of knowledge; 15 – Grading criteria should be materially changed; 16 – There is no absolutely untalented pupil; 18 – Pupils in schools today do not acquire knowledge relevant for life and subsequent education as was the case at the time we went to school; 20 – Interpersonal relations in school are undermined; 21 – Parents want their children to attend schools where there is work and discipline; 22 – Pupils today receive unnecessarily and pointlessly high grades, so that grades are no longer a usable indicator of how successful a pupil's learning process has been; 26 – We are often "victims" of bullying by the pupils' parents; 31 – Pupils today are used to receiving high grades without any effort; 36 – Textbooks are of more use to teachers for preparing lessons than to pupils for independent studying; 39 – Teachers (and professional assistants) are not sufficiently respected in society; 41 – Most teachers in my school are ready to adapt their teaching activities to the wishes and needs of the new generations of pupils; 43 – Teachers (and professional assistants) should receive additional training for work with pupils with special needs; 44 – I am annoyed by the constant demands to learn and change something in

my work; 45 – We are often “victims” of bullying by pupils; 47 – I readily co-operate with school colleagues in thinking out ways to conduct lessons; 49 – If I had a higher salary, I would be more motivated.

As is evident from Table 1, the variable v39 has the highest MCT (Mean=3.691; Mode=4), that is, *teachers’ social status*, in terms of the teachers’ problems mentioned, received the highest assessment of curricular characteristics. Teachers also single out as curricular characteristics that they *readily cooperate with school colleagues in thinking out ways to conduct classes* (Mean=3.668, Mode=4); that *teachers (and professional assistants) should receive additional training for work with pupils with special needs* (Mean=3.648, Mode=4); that *there is no absolutely untalented pupil* (Mean=3.637, Mode=4) and that *classical textbooks will soon be replaced by modern digital multimedia sources of knowledge* (Mean=3.613, Mode=4). However, our respondents love their profession (*if I had an opportunity, I would stop teaching* (Mean=1.584, Mode=1)), and are ready for change (*I am annoyed by constant demands to learn and change something in my work* (Mean=1.872, Mode=1)).

In terms of skewness, most variables have a left-skewed asymmetrical distribution, which is in line with the highest values of the arithmetic mean. In addition, variables vary from mildly platikurtic to highly leptokurtic (V16, V39, V47), which is in line with higher homogeneity (less dispersion).

In line with the aim of the study, we examined whether there are age differences, i.e., years of working experience in school, in the assessments of the variables of pedagogic and curricular characteristics of teaching methods and didactics in primary education. The distribution of the variable years of work is as follows: under 10 years (22%), 11-20 years (24.6%), 21-30 years (40.7%) and over 30 years (12.7%). In order to test subsamples on dependent variables, we used the robust Welch and Brown-Forsythe tests in parallel, because the normality of distribution was undermined and the homogeneity of variances (Leven test) on certain variables was not satisfied. The results of the robust Welch and Brown-Forsythe tests are shown in Table 2.

Table 2 - Robust Tests of Equality of Means

		Statistic ^a	df1	df2	Sig.
1	Welch	3.270*	3	100.420	.024
	Brown-Forsythe	2.650*	3	203.427	.050
5	Welch	0.385	3	97.533	.764
	Brown-Forsythe	0.343	3	174.296	.794
7	Welch	2.060	3	91.570	.111
	Brown-Forsythe	2.136	3	162.755	.098
8	Welch	1.668	3	94.936	.179
	Brown-Forsythe	1.781	3	163.353	.153
9	Welch	.952	3	96.204	.419
	Brown-Forsythe	.896	3	176.849	.444
10	Welch	1.829	3	100.765	.147
	Brown-Forsythe	1.609	3	198.219	.189
11	Welch	1.365	3	97.393	.258
	Brown-Forsythe	1.265	3	177.446	.288
12	Welch	.556	3	97.706	.646
	Brown-Forsythe	.511	3	177.063	.675
13	Welch	2.209	3	95.559	.092
	Brown-Forsythe	2.436	3	166.896	.067
14	Welch	1.201	3	93.819	.314
	Brown-Forsythe	1.191	3	162.522	.315
15	Welch	.740	3	92.148	.531
	Brown-Forsythe	.727	3	140.124	.537
16	Welch	3.438*	3	88.547	.020

	Brown-Forsythe	3.786*	3	111.545	.012
18	Welch	.589	3	96.907	.624
	Brown-Forsythe	.567	3	179.299	.637
20	Welch	1.277	3	97.493	.286
	Brown-Forsythe	1.316	3	175.261	.271
21	Welch	1.945	3	99.218	.127
	Brown-Forsythe	1.835	3	190.498	.142
22	Welch	.294	3	94.034	.830
	Brown-Forsythe	.263	3	137.989	.852
26	Welch	.372	3	96.404	.773
	Brown-Forsythe	.415	3	163.085	.743
31	Welch	3.233*	3	98.185	.026
	Brown-Forsythe	3.368*	3	184.312	.020
36	Welch	.396	3	94.514	.756
	Brown-Forsythe	.402	3	153.600	.752
39	Welch	.421	3	94.333	.738
	Brown-Forsythe	.427	3	153.547	.734
41	Welch	2.200	3	101.967	.093
	Brown-Forsythe	2.106	3	201.108	.101
43	Welch	.439	3	98.954	.725
	Brown-Forsythe	.438	3	191.153	.726
44	Welch	.716	3	91.605	.545
	Brown-Forsythe	.714	3	146.873	.545
45	Welch	1.989	3	97.963	.121
	Brown-Forsythe	2.033	3	181.933	.111
47	Welch	.227	3	98.611	.877
	Brown-Forsythe	.262	3	189.592	.853
49	Welch	.875	3	97.805	.457
	Brown-Forsythe	.833	3	175.090	.477

a. Asymptotically F distributed.

*p<0.05

As evident from Table 2, there is a statistically significant age/working difference (years of work) on the variables: **V1** (*The curricula include too much content and activities that are worthless for subsequent education and life*); **V16** (*There is no absolutely untalented pupil*) and **V31** (*Pupils today are used to receiving high grades without any effort*). In order to examine the direction of the differences, i.e., between which categories of years of work there is a statistically significant difference on the said dependent variables, we used the **POST HOC Games-Howell** test, which does not imply the homogeneity of variances. The results are shown in Table 3.

Table 3 - Multiple Comparisons

Games-Howell

Dependent Variable	(I) years of work	(J) years of work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
1	under 10 years	11-20 years	-.1757	.1530	.660	-.575	.224
		21-30 years	-.1549	.1445	.707	-.532	.222
		over 30 years	-.5033*	.1641	.016	-.935	-.071
	11-20 years	under 10 years	.1757	.1530	.660	-.224	.575
		21-30 years	.0209	.1364	.999	-.334	.376
		over 30 years	-.3276	.1570	.168	-.741	.086
	21-30 years	under 10 years	.1549	.1445	.707	-.222	.532
		11-20 years	-.0209	.1364	.999	-.376	.334
		over 30 years	-.3485	.1488	.099	-.741	.044
	over 30	under 10 years	.5033*	.1641	.016	.071	.935
		11-20 years	.3276	.1570	.168	-.086	.741
		21-30 years	.3485	.1488	.099	-.044	.741
16	under 10 years	11-20 years	-.0693	.1351	.956	-.422	.284
		21-30 years	-.2208	.1214	.272	-.539	.098
		over 30 years	.3020	.2023	.449	-.235	.839
	11-20 years	under 10 years	.0693	.1351	.956	-.284	.422
		21-30 years	-.1515	.1031	.459	-.421	.117
		over 30 years	.3713	.1919	.229	-.141	.884
	21-30 years	under 10 years	.2208	.1214	.272	-.098	.539
		11-20 years	.1515	.1031	.459	-.117	.421
		over 30 years	.5228*	.1825	.033	.032	1.014
	over 30 years	under 10 years	-.3020	.2023	.449	-.839	.235
		11-20 years	-.3713	.1919	.229	-.884	.141
		21-30 years	-.5228*	.1825	.033	-1.014	-.032
31	under 10 years	11-20 years	.0544	.1852	.991	-.429	.538
		21-30 years	.4527*	.1626	.031	.029	.877
		over 30 years	.2923	.2104	.511	-.264	.848
	11-20 years	under 10 years	-.0544	.1852	.991	-.538	.429
		21-30 years	.3983	.1703	.095	-.045	.842
		over 30 years	.2379	.2164	.691	-.333	.808
	21-30 years	under 10 years	-.4527*	.1626	.031	-.877	-.029
		11-20 years	-.3983	.1703	.095	-.842	.045
		over 30 years	-.1604	.1974	.848	-.684	.363
	over 30 years	under 10 years	-.2923	.2104	.511	-.848	.264
		11-20 years	-.2379	.2164	.691	-.808	.333
		21-30 years	.1604	.1974	.848	-.363	.684

*. The mean difference is significant at the 0.05 level.

As evident from Table 3, there is a statistically significant age/work difference (years of service) on variable V1 between those having the least years of service (under 10 years) and those having the most years of service (over 30 years). Based on the differences arithmetic mean (mean difference), the respondents with under 10 years of service believe that the curricula include less content and activities that are worthless for

subsequent education and life than their older colleagues with over 30 years of service. A graphic presentation of arithmetic mean on variable v1 is shown in Figure 1.

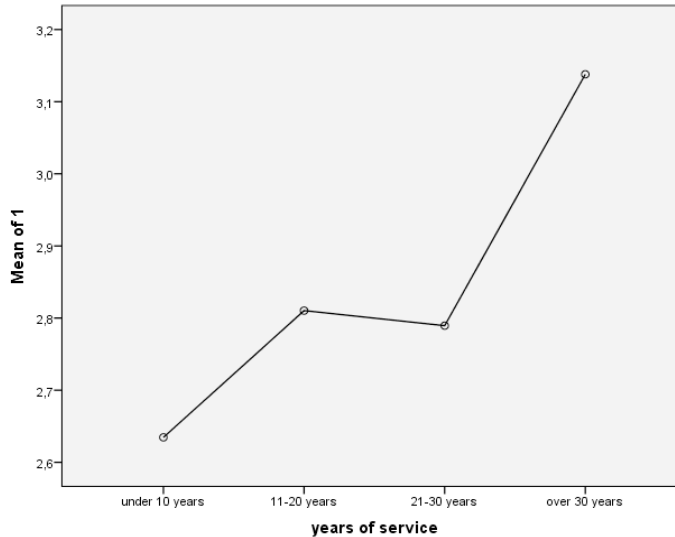


Figure 1 – Arithmetic mean: V1 (*The curricula include too much content and activities that are worthless for subsequent education and life*) * years of service

In view of the variable V16, the linear trend as in variable V1 is interrupted, since there is a statistically significant age/work difference between the respondents with 21-30 years of service and those with the most years of service (over 30 years). Those soon to retire assessed that there are more untalented pupils than their younger colleagues with 21-30 years of service (Figure 2).

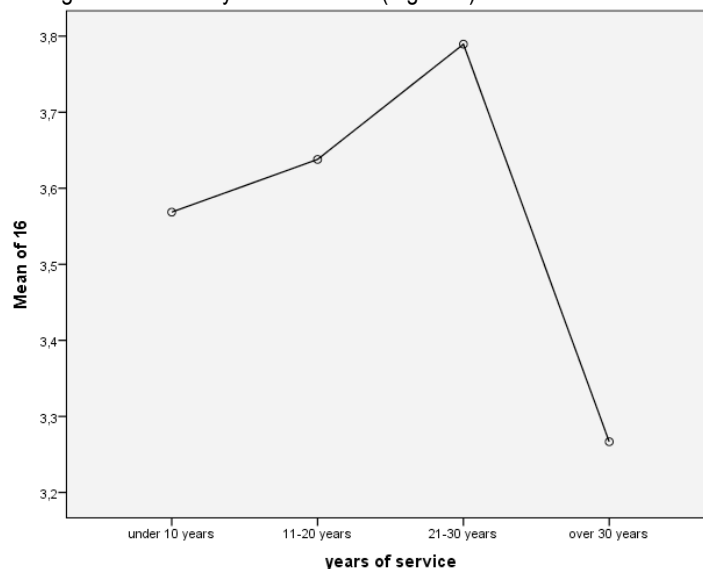


Figure 2 - Arithmetic mean: V16 (*There is no absolutely untalented pupil*) * years of service

Finally, the tested age/work difference on variable V31 showed that there is a statistically significant difference between teachers with the least years of service (under 10 years) and those with 21-30 years of service. The respondents with the least years of service assessed more strongly than their older colleagues (21-30 years of service) that today's pupils are used to gaining good grades without effort (Figure 3). Perhaps the reason lies in the fact that in Croatia school grades are used as the main criterion for the selection of pupils at the time of

entry into higher education, so there is great pressure on teachers from parents and pupils to give the highest grades for modest knowledge and for other outcomes of learning.

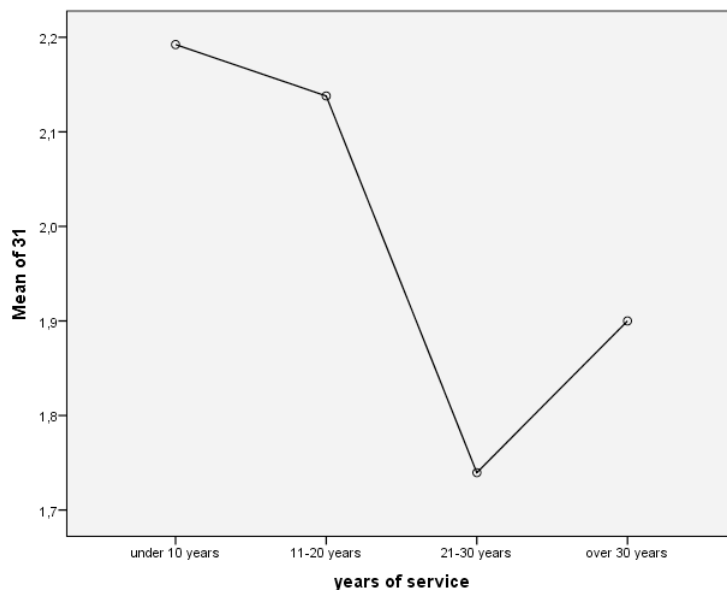


Figure 3 - Arithmetic mean : V31 (*Pupils today are used to receiving high grades without any effort*) * years of service

An increasing or declining trend of assessments on the dependent variables with regard to the tested age/work categories is not indicated from the above-mentioned statistically significant reasons.

4. Conclusion

The results of our study show that primary education teachers very clearly recognise the characteristics of constructivist didactics and modern trends in the theory of education and the theory of school. Most agree that it is important to organise classes in which pupils are more active than teachers, and that the curriculum is implemented only to the extent that pupils are really active. Most respondents hold that classical textbooks will soon be replaced by modern digital multimedia sources of knowledge. Teachers agree that all pupils should be allowed to realise their abilities to the greatest possible extent, bearing in mind that everyone has different talents (Baert, Galton, Honeth, Sivirine, Thurler, 2002). In certain variables, there is a statistically significant difference in the assessment of curricular variables in view of the age of the respondent. Teachers/respondents agree that they need further training in docimology and in the acquisition of skills relevant for work with pupils who have developmental difficulties. Most respondents agree that the status of teachers in comparison with similar professions is low, but they still readily take part in lifelong training and would not like to change their work place and to stop teaching.

It would be useful to compare these results from a sample of primary education teachers with other teachers working on the organisation of classes of pupils in lower and upper secondary levels of education.

References

- Baert, G., Galton, M., Honeth, P., Sivirine, J.M. Thurler, M. (2002). Innovations in Primary Education (Prijevod s francuskog na hrvatski jezik: orig. L'innovation dans l'enseignement primaire). Zagreb: Školske novine.
- Bruner, J. (1999). Process of Education. Cambridge & London: Harvard University Press.
- Dorph, R., Shields, P., Tiffany-Morales, J., Hartry, A., McCaffrey, T. (2011). High hopes–few opportunities: The status of elementary science education in California. Sacramento, CA: The Center for the Future of Teaching and Learning at WestEd.

- Doyle, T. (2008). *Helping students learn in a learner-centered environment: A guide to facilitating learning in higher education*. Sterling, VA: Stylus Publishing.
- Eichelberger, H., Laner, Ch., Kohlberg, W. D. und Sary, Ch. (2008). *Reformpädagogik goes elearning: Neue Wege zur Selbstbestimmung von virtuellem Wissenstransfer und individualisiertem Wissenserwerb*. München: Oldenbourg Wissenschaftsverlag.
- Gatto, J. T. (2009), *Weapons of mass instruction*. Gabriola Island, BC: New Society Publishers (translated into Croatian 2009: *Oružja za masovna poučavanja*). Zagreb: Algoritam.
- Herrmann, U. (Hrsg.). (2009). *Neurodidaktik: Grundlagen und Vorschläge für gehirngerechtes Lehren und Lernen*. Weinheim und Basel: Beltz Verlag.
- Kerres, M. (2013). *Mediendidaktik: Konzepten und Entwicklung mediengestützter Lernangebote* (4. Auflage). München: Pldenburg Verlag.
- Liessmann, K. P. (2006). *Theorie der Unbildung*. Wien: Paul Zsolnay Verlag. (translated into Croatian 2001: *Teorija neobrazovanosti*). Zagreb: Naklada Jesenski i Turk).
- Lu, Ch., Tsai, CH. & Hong, J. (2008). Use root cause analysis teaching strategy to train primary pre-service science teachers. *US- China Education Review*, 5(12),47-53.
- Reece, J. and Walker, S. (2011). *Teaching, Training and Learning: A Practical Guide*. Durham: Business Education Publishers Limited.
- Reich, L. (2006). *Konstruktivistische Didaktik*. Weinheim und Basel: Beltz.
- Terhart, E. (2003). Constructivism and teaching: a new paradigm in general didactics? *Journal of Curriculum Studies* 35(1): 25-44.
- Thomas, G. (2015). *Education: A Very Short Introduction* (translated into Croatian: *Kratak uvod u pedagogiju*). Zagreb: Educa.

Acknowledgment

This research was realized at the Faculty of Teacher Education of the University of Zagreb in Research project „School for Net-Generation: Internal Reform of Primary and Secondary School Education“ (duration 2015.-2017.) - financed by the Croatian Science Foundation.