Project **Integration of key competences in the education system of Montenegro**

co-financed by the EU and the Government of Montenegro

**REPORT ON TEACHER TRAINING ON MATURA**

**Annex No:** 8

**Place and date:** Online via ZOOM platform

On day one of the trainings for the members of subject committees included theory presentation and a total of 120 participants took part in the education using the Zoom application. The training aimed to better understand the basic principles, importance, and application of the examination technologies through the preparation of the examination assignments for the state graduation exam. Concretely, the participants were presented with the technology to prepare the specification of high-risk tests, and the practical part was practicing the preparation of the high-risk tests.

**Zora Bogićević** of the Montenegrin Ministry of Education greeted the online meeting and the project leader **Mr. Boris Ćuković** presented to the participants the project “Integration of the key competencies in the educational system of Montenegro” and the goals of current undertaken activities. **Mrs. Maja Jukić** had the introductory presentation related to the experiences of introduction, preparation, and implementation of the state graduation exam in the region countries.

Before this training, the participants were sent an online survey, i.e., preliminary research about the needs and expectations of the participants was undertaken. The survey was answered by 104 participants, out of which 58 percent are teachers in the high school, 21 percent teachers in the faculties, five percent teachers in the primary education, 5 percent employees of the Examination Centre, four percent the officials of the Bureau for Educational Services and others. The results were shortly presented to the participants. Approximately 17 percent of the participants in this education took part in the groups preparing the assignments and/or high-risk exams, and 18 percent “three or more times” a year took part in the training related to the learning outcomes. Their own theoretical and practical knowledge in the preparation of exam assignments was assessed by the participants with a ‘very good’ grade, four, on a scale of one to five.

During **day one** (workshop 1 and 2), Mrs**. Ines Elezović** held a lecture “The research in the social sciences with an accent on education and ILSA (International Large Scale Assessments)“. **Dr. sc. Srđan Verbić** had a lecture entitled "Metric characteristics of tasks and tests.

In the following four days, group work was organized, in groups of 30 participants, with the workshop activities. The participants were divided into groups according to the following schedule: social and human sciences (first day), STEM courses (second day), native and foreign languages (third day), and vocational subjects (fourth day).

The participants were sent in advance a form of assignments they are supposed to prepare before the day of implementation of the practical part of training for their subject group. That referred to three exam assignments of the following type: one assignment of multiple choice answers, one assignment of the short open answer, and one extended open answer. Workshops 3 and 4 covered the work of participants on exam assignments, with the leadership of project experts and the additional help of the Montenegrin Examination Centre employees. The subject group was further on divided into sub-groups, including 5 – 6 participants who shared their prepared assignments among themselves and discussed them. The assignments were evaluated, corrected, and improved and afterward presented at the last, plenary part of the workshop, at the end of each day. On occasion, all of the participants could comment the assignments or ask questions. Each sub-group plenary presented their conclusions on the steps and quality standards in the preparation of assignments and exams what was also plenary discussed.

At the end of the day, in the practical part of the training, the participants filled in a survey (evaluation sheet) about their satisfaction with the training in general and some of its specific elements (applicability, relevance, quality of the program, trainers and the work condition). In total 66 participants took part in the survey, and the results are following:

|  |  |
| --- | --- |
|  | **Mark (1 – 5)** |
| The training fulfilled my expectations. | 4.37 |
| Knowledge and skills gained are applicable in the teaching praxis. | 4.7 |
| The content/theme of the training is relevant for my praxis. | 4.59 |
| We were encouraged to think and exchange ideas and experiences. | 4.8 |
| The trainers demonstrated good knowledge of the field /theme of the training. | 4.85 |
| The trainers demonstrated developed training skills. | 4.77 |
| The training was organized according to the work plan. | 4.82 |
| The work conditions were at a satisfactory level. | 4.65 |

**Tacher training on Matura**

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Online training for members of subject commissions

1. **Participants: Members of the subject commissions for the preparation of exam tasks for the state matura**
2. **Training goal:**

**The general goal of the program:**

* A better understanding of the basic principles, significance and application of exam technologies through the creation of exam tasks for the state matura.

**The specific goal of the program:**

* Introduce participants to the technology of drafting and specifications of high-risk tests
* Practically practice making high-risk test tasks
* Inform participants about test quality assurance procedures and their importance

1. **Training outcome**

After completing the training and implementing what was learned during the training, participants:

* They use key terms of test technology
* Distinguish between types of test tasks and their characteristics
* Participants are motivated to apply the basics of test quality assurance procedures

1. **Experts who will support the training process**
2. **Maja Jukic, key expert for teacher training**
3. **Srdjan Verbic, senior short-term expert in STEM disciplines**
4. **Ines Elezović**, short-term expert in the assessment of evaluation mechanisms and quality

**Logistic support:**

**Marija Nikčević**, office manager

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**Agenda**

**Day one - Thursday, 10. December 2020**

* 1. **– 16.30** **Workshop 1**: Introduction
     + **Introductory speech by the representatives of the State Commission for Matura**
     + **Project presentation: Seminar goal, way of work, time frame, expectations from the seminar**
     + **Conclusions on the analysis of the training need questionnaire**

**16.30 – 19:15** **Workshop 2**

Ines Elezović:

* **Research in the social sciences with an emphasis on education and ILSA (International Large Scale Assessments)**
* **Methodological aspects of high risk exams**

Coffee break

SrđanVerbić

* **Metric characteristics of items and tests**

*End of the first day - (Task for members of subgroups for individual and group work between two days)*

**Day two – group work, work in groups of 20-25 participants (from 15. December till 18. December .2020.)**

16:00 – 17:30 **Workshop 3**

* **Exercise: Specification and draft of the exam** (participants can find exam catalogs on the website of the Examination Center)
* **The practice of making items: making new items -** exercise 1:write items in a sub-group of 3 people; exercise 2: cross-write comments on the submitted items of the second sub-group (review each other)

17:30 – 17:45 Coffee break

17:45 – 19:15 **Workshop 4**

* **Exercising tasks - continued: creating new items and reviewing the items:** exercise 3: review how their colleagues did and commented on the items; exercise 4: correct the items and write the key for assessment

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|  | Subject Commission - **Montenegrin - Serbian, Bosnian, Croatian Language and Literature:** | |  |
|  | **Name and surname** | Work place | City |
| 1 | Dajana Ševaljević | Gymnasium „Stojan Cerović“ | Nikšić |
| 2 | Andrijana Deletić Milačić | High School of Economics „Mirko Vešović“ | Podgorica |
| 3 | Snežana Grujičić | Vocational school Pljevlja | Pljevlja |
| 4 | Dragana Nenadović | Examination center | Podgorica |
| 5 | Mirjana Cerović |  |  |
|  | Subject Commission - **Albanian Language and Literature:** | |  |
|  | **Name and surname** | Work place | City |
| 6 | Valbona Hodžić | Elementary School”M.Tito”, Ulcinj and UCG PUS/ ALB PG | Ulcinj/Podgorica |
| 7 | Ljumnija Metanović | Elementary School ”M.Tito” i JU SMŠ”B.Jedinstvo” | Ulcinj |
| 8 | Teuta Gilaj | Elementary School ”Mahmut Lekić” | Tuzi |
| 9 | Ardita Mučović | Elementary School ”Bedri Elezaga” | Ulcinj |
| 10 | Mr. Sehad Lulanaj | Mixed high school ”25.Maj” | Tuzi |
| 11 | Luigj Berisha | Examination center | Podgorica |
|  | Subject Commission - **Mathematics (basic and advanced level):** | |  |
|  | **Name and surname** | Work place | City |
| 12 | dr Goran Popivoda | Faculty of Sciences Univerziteta Crne Gore | Podgorica |
| 13 | Ivona Adžić | Gymnasium „Slobodan Škerović” | Podgorica |
| 14 | Miomir Brajović | Gymnasium „Slobodan Škerović” | Podgorica |
| 15 | Vidosava Vujošević | Secondary School of Civil Engineering and Geodesy „Ing. Marko Radević“ | Podgorica |
| 16 | Magdalena Kilibarda | High school of economics and catering | Nikšić |
| 17 | Tatjana Vujošević | Examination center | Podgorica |
|  | Subject commission - **Analysis with algebra (basic and advanced level):** | |  |
|  | **Name and surname** | Work place | City |
| 18 | Maja Kraljević | Gymnasium "Slobodan Škerović" PG | Podgorica |
| 19 | Božo Baković |  | Podgorica |
|  | Subject commission - **English language (basic and advanced level):** | |  |
|  | **Name and surname** | Work place | City |
| 20 | dr Janko Andrijašević | Faculty of Philology | Nikšić |
| 21 | mr Nataša Bešović | Gymnasium "Slobodan Škerović" | Podgorica |
| 22 | Snežana Brajović | Mixed high school „Ivan Goran Kovačić“ | Herceg Novi |
| 23 | Sanja Golubović | Gymnasium „Tanasije Pejatović“ | Pljevlja |
| 24 | Dušica Marković | Examination center | Podgorica |
| 25 | mr Danilo Alagić | Faculty of Philology | Nikšić |
| 26 | Višnja Tripić |  |  |
|  | Subject commission – **German language (basic and advanced level) and German language as a subject of students' choice:** | |  |
|  | **Name and surname** | Work place | City |
| 26 | Mr Ljubomir Ivanović | Faculty of Philology | Nikšić |
| 27 | Milica Gajović | Mixed high school „Ivan Goran Kovačić“ | Herceg Novi |
| 28 | Mladenka Perić | Elementary School „Boško Strugar“ | Ulcinj |
| 29 | Gordana Tmušić-Radulović | Bureau for Educational Services | Podgorica |
|  | Subject commission – **Russian language (basic and advanced level):** |  |  |
|  | **Name and surname** | Work place | City |
| 30 | Dr Ana Pejanović | Faculty of Philology | Nikšić |
| 31 | Vesna Vuković | Gymnasium ”Stojan Cerović”, Nikšić | Nikšić |
| 32 | Branka Golubović | Mixed high school ”Braća Selić”, Kolašin | Kolašin |
| 33 | Dr Vesna Vukićević | Faculty of Philology | Nikšić |
| 34 | Mr Marija Paunović | Faculty of Philology | Nikšić |
|  | Subject commission – **Italian language:** |  |  |
|  | **Name and surname** | Work place | City |
| 35 | Dr Gordana Luburić | Faculty of Philology | Nikšić |
| 36 | Mr Hajdana Vujanović | Faculty of Philology | Nikšić |
| 37 | Darinka Radović | Gymnasium ”Petar I Petrović” | Danilovgrad |
| 38 | Milica Usančević | Gymnasium ”Slobodan Škerović” | Podgorica |
| 39 | Dr Deja Piletić |  |  |
|  | Subject commission – **French language:** |  |  |
|  | **Name and surname** | Work place | City |
| 40 | Dr Dragan Bogojević | Faculty of Philology | Nikšić |
| 41 | Dr Jasmina Nikčević | Faculty of Philology | Nikšić |
| 42 | Dragana Tasić | Gymnasium ”Slobodan Škerović” | Podgorica |
| 43 | Dr Sonja Špadijer |  |  |
|  | Subject commission – **Latin language:** |  |  |
|  | **Name and surname** | Work place | City |
| 48 | Žaneta Andrijašević | Gymnasium ”Stojan Cerović” | Nikšić |
| 49 | Ilijana Martić | The first vocational high school | Nikšić |
| 50 | Tanja Zeković | Gymnasium Cetinje | Cetinje |
| 51 | Snežana Pekić |  |  |
|  | Subject commission – **Chemistry:** |  |  |
|  | **Name and surname** | Work place | City |
| 52 | dr Vlatko Kastratović | Faculty of Sciences | Podgorica |
| 53 | dr Miljan Bigović | Faculty of Sciences | Podgorica |
| 54 | Svetlana Varagić | Gymnasium “Sloboda Škerović” | Podgorica |
| 55 | Ratka Vulanović | Gymnasium “Stojan Cerović" | Nikšić |
| 56 | **Tatijana Čarapić** | Examination center | Podgorica |
|  | Subject Commission - **Biology:** |  |  |
|  | **Name and surname** | Work place | City |
| 57 | dr Slađana Krivokapić | Faculty of Sciences | Podgorica |
| 58 | Sanja Ognjanović | Gymnasium “Sloboda Škerović” | Podgorica |
| 59 | Vesna Kastratović | Gymnasium “Tanasije Pejatović” | Pljevlja |
| 60 | mr Blaženka Petričević | Faculty of Sciences | Podgorica |
| 61 | **Tatijana Čarapić** | Examination center | Podgorica |
|  | Subject Commission - **Physics:** |  |  |
|  | **Name and surname** | Work place | City |
| 62 | dr Mira Vučeljić | Faculty of Sciences | Podgorica |
| 63 | Suzana Vujošević | Gymnasium “Sloboda Škerović” | Podgorica |
| 64 | Ana Vujačić | Gymnasium “Stojan Cerović” | Nikšić |
| 65 | **Tatijana Čarapić** | Examination center | Podgorica |
|  |  |  |  |
|  | Subject Commission - **Informatics and Programming and Programming Languages:** | |  |
|  | **Name and surname** | Work place | City |
| 66 | Dr Goran Šuković | Faculty of Sciences | Podgorica |
| 67 | Mladen Janković | Gymnasium “Slobodan Škerović” | Podgorica |
| 68 | Dr Božo Krstajić | Faculty of Sciences | Podgorica |
|  | Subject Commission - **Geography:** |  |  |
|  | **Name and surname** | Work place | City |
| 69 | Dragica Mijanović | Faculty of Philosophy | Nikšić |
| 70 | Asim Kuhinja | Gymnasium “Tanasije Pejatović” | Pljevlja |
| 71 | **Zoran Pejović** | Gymnasium “Slobodan Škerović | Podgorica |
| 72 | **Dragoje Đokić** | Examination center | Podgorica |
|  | Subject Commission - **History:** |  |  |
|  | **Name and surname** | Work place | City |
| 73 | Nenad Perošević | Faculty of Philosophy | Nikšić |
| 74 | Radovan Popović | Bureau for Educational Services | Podgorica |
| 75 | **Zoran Pejović** | Gymnasium “Slobodan Škerović | Podgorica |
| 76 | **Dragoje Đokić** | Examination center | Podgorica |
|  | Subject Commission **- Sociology:** |  |  |
|  | **Name and surname** | Work place | City |
| 77 | Nataša Krivokapić | Faculty of Philosophy | Nikšić |
| 78 | Ana Ivanović | Bureau for Educational Services | Podgorica |
| 79 | Vesna Krivčević | Vocational school Cetinje | Cetinje |
| 80 | Andrijana Bogetić | Gymnasium “ Stojan Cerović" | Nikšić |
| 81 | Ivan Đukić | Gymnasium “ Slobodan Škerović | Podgorica |
|  | Subject Commission - **Philosophy:** |  |  |
|  | **Name and surname** | Work place | City |
| 82 | Darko Blagojević | Faculty of Philosophy | Nikšić |
| 83 | Biljana Vujadinović | Gymnasium Cetinje | Cetinje |
| 84 | Dragan Radulovic | Mixed high school “Danilo Kiš” | Budva |
|  | Subject Commission - **Psychology:** |  |  |
|  | **Name and surname** | Work place | City |
| 85 | Mr Zoran Lalović | Bureau for Educational Services | Podgorica |
| 86 | Dijana Janković | Gymnasium „Slobodan Škerović“ | Podgorica |
| 87 | Lidija Begović | Gymnasium Kotor | Kotor |
|  | Subject Commission - **Fine Arts:** | |  |
|  | **Name and surname** | Work place | City |
| 88 | Sanja Boričić | Gymnasium „Slobodan Škerović“ | Podgorica |
| 89 | Mr Srđan Ilinčić | High school of art „Petar Lubarda“ | Cetinje |
| 90 | Prof dr Maja Đuric | University of Donja Gorica | Podgorica |
|  | Subject commission - **Music art:** | |  |
|  | **Name and surname** | Work place | City |
| 91 | Vedrana Marković | Music Academy | Cetinje |
| 92 | Olivera Dakić | Art School of Music and Ballet „Vasa Pavić“ | Podgorica |
| 93 | Darija Šćepanović | Gymnasium „Slobodan Škerović“ | Podgorica |
| 94 | Bojana Nenezić | Bureau for Educational Services | Podgorica |
|  | Subject Commission - **Mechatronics Technician:** | |  |
|  | **Name and surname** | Work place | City |
| 95 | Prof. dr Marina Mijanović Markuš | University of Montenegro | Podgorica |
| 96 | mr Dragoljub Draganić | The first vocational high school | Nikšić |
| 97 | Desimir Mojović | Vocational school Pljevlja | Pljevlja |
| 98 | Vladica Avramović | Vocational school Pljevlja | Pljevlja |
| 99 | Vladimir Kitaljević | Electrical Engineering High School „Vaso Aligrudić“ | Podgorica |
| 100 | Persa Đaković | Electrical Engineering High School „Vaso Aligrudić“ | Podgorica |
|  | Subject Commission - **Electrical Energy Technician:** | |  |
|  | **Name and surname** | Work place | City |
| 101 | Prof. dr Jadranka Radović | University of Montenegro | Podgorica |
| 102 | Nikolija Kaljević | Electrical Engineering High School „Vaso Aligrudić“ | Podgorica |
| 103 | Melanija Ćalasan | Electrical Engineering High School „Vaso Aligrudić“ | Podgorica |
| 104 | Željko Nikitović | Vocational school Nikšić | Nikšić |
| 105 | Eldin Cikotić | Vocational school Rožaje | Rožaje |
|  |  |  |  |
|  | Subject Commission - **Fashion Design Technician:** | |  |
|  | **Name and surname** | Work place | City |
| 106 | Doc. dr Tatjana Burzanović | UDG - Faculty of Design and Multimedia | Podgorica |
| 107 | Marija Stanković | Vocational school „Spasoje Raspopović“ | Podgorica |
| 108 | Aleksandra Radusinović | Resource center for children and people with intellectual disabilities and autism „1. jun“ | Podgorica |
|  | Subject commission - **Economic technician:** | |  |
|  | **Name and surname** | Work place | City |
| 109 | Gorica Marković | High School of Economics “M.Vešović” | Podgorica |
| 110 | Branka Vukotić | Secondary School of Economics and Hospitality Nikšić | Nikšić |
| 111 | Valentina Veličković | High School of Electrical Economics Bijelo Polje | Bijelo Polje |
| 112 | Ivana Perović | School of Economics and Catering Bar | Bar |
|  | Subject commission - **Restaurateur:** |  |  |
|  | **Name and surname** | Work place | City |
| 113 | Jelena Vlahović | School of Economics and Catering Bar | Bar |
| 114 | Dražen Radovanović | School for secondary and higher vocational education „Sergije Stanić” | Podgorica |
| 115 | Dejan Labović | School for secondary and higher vocational education „Sergije Stanić” | Podgorica |
|  | Subject commission - **Architectural technician:** | |  |
|  | **Name and surname** | Work place | City |
| 116 | Bratislav Radunović | Secondary School of Civil Engineering and Geodesy „Ing. Marko Radević“ | Podgorica |
| 117 | Gordana Popivoda | Secondary School of Civil Engineering and Geodesy „Ing. Marko Radević“ | Podgorica |
| 118 | Lela Vojvodić |  | Podgorica |
| 119 | Jasminka Prlja (Jasenka) | Mixed high school “Ivan Goran Kovačić” | Herceg Novi |
| 120 | Lidija Drašković | Secondary School of Civil Engineering and Geodesy „Ing. Marko Radević“ | Podgorica |
|  | Subject commission - **Legal-administrative technician:** | |  |
|  | **Name and surname** | Work place | City |
| 121 | Nataša Rutešić (bivša Todorović) | High school of economics and catering Nikšić | Nikšić |
| 122 | Lidija Vujovič | High School of Economics „Mirko Vešović“ | Podgorica |
| 123 | Ivana Kovačević | School of Economics and Catering Bar | Bar |