

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

co-financed by the EU and the Government of Montenegro

Number: 9.2.

Place and date: Podgorica, 17.10.2020. and 24.10.2020.

**REPORT ON COMPLETION OF THE TRAINING PROGRAMME**

**Title of the program****:** Teacher education for key competencies in primary and secondary education[[1]](#footnote-1)

**Date:** Day one – 17. October 2020, Day two 24 October 2020

**Place:** Online

**Trainers:** Day one: Boris Ćurković, Maja Jukić, Rajko Kosović,

Day two: Maja Jukić

**Goals of the training:**

1. Introduce teachers to the European and Montenegrin framework for key competences
2. Motivate teachers to apply active learning strategies and teaching methods that are effective for education for key competences
3. Present instruments for preparation, implementation and evaluation of successful teaching for key competencies (Manual for teachers) (methods and forms of teaching for key competencies), preparation for teaching (annual planning, scenario), quality indicators, teacher self-evaluation, peer review, student's self-assessment of what has been learned, evaluation of classes, etc.)
4. Show good examples of preparation for teaching that includes key competencies (annual planning, lesson plan (at the level of one subject, at the level of several topics, at the level of students dedicated to the issue of special importance) at the level of extra-curricular activities) and indicate ways to each of the key competencies can be applied in STEM subjects/vocational modules
5. Develop individual or group preparation for achieving key competencies (preferably at the school level, planned in the annual plan)
6. **General data** **and the review of training implementation**

The training was organized online via The Zoom platform ( [www.zoom.us](http://www.zoom.us) ). In total **103 participants from secondary schools across the northern region of Montenegro** took part in the training. Participants were nominated by school principals, who had previously undergone training "Key competences – teaching curricula, assessment and evaluation at the institution level "(listed in the Bureau for Educational Services, Catalog of the training programs for 2019/2020. and 2020/2021. under number 146, II. The priority area – Active methods of lecturing and learning) and Centre for Vocational Education and Training. The participants with the invite to take part in the course were handed over the materials: the EU key competences for the life- long learning framework (2018), proposal of the Montenegrin key competences framework program, a draft version of the Teacher's Manual for the integration of key competences with guidelines for formal evaluation, worksheets and a list of learning outcomes for all eight key competences for ISCED level 3. The participants were asked to study the materials.

In total **82 participants** took part in the training on days one and two via an online platform. The first, introductory workshop of day one was focused on getting to know the trainers, the expectations of the participants, explanation of the rules, the presentation of the Project, concept, agenda, and goals of the training, assignments, and other activities after the training. Ms. Sandra Brkanović, a representative of VET Centre in the Project Team, greeted the participants. After introductions and debate about the work rules on an online platform and the basic work rules during the training, the Project itself was shortly presented. The participant's expectations from the training and entire engagement related to implementing the key competences in the school were gathered using the menti-meter (online tool – [www.menti.com](http://www.menti.com) ).

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It was concluded that the expectations of the participants significantly correspond to the goals of the training. A reminder of the competences necessary for life and successful work assignments, the need for life- long learning and improvement of the key competencies was made using the "ice-breaker ". All of the participants wrote down the answers in the "chat" on questions related to the essential skills, the attitudes and values they gained during education and they still use them and develop every day, and the importance of teacher for their development. After that the answers were systematized what pointed out the fact that the key competences are the most important value gained during the education and those dedicated and extraordinary teachers that are never forgotten get the credits.

During the second workshop of day one, the participants were informed about the European key competences for the life - long learning framework, the Montenegrin key competences framework program, and the proposal of the learning outcomes at ISCED levels 3. The concept of key competences and the EU reference framework of key competences for lifelong learning are briefly presented. The participants organized in groups discussed in detail the content of the EU framework. They were gathered in couple of groups with an assignment to present a part of the EU framework text in one ppt slide to other participants or with a "mind- map" done by hand (drawing) or digital- using a tool [www.mindmeister.com](http://www.mindmeister.com) The works were presented to all of the participants. After that, the proposal of the Montenegrin Framework Program of Key Competences was presented. The focus was mainly on the learning outcomes for the ISCED level 3 for the key competences. The participants learned about the outcomes filling in the quiz designed especially for that purpose (quiz for ISCED level 1: <https://www.proprofs.com/quiz-school/story.php?title=mjg3mzk2ng4yx2>, quiz for ISCED level 2: <https://www.proprofs.com/quiz-school/story.php?title=isced-2-predmetna-nastava-u-osnovnoj-koli> and quiz for ISCED level 3: <https://www.proprofs.com/quiz-school/story.php?title=isced-3-srednja-kola>.)

At the third workshop of day one - *The presentation of the draft of the Manual for teachers with instruments elaborated in the Project related to the preparation, implementation, documenting, assessing and evaluation of the education for key competences.* Manual was presented and after that, the participants, working individually, analyzed the Manual content, the examples of the key competences, and the learning methods. Their reflections were noted in a short online survey. In this workshop, as an incentive to implement as many active learning methods in their lectures, a short movie from "TED TV "was shown – "Sugata Mitra – The experiments in self-teaching ". Active learning and teaching methods and formative evaluation are explained in detail by the training facilitators.

At the fourth workshop of the training day one - *The preparations for the regular teaching (e.g. scenario for one curriculum, integrated or inter- curricula) or extra-curricular activities (e.g. a project at the school level) related to the education for key competences*, the participant discussed in groups the possible ideas and activities in their schools, thru the regular teaching, the integrated teaching and other models of possible school activities. After that, they have presented a scenario of the integrated teaching of a curriculum and an inter- curricular topic, working in groups, four proposals were developed and elaborated by curricula and by key competences. During the group work, all participants shared their previous experiences of working with key competencies. Based on these experiences and learning outcomes, implementation proposals have been developed for their ISCED levels.

Towards the end of the first day, participants were given tasks for work between two days of training:

* Study in the details the materials from the training day one
* Elaborate the ideas for possible activities to integrate the key competences in the teaching in their schools (the regular teaching, the integrated teaching, the inter - curricula, the school project, extra-curricular activities)
* Study the part of the Annual school plan related to the implementation of the key competences (contact the principal and/or the members of a school team who took part in the training No. 146)
* Share the ideas with the co-workers from school included in this training, agree on different activities, and note the selected one on your own "Teacher's annual work plan".

Day one ended with the short online survey in which the participant gave a positive evaluation of the training. They shared their motivation and commitment to continue the work.

On day two of the training, a group of 82 (102 were invited) participants was divided into four groups and four trainers, one for each group. This report is given for the group in which teachers of the following schools took part:

* **Electrical engineering high school Vaso Aligrudić, Podgorica, of which is 11 STEM teachers and 17 vocational module teachers.**

At the first introductory workshop of day two, the work from day one was summarised. One school representative gave a short review of day one and the school activities between the two courses. After that, each participant, or the representative of the teacher's group that planned the integrated teaching and/or related activities, presented their ideas for the activities (of curricula or integrated teaching). After presenting the ideas through a short discussion, the other participants and the trainer gave comments and ideas to improve the activities and achieve better outcomes for integrating key competencies. The proposal of the form (from the Manual) and the examples from Montenegro, Croatia, and Bosnia and Herzegovina were presented. It was emphasized to the participants that they can use the preparation format they have used so far since the Institute for Education services encourages teachers' autonomy in choosing the form of preparation.

At the second workshop of day two, the training participants were divided into groups. After that, either through group work or individually, they started elaborating the preparations depending on their ideas. The trainer of each group supported the work on preparations

At the third workshop of day two, the participants presented the following preparations:

* **INTEGRATED TEACHING - Subjects: Physics; Chemistry; Mathematics; Informatics; MMSCB language and literature and Vocational modules: Audio technique; Electronic measurements; Production of multimedia content; English language of sjubject for I, II and III grade of high school on the topic: "Sound characteristics and the way of sound wave propagation"**
* **Integrated extracurricular activity Development of the project "Reconstruction of existing electrical installations in the computer room" for the subjects Mathematics (I grade), Informatics (II grade) and Physics (I grade) and for modules Electrical installations (I grade), Execution of electrical installations (II grade), Software tools for design in electrical engineering (III class) and Design in electric power (IV class)**
* **Integrated teaching for Modules: Computer Graphics and Animation and Subjects: MSCB Language and Literature, English for Simulation of application and job interview for a foreign company graphic designer.**

At the fourth workshop of day two, the participants working in groups for preparations elaborated an action plan for activities necessary to prepare the lectures, gathered the evidence and everything required to upload on a site "Integration of key competences in the education system of Montenegro." The mentioned site was presented, as well as the instruction to register, search and upload documents.

Also, the assignments for the period after the training were presented as necessary to confirm the implementation and evaluation of the planned activities and fulfill all the conditions required to obtain the certificate.

1. **Prepare an individual yearly teacher working plan related to the development of student's key competences**, following the annual school plan (if its applicable to this school year, having in mind the current specific conditions assigned at the national level)
2. **Finish started preparations (scenarios)** at the training and **all necessary working materials for its implementation** (e.g., the working sheets, the instructions for work in groups, rebuses, the evaluation sheets, etc.)
3. **Implement prepared activities** (according to the prepared scenario) to develop at least two key competences of the students (by choice; for regular teaching of one curriculum, for more related or different curricula- integrated teaching and extra-curricular activities)
4. **Upload** the following documents on a web- site "Integration of key competences in the education system of Montenegro "
5. ***A part of the individual yearly plan of a teacher related to the development of the student's key competences,*** *and following the school's annual working plan* (if it can be applied to this school year having in mind the current specific conditions, assigned at the national level)
6. ***Preparation of working materials for teaching and tutoring***
7. ***Evidence of the implemented activity*** (student's works, photos, videos) after the implementation of the activity
8. ***Form for self-evaluation of teachers with a remark based on the observation of the class by a colleague (****if one of the colleagues was in class), critical review of the implementation and suggestions for improvement after the implemented activity (Annex 3.b attached to the Manual)*
9. *Optional - a filled-in checklist for preparation, monitoring, and evaluation of the lectures (annex 3.c. in the Manual)*
10. ***A group results of the filled-in student's form –*** *evaluation of the lectures/ activities for student's key competences (annex 3.d in Manual or it0s adapted form)*
11. ***Report of the implemented activities*** *(the BE form) for professional development after the training and the implementation of the activity*

In preparation for the foreseen assignments, it was suggested to use the draft of the Manual and part of the Montenegrin Key Competences Framework Programme.

Finally, all the participants gave their feedback on the training and the training materials, whether the training was useful for the teachers and about the atmosphere during the training. They filled in an electronic evaluation paper prepared by the Bureau for Educational Services.

**Conclusion:**

Participants in the evaluations emphasized that the training was very intensive, required their engagement and that it was very useful and presented, proposed, and practiced through the activities carried out during the training, which will contribute to training students for key competencies quality of regular teaching. The value of joint work in school teams and the exchange of the experiences by the participants from the same and different schools was noted as particularly important.

Problems were noticed because of the online environment, either because there was a power outage or a weak internet connection and the "cracking" of the internet. Despite the technical difficulties and problems in dealing with technical equipment or simple applications by the participants, with joint efforts by the trainers and participants, all of the difficulties were overcome and the training was organized as planned.

The atmosphere at the training was supportive and motivating.

All goals foreseen by the training were achieved, which is visible in the results of all the undertaken exercises. The most valuable results were conducted after the last exercise, when all of the employees of one school agreed on the activities and the educational goal/topic, and for which the suggestions for the preparation of teaching for key competences were made.

1. **Training evaluation**

The evaluation questionnaire of the Bureau of Education Services was completed by 10 STEM school teachers, electronically, (link: <https://forms.gle/6qrqU7RvMqLMZ3QNA>). The results are shown in the following tables:

**General information**

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| **Title of the training program** | | Teacher education for key competencies in primary and secondary education | | | | | | | | | |
| **Date of training** | | | 17.10.2020. i 24.10.2020. | | | **Place of training** | | | Online | | |
| **The profession of participants, class or subject teaching** | | | | | | 10 subject teachers | | | | | |
| **Education level** | | | 100% higher education | | | | | | | | |
| **Sex** | **Male** | **Female** | | **Years in eductaion** | **0-2** | **3-7** | **8-15** | **16-25** | | **26-35** | **Over 35** |
| 2 (20%) | 8(80%) | | 1(10%) | 1(10%) | 4(40%) | 3(30%) | | 1(10%) | 0 |

**Training evaluation**

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|  |  | **Fully agree** | **Mostly agree** | **Partly agree** | **Mostly disagree** | **Fully disagree** |
| 1. | **The training met my expectations.** | 50% | 40% | 10% | 0% | 0% |
| 2. | **The acquired knowledge and skills are applicable in teaching practice.** | 60% | 40% | 0% | 0% | 0% |
| 3. | **The content/topic of the training is relevant to my practice.** | 50% | 50% | 0% | 0% | 0% |
| 4. | **At the training, we are encouraged to think, exchange ideas and experiences.** | 70% | 30% | 0% | 0% | 0% |
| 5. | **The facilitators showed a good knowledge of the training area/topic.** | 70% | 30% | 0% | 0% | 0% |
| 6. | **Facilitators demonstrated developed coaching skills.** | 70% | 20% | 10% | 0% | 0% |
| 7. | **The training was realized according to the work program.** | 70% | 20% | 10% | 0% | 0% |
| 8. | **Working conditions were at a satisfactory level.** | 70% | 20% | 10% | 0% | 0% |
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| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | **Topics you suggest for next training:**  How to conduct field teaching adequately? | | Commit to a particular competency | | Commit to a particular competency | | One of the competencies specifically | | To devote ourselves to a particular competence | | Some specific competence | | Mathematical competencies | | | | | | | | | |

**Annexes**

1. Training work program (agenda)
2. List of participants - photocopy of original signatures
3. Records of reports on realized professional development activities after the training in schools
4. Signed lists of attended professional development programs by schools

**Training organizer**

Boris Ćurković, team leader of the Project Integration of key competences in the educational system of Montenegro

**Annex 1. Training work program (agenda)**

# Training for the teachers for implementation of the key competences in the secondary schools

# **Agenda**

**Place and time of training:** **Zoom online platform, 17.10. and 24.10.2020,** **from 9 to 17 o clock**

**Trainers: Boris Ćurković, Maja Jukić, Rajko Kosović, Ljubica Špirić**

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| Saturday, 17. October 2020 |

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| 09.00 - 10.30 | **Workshop 1**   * Presenting of the trainers and participants, expectations, workshop rules, presenting of the Project, concept, agenda, and goals of the training, assignments, and other activities after the training * The remainder of the competencies necessary for life and successful work completion, as well as the need for the life- long training and improvement of the key competences |
| 10.30 - 11.00 | Coffee break |
| 11.00 - 12.30 | **Workshop 2**   * Presentation of the European key competences for the life- long learning framework Presentation of the Montenegrin key competences framework program and suggestions of the key competencies learning outcome on the ISCED level 3 |
| 12.30 - 13.30 | Lunch break |
| 13.30 - 15.00 | **Workshop 3**   * Presentation of the Manual for teachers with instruments elaborated in Project related to the preparation, implementation, documenting, assessing and evaluation of the education for key competences. * Presentation of the good yearly planning examples and up-to-date successful preparations and lectures for key competencies (prepared in advance by the participants and trainers) |
| 15.00 - 15.30 | Coffee break |
| 15.30 – 17.00 | **Workshop 4**   * Beginning of the preparation for teaching * Conclusions of the first day |

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| |  | | --- | | Saturday, 24. October 2020 | |

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| 09.00 - 10.30 | **Workshop 1**  Working on the preparation for teachers |
| 10.30 - 11.00 | Coffee break |
| 11.00 - 12.30 | **Workshop 2**  Working on the preparation for teachers |
| 12.30 - 13.30 | Lunch break |
| 13.30 - 15.00 | **Workshop 3**  Presentation of the prepared preparation |
| 15.00 - 15.30 | Coffee break |
| 15.30 – 17.00 | **Workshop 4**   * Summary and conclusions of the training * Development and presentation of an action plan for participants for post-training activities * Training evaluation |

**Annex 2:**

**LIST OF TRAINING PARTICIPANTS**

**Program title:** Teacher education for key competencies in primary and secondary education

**Place:** Podgorica (online)

**Date:** 24. October 2020 (day two)

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|  | **Name and surname** | **School/preschool institution and subject (profession) of the trainee** |
| 1. | Milanka Stanišić | Secondary Technical School Vaso Aligrudić - STEM |
| 2. | Svetlana Knežević | Secondary Technical School Vaso Aligrudić - STEM |
| 3. | Emsada Bećirović | Secondary Technical School Vaso Aligrudić - STEM |
| 4. | Biljana Šuković | Secondary Technical School Vaso Aligrudić - STEM |
| 5. | Dijana Bulatović | Secondary Technical School Vaso Aligrudić - STEM |
| 6. | Jelena Šćekić | Secondary Technical School Vaso Aligrudić - STEM |
| 7. | Olivera Mandić | Secondary Technical School Vaso Aligrudić - STEM |
| 8. | Olivera Ivanović | Secondary Technical School Vaso Aligrudić - STEM |
| 9. | Olga Nišavić | Secondary Technical School Vaso Aligrudić - STEM |
| 10. | Marija Žeželj | Secondary Technical School Vaso Aligrudić - STEM |
| 11. | Spasoje Papić | Secondary Technical School Vaso Aligrudić - STEM |
| 12. | Nikola Kojović | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 13. | Zoran Radulović | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 14. | Persa Đaković | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 15. | Radomir Stanišić | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 16. | Dragica Milentijević | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 17. | Gordana Tasić | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 18 | Mileva Lučić | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 19. | Radovan Božović | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 20. | Nada Vemić | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 21. | Violeta Rašković | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 22. | Mirjana Stevović | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 23. | Ana Vujović | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 24. | Aleksandar Obradović | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 25. | Vladimir Kovač | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 26. | Nada Dašić | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 27. | Vladimir Kitaljević | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 28. | Vesna Ćalasan | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 29. | Marina Braletić | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |
| 30. | Radmila Čogurić | Secondary Technical School Vaso Aligrudić – VOCATIONAL MODULE |

1. The training program is listed in the Training Program Catalog for 2019/2020. and 2020/2021. year of the Bureau for Educational Services under number 146, II. Priority area - Active teaching and learning methods [↑](#footnote-ref-1)