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# Annex 7:

# Capacity building plan

**Introduction**

Having in mind the general goal of the Project related to improving the quality of education at all levels from preschool to higher education, providing support to initial and continuing teacher education and improving the quality assurance system, a general Capacity Building Plan has been developed which is of crucial importance for its realization and sustainability. The purpose of this plan is to ensure the sustainable integration of key competences for lifelong learning into the Montenegrin education system, with a special focus on the STEM competence.

In the literature, capacity building (or development) is most often explained as the process by which individuals and organizations acquire, enhance, and retain the skills, knowledge, tools, networks, and other resources needed to perform their jobs competently.

The capacity building methodology encompasses the individual and institutional level and fully follows and supports the concept or philosophy of lifelong learning as a central approach in implementation and is an integral part of all project interventions. The individual level enables individuals to develop and improve their knowledge and skills and refers to process learning that would introduce systemic changes and adapt to them. The institutional level includes providing support in the formation of desired education policies and effective methods of monitoring and evaluating their implementation. A holistic approach to lifelong learning includes other forms of capacity building in addition to developing and conducting specific training according to assessed needs. It includes intensive cross-sectoral cooperation of educational institutions, network development with the community, diversity of approaches and forms of learning such as working group and team meetings, focus groups, user needs research, counselling, horizontal or peer learning, or all forms of process work, which can take place remotely with the help of modern technologies. In a dynamic and interactive capacity building process, a consensus is created between the institutional environment, its requirements and the resources needed to carry out project tasks in the way that user institutions define and determine. This approach ensures a "demand driven" approach to capacity development, i.e. the provision of knowledge and skills that users themselves have identified as necessary for the successful implementation of European educational reforms embodied in the recommendations of the Reference Framework for Key Competences for Lifelong Learning.

The development of key competencies is not a novelty in the Montenegrin education system, and the basic intention of the plan for capacity building of participants in education is **to achieve balance and a systematic approach to improving the quality of learning and teaching as a basis for lifelong learning at all educational levels**. This will ensure synchronization of interpretation and understanding of the outcomes of the Montenegrin framework, their integration into teaching and learning, and provide feedback to decision makers on the results. If a feedback loop is established in the implementation of the Montenegrin Framework Program for Key Competences at all levels of education, we can talk about systemic progress in improving the quality of learning and teaching as a lifelong process. This means, on one hand, to introduce knowledge and skills on the development of lifelong learning in students into initial teacher education programs, as planned by the Strategy of Teacher Education in Montenegro (2017-2024), and on the other, to carry out capacity building activities according to the priorities proposed by the teachers themselves through the result of researching their needs as well as measuring and monitoring the efficiency of the application of innovations.

The framework for capacity development planning consists of the Montenegrin framework of key competencies for all educational levels with learning outcomes, Report on the analysis of initial education and continuous professional development (CPS) of primary school teachers and natural subjects from the point of view of key competencies and conclusions of meetings and workshops of the Project Team and working groups.

The description of the terms of reference provided the target groups and the main guidelines for the trainings, which were elaborated in detail with this plan with a proposal of the content, outcomes and forms of capacity building. In further elaboration, it is proposed to strengthen the resources of all recognized participants given by the task description - from policy makers or representatives of institutions, direct implementers of learning and teaching - teachers, those who manage the school - principals, their assistants and school teams, and those who monitor, advise and evaluate the quality of work of school-educational supervisors and advisors.

**Target groups and capacity building goals**

The target groups for capacity building within the project are all stakeholders, i.e. institutions benefiting from project assistance and partners in implementation.

The overall goal of capacity building of these groups is the integration of key competencies into the education system of Montenegro in accordance with their individual professional roles in the system.

Target groups, expected outcomes of capacity development and forms of work are presented in a table:

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| --- | --- | --- |
| **Target group** | **Forms of work/capacity development** | **Outcomes of capacity development** |
| Representatives of beneficiary institutions that make up the composition of the Working Groups and the Project Team   * Ministry of Education of Montenegro * Bureau for Education Services of Montenegro * Centre for Vocational Education of Montenegro * Examination Centre of Montenegro * Faculty of Philosophy, Faculty of Philology and Faculty of Science, University of Montenegro * Primary and secondary schools | Meetings  Workshops  Counselling  Focus groups  Study visit | Agreed and approved project strategic documents  Montenegrin program of key competencies  Accreditation of trainings for integration of key competencies in teaching and learning  Innovated university skills and knowledge program to develop key competencies  Key competencies integrated into regular teaching, learning and extracurricular activities |
| Primary school teachers (900) | Focus groups  Training  Peer learning within teaching council | Teaching preparations which, in addition to the subject outcomes, also include the outcomes of the key competencies of the Montenegrin framework |
| * STEM subject teachers in primary and secondary education (960) | Focus groups  Training  Peer learning within teaching councils | Teaching preparations which, in addition to the subject outcomes, also include the outcomes of the key competencies of the Montenegrin framework |
| * School principals (with assistants, pedagogues, | Training  Counselling | An action plan that strategically positions the development of key competencies as part of the School's Annual Plan |
| * Educational supervisors / inspectors | Training  Counselling | Formulated indicators and protocols  Continuous monitoring and evaluation of the integration of key competencies in learning and teaching |

**Methodology**

The main methodological approach in capacity building is based on the following pillars:

1. Capacity building as a process
2. Full participation of target groups in capacity building and realization of tasks
3. Professionalization of employees in education
4. Development of training programs according to the needs and the concept of distance learning

**The first pillar** of the methodological approach is the understanding of capacity building as a process of development, strengthening, knowledge, skills and strength needed by either individuals, institutions or communities to thrive in an ever-changing environment. Capacity development therefore requires constructiveness and readiness to change, getting out of the comfort and routine zone and shaping the reality that adequately responds to changes and is in accordance with them. The individual, group and community are thus transformed in finding optimal responses to the demands of the environment. Learning and capacity building cannot happen without transformation, making a change and purposefully adapting to a changing reality. Capacity building as a process requires time, reflection, stage work on tasks until the introduction of changes and adaptation to them.

**The second pillar** refers to the full participation of target groups in capacity building activities. This request, after the first quarter of the project, was fully met, given the 100% participation of all invited representatives of institutions to workshops and meetings on the development of strategic documents of the Project. The Montenegrin framework of key competencies has been developed through organized workshops and working meetings, the outcomes in the staged work process have been discussed in detail and changed to an agreed working version that will show its effectiveness with feedback from the teachers themselves.

In the following period, the same response of teachers to trainings and their active participation in the development of examples of lesson plans, project activities and interdisciplinary integration with other subjects is expected in order to develop key competencies of students. Within the trainings, teachers are expected to start developing their own approaches to teaching and learning in the realization of the outcomes of the Montenegrin Framework Program and propose practical and feasible examples of classes either within their subject, or interdisciplinary, through connecting topics. These examples would be the basis of their collegial learning and exchange of experiences either in the form of respectable and exemplary classes, or in some other form that implies horizontal learning and sharing of experiences and good practices.

The full participation of principals in planned trainings is also expected to ensure school-level decision-making on introducing the development of key competences outcomes into standard teaching and planning of learning as well as programming and delegating tasks to teaching teams.

Educational supervisors are already involved in workshops and the process of developing indicators and protocols to prevent the integration of key competencies at all levels of education and have ensured full participation.

**The third methodological pillar** of professionalization of employees in education is based on the Recommendations of the EU reference framework and the findings of the analysis of the situation of initial and continuous professional development (further referred to as CPD) among teachers in Montenegro. It involves supporting teachers, lecturers and other educators in the implementation of teaching and learning based on key competencies as a foundation of lifelong learning. This is one of the substantial recommendations of the European Framework of Reference, which is fully represented by the Montenegrin Framework. The recommendation refers to the domain of professional growth of employees in education and capacity building as qualified professionals. This primarily refers to training and learning that are aimed at developing the competencies of teachers in both initial education and continuing professional development during work. In order to fully realize this pillar, interventions within university study programs are necessary, i.e. innovation of pedagogical-psychological and didactic-methodological subjects with skills and knowledge about the development of key competencies. The findings of the online questionnaire and focus group of teachers within the Project confirmed the insufficiency of these contents in the formal education of future teachers. The recommendations of the Framework together with the Action Plan of the latest Strategy for Teacher Education in Montenegro until 2024 represent a platform for intervention within university education and capacity building within the intervention in initial education. The project provides the engagement of an expert who will work together with university representatives to innovate programs and develop possible additions of practice to theoretical education through the establishment of a centre of practice ("centre of excellence") in schools. This proposal came from a focus group of teachers.

**The fourth methodological pillar** refers to the development of training programs according to the needs that teachers themselves have singled out as a priority in their answers within focus groups and online questionnaires. The content of the trainings according to the recommendations of the analysis of teachers' responses will be given in detail within the description of the content of the training for teachers. After the first quarter of the project, when this Analysis was presented to the Project Team, the global pandemic of the Covid 19 virus changed the planned way of conducting training in accordance with current epidemiological guidelines in Montenegro. Adapting to these changes presupposed the only possible option, and that was to conduct the trainings remotely (online).

The concept of distance learning existed even before the information age, according to historians of education, this concept is as old as education itself. Nevertheless, the real momentum and structure of distance learning has been happening since the beginning of the 20th century as correspondence education, programmed, multimedia, etc., in order to experience real expansion and massification with the information age. Before the advent of the Internet, distance learning models were implemented through letters, print, television, radio, image and sound transmitters (video and audio cassettes, CDs). They had practical and successful results primarily due to the self-directed nature of this type of learning, motivated by real needs, mostly in the field of non-formal and adult education. In modern times, "online", "electronic" or "online learning" (E-Learning, web-based education) is one of the important concepts and opportunities provided by the Internet. This method has become dominant and global, and will probably be the only tool for distance learning in the near future, especially due to the widespread use of it. E-learning, as a new version of distance learning, is applied through Internet technologies and includes educational activities that do not require the presence of teachers / mentors / trainers and students / trainees in one place, who do not have to be present at the same time. Learning content varies from simple to very complex, and the tools used allow for interactivity (discussion groups, "chat"), phasing and process learning, which fully allows project tasks related to capacity building to continue regardless of the constraints caused by the pandemic. E-learning does not require any transportation or accommodation costs. Because the process of such learning is per se focused on the learner (learner-centred learning), it allows the learner to plan learning, determine and direct their own style, and take responsibility for their own learning.

**Capacity building of the Project Team and working groups related to the development of strategic documents**

During the initial phase, working bodies were established composed of groups of individuals delegated by the institutions benefiting from the project assistance, which are of key importance for providing guidance in the implementation of the Project Tasks.

The project team is the main implementing body for making decisions on the structure and content of strategy documents, selecting schools and their representatives in project activities, approving trainings, and generally adapting the recommendations of the project expert team according to user needs, experience and capacities. The focus of the Project Team is to identify implementation methods and dynamics, ensure timely user involvement, inform processes with local knowledge, approve proposals and ensure implementation and sustainability.

In the first quarter of the project, two two-day seminars were planned and held, where valuable experiences on the development of key competencies in the countries in the region, European recommendations and harmonized dynamics of process work regarding the selection of competencies, structure and content of the Montenegrin framework were exchanged.

The project team delegated individuals, also from beneficiary institutions, to four working groups that worked on the individual development of competence outcomes, each group having two competencies. These groups were tasked with formulating learning goals and outcomes by educational level. Activities and topics are tabulated:

| **Project team** | **Working groups** |
| --- | --- |
| **1st meeting:**   * Constituting the Project Team and work methodology; * Defining key competencies for lifelong learning relevant to the education system of Montenegro; * Defining the structure and goals of the Montenegrin Framework Program of key competencies; * Establish a methodology for developing learning outcomes for key competencies, levels for learning outcomes and pattern | **1st meeting:**   * Constituting a working group and work methodology; * Defining key competencies, based on the EU reference framework of key competences for lifelong learning (2018); * Determining learning outcomes for eight key competencies (each working group for two) by established educational levels; * Defining general guidelines (didactic recommendations) for the integration of key competencies in teaching and learning |
| **2nd meeting:**   * Review and finalize the methodology for monitoring the integration of key competencies in school learning at the proposal of the supervisor and advisor for quality assurance of the Bureau for Education Services and the Centre for Vocational Education; * Action plan for integration of STEM key competencies into the education system of Montenegro; * Continuation of work on the development of the Montenegrin Framework Program of key competencies for lifelong learning. | **2nd, 3rd and 4th meeting:**   * Formulating outcomes |
| Meetings and consultations in small groups with the task of "grinding" the formulated outcomes of the competencies of the Montenegrin framework at previous meetings. | |

After seminars and workshops in the first quarter of the project, process work is planned and continued in numerous meetings, consultations, with the use of e-tools when the epidemiological situation does not allow tet-a-tet encounters. The expected result is harmonized and verified strategic documents and decisions on further activities for the implementation of project tasks.

**Training of pedagogical supervisors of the Bureau for Education Services and quality assurance advisors of the Centre for Vocational Education**

Three two-day trainings are planned for 30 employees in the Bureau of Education Services, schools and higher education institutions who are directly responsible for quality assurance, including internal and external evaluation. In the first quarter of the project, a two-day training was held in which supervisors were instructed in the specifics of monitoring and evaluating the inclusion of key competencies in teaching and learning.

Every process of change begins with monitoring, measuring the state of current practice. Premature evaluations may indicate a “decline in implementation” as new pedagogical practices have yet to catch on. Therefore, the role of pedagogical supervisors should be supportive, empowering, more advisory than controlling, especially at the beginning of implementation.

**School administration training**

Capacity building of the school administration implies the inclusion not only of the principal and his assistant, but also of other employees in schools who are an important resource for the initial momentum in the efforts to integrate the outcomes of the Montenegrin framework into regular teaching and learning. The school team, which should be the core of dissemination, also includes a pedagogue, as well as a person who is considered the team leader or responsible for CPD at the school level.

The content of the one-day training for school administration includes 360 individuals in front of all primary and secondary schools in Montenegro.

The goal of this training and consultation with the principal and school team members is to provide strategic planning or action plan that would be part of the school's annual plan and support the efforts of teachers who will be trained within the project, to implement and share lessons learned with colleagues.

**Teacher training**

*"We prepare children for a life we ​​know nothing about"*

*Francoise Dolto*

There are great differences between teachers, as well as between schools, in habits, traditions, beliefs about learning, in teaching approaches and methods, and thus in efficiency. This suggests that professional development should be directed towards an individual assessment of the need to improve skills and knowledge, and after self-evaluation, progress can be achieved with good examples of effective work with students and a good collaborative atmosphere at school among teachers. To support the development of key competencies of their students, teachers should develop their key competencies as well as pedagogical practices that support the development of key competencies. This is especially important if teachers find it harder to give up the secure role of knowledge transfer instead of investing in activating and making students independent.

The findings of the CPD analysis, among other things, showed that teachers in Montenegro, especially subject subjects, mostly recognize their role in teaching and fulfilling curricula, limiting themselves to classroom walls and the boundaries of their subject. As reasons for that, they state the lack of a fund of classes. The competence to understand the education system and its development requires a teacher who will experience the development of the student's key competencies as his professional mission. One of the efforts that a teacher should make is to overcome or expand their disciplinary field with other disciplines through unifying outcomes of key competencies, using approaches that support curiosity and help students find their learning style. Through joint planning, which requires time and dedication, teachers should find ways for the student to learn contextually and to learn how to lead himself.

Based on the findings of the analysis of the situation of initial and CPD of teachers in Montenegro, training was developed for a total of 1860 teachers, i.e. 900 primary school teachers and 960 subject teachers of STEM subjects in primary and secondary education.

The name of the training is: "Teacher education for key competencies in primary and secondary education", the planned duration is two days, with accreditation in the Training Catalogue of the Institute for Education under number 144.

The following training objectives were derived, according to which the program, contents, training methodology and materials that can be of help to teachers were developed:

1. Introduction to the European and Montenegrin framework for key competencies;

2. Motivating teachers to apply active learning strategies and teaching methods that are effective for education for key competencies;

3. Presentation of instruments for preparation, implementation and evaluation of successful teaching for key competencies with the help of the Teacher's Manual;

* methods and forms of teaching for key competencies
* preparation for classes - annual planning, scenario, thematic planning
* quality indicators, teacher self-evaluation, peer review of teaching, student self-assessment of what has been learned; evaluation of teaching

4. Demonstrating good examples of preparation for teaching that includes key competencies: (annual planning, individual, lesson plan - at the level of one subject, at the level of several subjects, at the school level, at the level of extracurricular activities) with a description of how each key competencies can be applied in STEM cases;

5. Development of individual or group preparation for achieving the outcomes of key competencies that is in line with the outcomes of the subject and the Annual Work Plan of the school.

After the first part of the training, teachers will implement an innovative teaching and learning plan with the intention of developing the outcomes of key competencies, and formative assessment of students and evaluation of the conducted teaching.

The training will take place remotely, on the ZOOM platform, with the guidance of key and short-term experts of the project, the first day in plenary with a large number of teachers, and the second day, after a week, in small groups of 20 participants, where time will be dedicated to group work and develop examples of lessons and approaches that include the outcomes of key competencies and a description of the activities and methods they will use. Teachers are obliged to applaud their work for each of the implemented activities to the trainers, in order to receive feedback.

In order to ensure the quality and measure the effectiveness of training, it is planned to select the most successful examples of teaching preparation, projects and activities that will be presented in the Teacher's Manual.