**Annex 6:**

**REPORT ON THE CONCEPT OF ONLINE TRAINING**

Component 3 (activities 3.1, 3.2, 3.3 i 3.4)

Component 4 (activity 4.2)

Content

[1 Introduction 3](#_Toc51599672)

[2 On online learning (e-learning), approaches and methodology 3](#_Toc51599673)

[2.1 Approaches to e-learning 3](#_Toc51599674)

[2.2 Synchronous and asynchronous activities 5](#_Toc51599675)

[2.3 Elements of e-learning 6](#_Toc51599676)

[2.4 Methodology 6](#_Toc51599677)

[3 Transformation suggestions/scenarios 7](#_Toc51599678)

[3.1 Completely online - asyncrono 7](#_Toc51599679)

[3.2 Fully online - synchronously 17](#_Toc51599680)

[4 Technology and tool proposal 26](#_Toc51599681)

[4.1 Specific instructions for organizing training in MS Teams 26](#_Toc51599682)

[5 Tips for maintaining a virtual classroom 27](#_Toc51599683)

[5.1 Preparation 27](#_Toc51599684)

[5.2 Implemention 28](#_Toc51599685)

[6 Tips for moderating an online discussion 29](#_Toc51599686)

[6.1 How to organize a discussion? 30](#_Toc51599687)

[6.2 How to encourage atendees? 31](#_Toc51599688)

[7 Tips for organizing project work 33](#_Toc51599689)

[8 Tips for evaluating student work and giving feedback 34](#_Toc51599690)

# Introduction

The purpose of this document is **to provide instructions and suggestions** on how to transform teacher training on the topic of Implementation of key competencies in the education system of Montenegro, which should be held within this project for 1860 teachers. **The transformation of training** is considered to be the transfer of training from **a fully classroom form** to **an online form** or **to a mixed form** (partly in the classroom, partly online).

Turning existing classroom training online can be a difficult, time-consuming job. An easy way can be - simply moving the content and parts of the lecture to an online tool - such an approach only leads to a mere transfer of information, loss of engaged activities and lecturer contributions.

Which is the better way? Look for ways to retain the wealth that a good lecturer brings to the classroom, such as group adaptation, a sense of humor, interesting stories and examples, and immediate feedback. This is an opportunity to make the most of the technology.

# On online learning (e-learning), approaches and methodology

Much is known today about online learning and teaching, about the advantages and disadvantages of such learning and teaching, and there is no need to start here from the beginning. Today, when we think or say e-learning, we think of training on any digital device. Watching an educational video, reading an interesting article, participating in an online discussion or online quiz - it's all e-learning.

If we go on such adventures ourselves, then such learning is often accidental or limited to the narrow segment that we need at that moment. However, all of these approaches can be combined during training that has a specific duration and is focused on pre-set learning objectives.

There are many reasons why organizations, both public and public, and private, choose to introduce e-learning to educate their employees or clients, such as the need to educate large numbers of students, geographic dispersion, busy student calendars, and today we are witnessing mass migration online due to the Covidom-19 pandemic.

E-learning is mostly used to develop cognitive skills, because the cognitive domain is best suited for e-learning. Various interactive activities are needed to develop thinking skills, as these skills are best learned through practical work. It is possible to use e-learning to teach students in the areas of soft skills and psychomotor skills, however, such trainings are less common.

## Approaches to e-learning

There are two general approaches to e-learning: self-paced and guided or mentored.

Using an **independent approach**, participants learn at their own pace and define their learning pathways based on their individual needs and interests. E-learning trainers do not have to plan, manage or monitor participants during learning. The content of e-learning is developed according to a set of learning objectives and is delivered using various media such as text, graphics, audio and video. It is important to provide as much support as possible to learning through explanations, examples, interactivity, feedback, glossaries and the like.

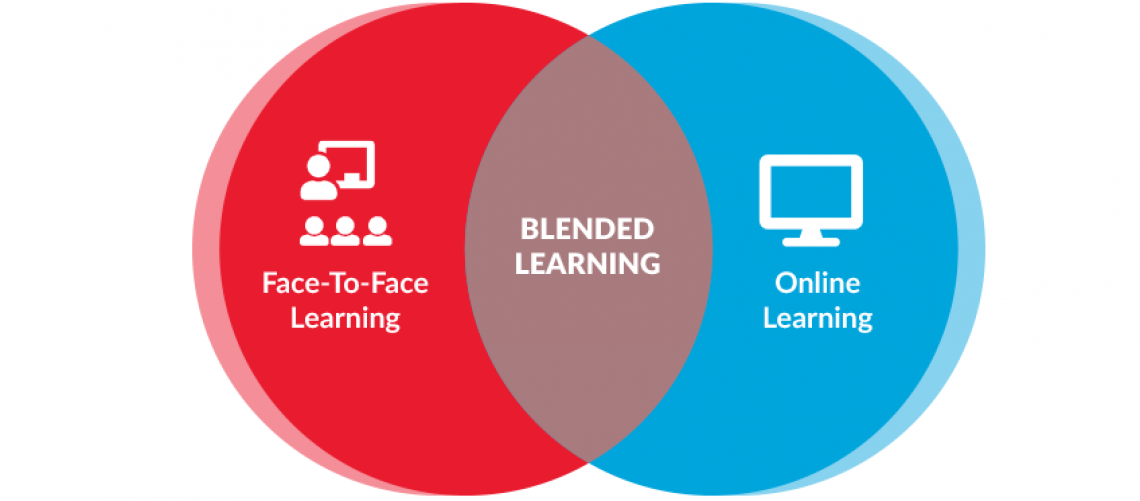
For **a guided or mentored approach**, a linear curriculum is usually developed that integrates online content and activities into a course for which there is a curriculum, and time constraints are provided for content and activities. The training is scheduled, has its beginning and end, and is led by a lecturer / mentor through an online learning platform.

E-learning content (presentations, texts, video and audio content, interactions, animations, quizzes) is integrated with lectures, individual assignments and collaborative activities. Attendees and mentors use communication tools such as email, discussion forums, chats, surveys, whiteboards, application sharing, audio and video conferencing tools, and more.

Such trainings also include an evaluation of the participants' work and, based on that, the awarding of certificates.

Additionally, there is **a blended approach** that combines e-learning, tools and traditional classroom learning to ensure maximum efficiency. In a mixed approach, combinations and possibilities are numerous, for example:

* Before the training in the classroom, there is a pre-course online which aims to bring the prior knowledge of all participants to the same level.
* The second approach consists of starting the main event in the classroom, followed by an online section that may include, for example, interacting with online resources or mentoring for continuous development. This approach can be used to develop a community of practitioners.
* Online sections can also be used to introduce and conclude blended learning forms. For example, they can be used to assess knowledge before and at the end of training.

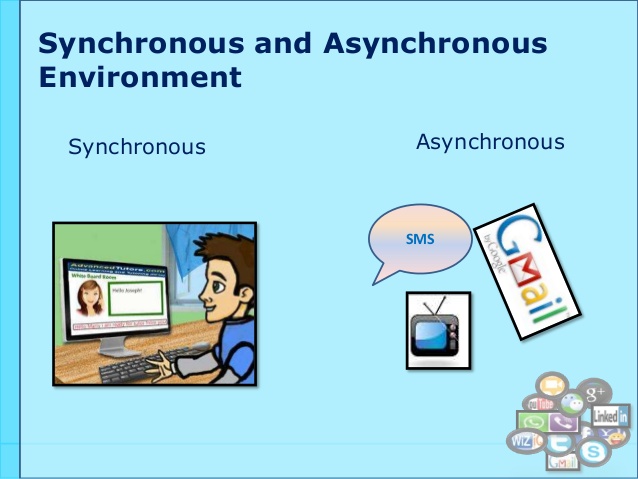


## Synchronous and asynchronous activities

Synchronous activities take place in real time. Synchronous communication between two people requires that both be present at some point. Examples of synchronous activities are chat conversations and audio / video conferencing.

Asynchronous activities are time independent. An example is a self-paced course for asynchronous e-learning because online learning takes place at any time. Email or discussion forums are examples of asynchronous communication tools.

Flexibility Internet technology creates gray areas related to the concepts of synchronous and asynchronous. For example, video and audio lectures or events can be recorded and subsequently made available to attendees who were unable to attend the live event.



## Elements of e-learning

As mentioned earlier, approaches to e-learning can combine different types of e-learning components, including:

* E-learning facilities;
* e-mentoring;
* Collaborative learning; i
* Virtual classroom.

Learning content can be simple materials, such as documents or presentations, but also more complex interactions, simulations or animations. Today, content even goes to the level of virtual or augmented reality.

Activities that provide a human and social dimension in an online environment to support learners in their learning experience are called online or e-mentoring. Online mentors provide individual support and feedback to participants through online tools, moderate discussions, guide and evaluate the work of participants at the individual and group level.

Collaborative learning activities can be online discussions and knowledge sharing all the way to working together on a joint project. Tools such as chats, discussion forums and blogs are often used for online collaboration among attendees.

A virtual classroom is a method of teaching most similar to traditional classroom training, because it is entirely led by a lecturer. The lecturer teaches remotely in real time, with a group of participants and uses a combination of materials (eg PowerPoint presentation, audio or video materials). It is a synchronous form of e-learning.

## Methodology

Methodological elements are a way of defining the structure within the educational material itself. For example, it could be a lesson, an assignment, a multiple-choice question, a quiz, a discussion, or a group case study.

At the very beginning, when creating a training plan and the educational content itself, the methods that could be used should be evaluated. Simple methods make it easy to create content, but they lack flexibility, richness and functionality. On the other hand, complex methods can be difficult to establish and slow to develop, although they have the potential to provide a more interesting learning experience.

It is possible to use different methods for e-learning:

* Socio-constructivist approach - this method is particularly well supported by the use of discussion forums, blogs, wikis and online collaborative activities. It is a collaborative approach that opens the creation of educational content to a wider group, including the participants themselves.
* The cognitive perspective focuses on the cognitive processes involved in learning, as well as how the brain functions.
* The emotional perspective focuses on the emotional aspects of learning, such as motivation, engagement, fun, and so on.
* The behavioral perspective focuses on the skills and behavioral outcomes of the learning process. Role-playing and applying settings in the workplace.
* The contextual perspective focuses on the environmental and social aspects that can encourage learning. Interaction with other people, shared discovery and the importance of support as well as pressure.
* Etc.

According to the report on innovative methods, published by Open University with the aim of researching new forms of teaching, learning and assessment, “contextual learning” is one of the recommended forms, because examples and cases are related to the working context of participants. The focus should be on non-formal and procedural learning to address dropout problems, participants should address the problems they face in the workplace during the training, in stages, small steps, with guidance and encouragement at each stage.

# Transformation suggestions/scenarios

## Completely online - asyncrono

Duration: 16 hours (2 weeks) - for participants

Mentor workload per group: 5 hours per week

Group activities: the workload per task per student is specified, the activities themselves will take longer due to the asynchronous mode

Goals:

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 subjects, at the level of students dedicated to the issue of special importance) at the level of extracurricular activities) and indicate ways to each of the key competencies can be applied in STEM subjects
5. Develop individual or group preparation for achieving key competencies (preferably at school level, planned in the annual plan)

Target group: 1860 teachers, 900 primary school teachers and 960 STEM / MINT subject teachers in primary and secondary education

Group size: 20 participant

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Duration (in hours) | E-course topic / subtopic | R.br. | Activity title | Description of the activity | Description of the functionality of the tools used in the activity |
| **First week of e-course** | | | | | |
| **Workshop 1** | | | | | |
| 0.5 h | Introduction | 1. | Personal activity of students – discussion with other **students** "Presentation of lecturers and participants"  Personal activity of students – discussion with other **students** "Presentation of lecturers and participants" | Encourage students to participate in the discussion in the discussion forum.  Open-type issues encourage participants to share information about themselves and their work experience in education and to share their experience in education for key competences. | MS Teams:Discussion within one team (joint conversations) |
| 0,5 h | Expectations | 2. | Guided activity – discussion with **other students**  "Expectations of training" | Encourage students to participate in the discussion in the discussion forum.  Open-type issues encourage participants to share information about their training expectations.  The mentor eventually sums up expectations and gives his review | MS Teams:Diskusija unutar jednog tima (zajednički razgovori) |
| 1 h | Getting acquainted with the project, concept, schedule and objectives of training, tasks and other post-training activities  Recalling the competences necessary for life and successful performance, as well as the need for lifelong training and improving key competences | 3. | Guided Activity - **Virtual Classroom** | The mentor schedules a meeting with students and gives a presentation on the default topics.  Answer students' questions —possibly both by voice and through chat.  Divide students into 4 to 5 groups. Devise another way of dividing, because the presentation mode is not possible.  The questions that are conceived in the presentation of this section, the mentor asks the students, and they respond via chat or voice. Groups are tasked with publishing the conclusions in the joint discussion section after the meeting.  After this meeting, the mentor opens channels within the team, for each group. Only group members and a mentor can access each channel.  The meeting must be recorded in order for the material to remain available to students both subsequently and/or for those who have not been able to be present.  The presentation should also be shared in the discussion of the meeting. | MS Teams: Audio/video meeting |
| 0,5 h | Conclusions after the meeting | 4. | Group Activity – "**Conclusions**" | The group decides for itself whether to organize a group meeting or to agree within the group in discussions regarding the conclusions and their presentations. The group selects a leader who will present the conclusions at joint talks. | MS Teams:Discussion within a single channel or meeting  Discussion at joint talks |
| Workshop 2 | | | | | |
| 1 h | Getting acquainted with the European Framework of Reference of Key Competences for Lifelong Learning  Introduction to the Montenegrin Framework Programme of Key Competences and proposals for learning outcomes for key competences at ISCED levels 1, 2, and 3. | 5. | Guided Activity - **Virtual Classroom** | The mentor schedules a meeting with students and gives a presentation on the default topics.  Answer students' questions —possibly both by voice and through chat.  The brainstorm that was conceived in the presentation is carried out during the meeting. The mentor at the end of the meeting sums up the ideas and publishes them in the discussion of the meeting.  The meeting must be recorded in order for the material to remain available to students both subsequently and/or for those who have not been able to be present.  The presentation should also be shared in the discussion of the. | MS Teams: Audio/video meeting |
| 1 h | Exercise 1 - EU framework for key competences for lifelong learning | 6. | Group Activity – **"Exercise 1**" | Each group gets to read a portion of the text provided in the description of the exercise. The group decides for itself whether to organise a group meeting or agree within the group in talks related to Exercise 1. The group creates a mind folder using the tool as you want: Powerpoint or OneNote within MS Teams.  The work produced is presented by the team leader at joint talks. | MS Teams:Discussion within a single channel or meeting  Additional tools within MS Teams  Discussion at joint talks |
| 0,5 h | Vježba 2 - Crnogorski okvir za obrazovanje za integraciju ključnih kompetencija u nastavu i učenje | 7. | Group activity - "**Exercise 2**" - Discussion | Each group gets to read a portion of the text provided in the description of the exercise. The group decides for itself whether to organize a group meeting or to agree within the group in talks related to Exercise 2. The group creates reviews, conclusions and suggestions using the optional tool: Wiki, or OneNote within MS Teams.  The work produced is presented by the team leader at joint talks. | MS Teams:Discussion within a single channel or meeting  Additional tools within MS Teams  Discussion at joint talks |
| Workshop 3 | | | | | |
| 1 h | Introduction to the Teacher Handbook and the project instruments related to the preparation, implementation, documenting, evaluation and evaluation of education for key competences.  Presentation of good examples of annual planning and successful preparations and lessons spent so far for key competences (pre-prepared by participants and coaches). | 8. | Guided Activity - **Virtual**  Classroom | The mentor schedules a meeting with students and gives a presentation on the default topics.  Answer students' questions —possibly both by voice and through chat.  The meeting must be recorded in order for the material to remain available to students both subsequently and/or for those who have not been able to be present.  The presentation should also be shared during the discussion. | MS Teams: Audio/video meeting |
| 1 h | Exercise 3 - Study Manual | 9. | Group Activity –**"Exercise 3"** | Each group gets to read part of the manual provided in the description of the exercise. The group decides for itself whether to organise a group meeting or agree within the group in talks related to Exercise 3. The group creates a review using the tool as desired: Wiki, or OneNote within MS Teams.  The work produced is presented by the team leader at joint talks. | MS Teams:Discussion within a single channel or meeting  Additional tools within MS Teams  Discussion at joint talks |
| 0,5 h | Exercise 4 - Value Axis | 10. | Group activity - **"Exercise 4"** | The group decides for itself whether to organize a group meeting or agree within the group in talks related to Exercise 4. A group creates a value axis using the tool as you want: PowerPoint or OneNote within MS Teams.  The work produced is presented by the team leader at joint talks. | MS Teams: A discussion within a single channel or a meeting  Additional tools within MS Teams  Discussion in joint conversations |
| Second week of the e-course | | | | | |
| Workshop 4 | | | | | |
| 6 h | Exercise 5 - Making preparation for classes | 11. | Group activity –**‘’Exercise 5**“ | Before beginning this exercise, the mentor should now group the participants into different groups from those that were for the previous four exercises. There should be teachers from the school in the groups, so that they can continue to work together even after the training. The mentor creates new channels for new groups for Exercise 5. An individual channel can only be accessed by group members and the mentor.  The mentor presents to the participants and groups what their task is in this exercise. The prepared preparation will be presented by the groups to each other in a virtual workshop that follows at the end of the week.  The group decides for itself whether to organize group meetings or to agree within the group in conversations related to Exercise 5. The group creates a scenario using a tool of their choice: MS Word, Wiki or OneNote within MS Teams. | MS Teams: A discussion within a single channel or a meeting  Additional tools within MS Teams |
| 0,5 h | Exercise 6 – Imagine success | 12. | Personal and group activity of participants - **"Exercise 6"** | Each member thinks about the task individually and writes their thoughts in a group discussion. They then think in groups about the key elements of success.  The group decides for itself whether to organize a group meeting or to agree within the group in discussions related to Exercise 6. The group creates a list of elements of success using the tool of choice: Wiki or OneNote within MS Teams.  The work is presented by the team leader at joint interviews. | MS Teams: A discussion within a single channel or a meeting  Additional tools within MS Teams  Discussion in joint conversations |
| Workshop 5 | | | | | |
| 1 h | Presentation of prepared preparations | 13. | Guided activity - virtual classroom | The mentor schedules a meeting with the participants and moderates the presentations of the teams and giving each other feedback between the teams - - possible both by voice and via chat.  The meeting should be recorded so that the material remains available to the participants both subsequently and / or for those who were not able to attend. | MS Teams: Audio/video meeting |
| 1 h | Exercise 7 - Development of an action plan for the implementation of education for key competencies at the school level | 14. | Group activity - "Exercise 7" | The group decides for itself whether to organize a group meeting or to agree within the group in conversations related to Exercise 7. The group creates an action plan using the tool of choice: MS Word, Wiki or OneNote within MS Teams.  The work is presented by the team leader at joint interviews. | MS Teams: Discussion within one channel or meeting  Additional tools within MS Teams  Discussion in joint conversations |
|  | The end |  | **Evaluation list** | | |

**Kalendar online obuke**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **DAY 1** | **DAY 2** | **DAY 3** | **DAY 4** | **DAY 5** | **DAY 6** | **DAY 7** |
| **WEEK 1** | Start of training.  Beginning of personal activity 1.  Start of guided activity 2. | End of personal activity 1  End of guided activity 2 | Guided activity 3 - Virtual classroom  Start of group activity 4 | End of group activity 4  Guided activity 5 - Virtual classroom  Beginning of group activity 6  Start of group activity 7 | End of group activity 6  End of group activity 7  Guided activity 8 - Virtual classroom  Start of group activity 9  Start of group activity 10 |  | End of group activity 9  End of group activity 10 |
|  | **DAY 8** | **DAY 9** | **DAY 10** | **DAY 11** | **DAY 12** | **DAY 13** | **DAY 14** |
| **WEEK 2** | Beginning of group activity 11  Beginning of personal and group activities 12 |  |  | End of group activity 11  End of group activity 12 | Guided activity 13 - Virtual classroom  Beginning of group activity 14 |  | End of group activity 14  End of training |

## Fully online - synchronously

Duration: 16 hours - 2 days, an interval of 12 days between the first and second day for each group

Lecturer workload: 16 hours per group

All activities take place in synchronous mode, except for the final definition of the topic for preparation to be checked in the school and harmonized with the annual work program, and other teachers

Objectives:

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 held, 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 subjects, at the level of students dedicated to the issue of special importance) at the level of extracurricular activities) and indicate ways to each of the key competencies can be applied in STEM subjects
5. Develop individual or group preparation for achieving key competencies (preferably at school level, planned in the annual plan)

Target group: 1860 teachers, 900 primary school teachers and 960 STEM / MINT subject teachers in primary and secondary education

Group size: 100 participants for plenary activities, 5 participants for group exercises, 20 participants for preparation for classes (these groups will be divided into smaller groups as needed)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Duration  (in hours) | E-course topic / subtopic | No. | Activity title | Activity description | Description of the functionality of the tools used in the activity |
| **The first day of the e-course** | | | | | |
| **Workshop 1** | | | | | |
| 15 min | Presentation and introductory information: workshop schedule, method of work, technologies, rules of work in the online environment, etc. | 1. | Guided activity - virtual classroom | Presentation - ppt slides are shared with participants during the presentation | MS Teams: Audio/video meeting |
| 15 min | Expectations from training - interactive exercise | 2. | Guided individual activity - interactive exercise "Expectations from training" | The lecturer switches on the screen sharing page to www.mentimeter.com which contains open-ended questions related to training expectations and expectations from the whole process.  Attendees share their expectations using mobile access to the tool, and a cloud of all words typed by attendees is created on the screen.  The lecturer summarizes the collected expectations and moves on to the next slide where the question of expectations is related to the whole process.  The whole process is repeated on the second question. | MS Teams: Audio/video meeting and Mentimeter |
| 20 min | Icebreaker | 3. | Guided individual activity - chat | The lecturer asks two questions one by one.  It first gives everyone 10 minutes to answer the first question in the chat on the call.  "What you learned / gained through regular education at school, and it helped you a lot in your life (for work and everyday life). Are they facts, skills, knowledge, values, a combination of them or something else? ”  It then gives an additional 10 minutes to answer the second question in the chat.  "Remember who was your favorite professor, write down why and how it affected what you gained through regular education, and it was the most useful in your life."  The lecturers follow the answers to the chat and prepare a slide on which the information collected from the participants will be summarized. | MS Teams: Audio/video meeting and chat |
| 30 min | Presentation of the project, concept and goals of the training, tasks and goals after the training, explanation of the portal | 4 | Guided activity - virtual classroom | Presentation - ppt slides are shared with participants during the presentation | MS Teams: Audio/video meeting |
| 20 min | Discussion and conclusions | 5. | Guided activity - "Conclusions" | The lecturer encourages the group to ask questions about possible ambiguities and to present their conclusions. | MS Teams: Audio / video meeting - encourage participants to get involved with their audio |
| Workshop 2 | | | | | |
| 10 min | Introduction to the European Reference Framework for key competences for lifelong learning | 6. | Guided activity - virtual classroom | The lecturer presents the European framework | MS Teams: Audio/video meeting |
| 1 h | Exercise 1 - EU framework for key competences for lifelong learning | 7. | Group activity - "Exercise 1" | The lecturer explains the task and how to work in groups. Before going to the group rooms, the lecturer invites the groups to present at the end - one A group, one B group,… and one E group. Whoever responds to the chat first, that group will present.  Participants temporarily leave the plenary meeting and join their group activity development channel, from A.1 to E.4, where they find a part of the document to read and make a mind map related to that part of the document.  The groups need to agree which of them will work on their computer mind map and share the screen with the others. All participate in the work, but one person makes. The mindmaster.com tool is used for this purpose.  When the mind map is created, the person who created it uses the "Share" option and copies the link to the plenary meeting chat.  Lecturers take screenshots of all the mind maps and make a presentation, so that everyone can see the work of other groups in a structured way. | MS Teams: A discussion within a single channel or a meeting  Additional tools: mindmaster.com  Group presentations in plenary |
| 10 min | Introduction to the Montenegrin Framework Program of Key Competences and Suggestions for Learning Outcomes for Key Competences at ISCED levels 1, 2 and 3. | 8. | Guided activity - virtual classroom | The lecturer presents the Montenegrin framework | MS Teams: Audio/video meeting |
| 10 min | Quizz | 9. | Individual activity - Quiz on outcomes and key competencies | The lecturer shares a link to the quiz, and instructs the participants when they should return after the break. | Online quizz |
| Radionica 3 | | | | | |
| 10 min | Introduction to the Teacher's Manual and the instruments developed in the project related to the preparation, implementation, documentation, evaluation and evaluation of education for key competencies. | 10. | Guided activity - virtual classroom | In the plenary session, the lecturer presents the manual and examples. | MS Teams: Audio/video meeting |
| 1 h i 20 min | Exercise 2 - Study the Manual | 11. | Group activity - "Exercise 2" | Participants return to channels A.1 to E.4.  They get a manual as a whole and one part to study.  They have 65 minutes to study the manual individually. Each participant takes notes on the clarity, meaningfulness, and usability of the handbook, both the pros and cons.  In the last 15 minutes of this block, attendees present their comments in channels to each other and in channel conversations publish the conclusions of their group regarding the clarity, meaningfulness and usability of the handbook. | MS Teams: A discussion within a single channel or a meeting |
| Workshop 4 | | | | | |
| 10 min | Presentation of good examples of annual planning and successful preparations so far and hours spent for key competencies (prepared in advance by participants and trainers).  The role of the teacher  Instructions for making your preparation | 12. | Guided activity - virtual classroom | In the plenary session, the lecturer presents examples, the role of the teacher and instructions. | MS Teams: Audio/video meeting |
| 80 min | Exercise 3 - Making preparation for classes | 13. | Group activity - "Exercise 3" | This exercise is done in different groups than the previous two exercises. There should be teachers from the same schools in the groups (in each group of two to four schools), so that they can continue to work together until the second term of training and after the training. Channels are named after numbers, for example from 1.1. to 1.5.  This exercise does not end with the end of this day. By the time of the dear day of training, participants need to align their ideas with the school’s annual work program in the area related to the implantation of key competencies. Accordingly, they should develop their individual plan and, using the Handbook and previous examples for the development of key competencies, define the final guidelines for preparation. | MS Teams: A discussion within a single channel or a meeting |
| Second day of the course | | | | | |
| Workshop 5 | | | | | |
| 3 h | Exercise 3 - Making preparation for classes - continued | 11. | Group activity - "Exercise 3" | Grupe rade na finalizaciji pripreme za nastavu. | MS Teams: A discussion within a single channel or a meeting |
| Workshop 6 | | | | | |
| 1,5 h | Presentation of prepared preparations | 13. | Guided activity - virtual classroom | Presentations take place within smaller groups / channels formed for Exercise 3. | MS Teams: A discussion within a single channel or a meeting |
|  | | | | | |
| 1,5 h | Exercise 4 - Development of an action plan for the implementation of education for key competencies at the school level | 14. | Group activity - "Exercise 4" | Based on the prepared preparations, in this block the groups develop Action Plans for their preparations | MS Teams: A discussion within a single channel or a meeting |
|  | The end |  | **Evaluation list** | | |

# Technology and tool proposal

As a platform for all teaching and collaborative processes, it is proposed to use MS Teams. Microsoft Teams is a Office 365 teamwork application that allows you to:

* Collaborate and talk with colleagues and other participants, as well as mentors
* Schedule meetings and hold video conferences, virtual classrooms
* Share content
* Add different applications.

Instructions on how to start using MS Teams can be found at the following links (Croatian language):

* <https://support.microsoft.com/hr-hr/teams>
* <https://www.carnet.hr/wp-content/uploads/2020/03/Microsoft-Teams-U%C4%8Ditelji.pdf>
* <https://hrvatskitelekom.hr/ResourceManager/FileDownload.aspx?rId=13656&rType=2>

It is recommended to use the MS Forms tool, which can also be integrated into the MS Teams environment, to implement and implement the questionnaire on student satisfaction with the training.

## Specific instructions for organizing training in MS Teams

Prior to the start of the training, trainers / mentors should study the work in MS Teams on the above links.

For each group of students (up to 20), the trainer opens a team to which he invites all participants using their email addresses to which their Office 365 account is linked. Given that Office 365 is just beginning to be used in the Montenegrin education system, teachers probably do not have experience with these tools, so the coach should provide support and advice in this segment to those who will not be able to cope immediately.

In addition to the trainees assigned to each trainer, the trainer invites a person from the Project Office in charge of supervising the training to the team.

Before the start of the training, the mentor creates a training calendar using the calendar from this document, but enters the actual dates, depending on the start date of the training. Also, after all participants are invited, he schedules all meetings / virtual classrooms according to the calendar, and he chooses the time within a certain day for each virtual classroom. It is also possible to combine several virtual classrooms into one, if it suits the mentor and / or the group. Each virtual classroom needs to be recorded and shared with the participants, as well as the PowerPoint presentation used.

All joint activities that involve discussions or the publication of results are conducted in the Posts in the General channel. For each activity, the mentor opens a separate conversation (thread), writes instructions for the activity in the first message, and informs the participants about the deadlines for that activity, and asks them to publish their thoughts or group results as answers to that first message.

During the training, participants will be divided into groups twice, and the mentor should open channels within the team for each group. For example, if participants are to be divided into five groups, during the first week the mentor opens five channels, and at the end of the first week, in preparation for the beginning of the second week, opens five new channels because there will be a different distribution of participants into groups. Channels should be private so that only group members and the mentor can see them.

Attendees should be encouraged to use built-in applications such as Wiki, OneNote, or Microsoft exercise tools within their channels, and can share the final screen image with other groups so as not to waste time downloading and sharing files. It is recommended that they use tools within MS Teams, as these tools encourage collaboration and collaboration.

If a student or group does not respond, it is advisable for the mentor to remind them of the deadlines using MS Teams, and if there are still no results, contact with other channels such as email or mobile phone is recommended.

# Tips for maintaining a virtual classroom

## Preparation

Since there are no face-to-face meetings with students during the virtual classroom, it is necessary to thoroughly plan the maintenance of the virtual classroom.

The planning phase includes:

* Getting to know the participants and their specific needs
* Planning appropriate time for the virtual classroom and coordinating the schedules of all attendees
* Sending all relevant materials to participants in advance
* Getting to know the details of working with a network tool
* Inserting a lot of interactions into the content of the virtual classroom (asking questions, quizzes, etc.)
* Sometimes virtual classrooms are perceived as boring and unattractive, so the trainer needs to put more effort into the visual content in his presentation, for example:
* Separation of long sections of text with subheadings and space between paragraphs
* Embedding a relevant and attractive image
* The goal is attractiveness, but also purposefulness

## Implemention

Although the trainer will teach the participants the same content as they would in the classroom, some different rules must be applied in the online environment:

• The trainer should be even more present and involved during the virtual classroom, compared to a standard classroom. Here are some tips on how to achieve this:

o Sending a welcome message before the virtual classroom to reach a relationship with the participants

o Answering questions asked in the discussion forum

o All lectures should be recorded and made available to participants at all times

• In an online environment, it is even more important to communicate clearly, as participants do not see the trainer face to face and some misinterpretations and communication challenges are possible. Here are some tips:

o Write more instructions than necessary for regular classes

o Making a two-minute video to explain some details of the task, so that this video is always available to participants

o Sharing additional examples

• If the trainer has no experience working with virtual classrooms, it is advisable to stay authentic and act as if he or she is in the classroom. Here are some tips:

o Humor and a relaxed teaching style are desirable

o Written communication before and after classes should be full of warmth, understanding and kindness

• Since distance is a communication barrier, a coach can reduce it if:

o Often asks participants for feedback on their satisfaction with the clarity of the lessons

o Ask your colleagues to participate in one of the virtual classrooms and get honest feedback from them

# Tips for moderating an online discussion

In collaborative online learning, a group of learners creates synergies around common learning goals. The mentor is responsible for ensuring that the imagined educational process is organized, stimulating and effective. The main tasks of the mentor are as follows:

* providing information on tasks / exercises, deadlines and places to upload or download files;
* monitoring participants during their work by checking the workflow and individual or group results, forming and opening groups, and involvement in group dynamics, if necessary due to potential conflicts or blockages in the group;
* initiating and concluding discussions;
* answering questions about tasks, deadlines or the use of learning tools;
* motivating students to work, think and exchange ideas;
* maintaining contacts with other partners in the process (eg administrator, implementation monitoring expert, technician); i
* organizes the final evaluation of e-training.

It is important to clearly communicate to the participants the objectives of the online discussion, similar to the discussions that take place in the classroom. Discussion can be even more important in an online environment, because attendees can feel isolated, without regular contact with other attendees. Therefore, purposeful discussion is useful for achieving student engagement and a sense of being part of a learning community.

However, the emphasis is on purposeful discussion. There is a wide range of possible goals for online learning discussions, and some of them are listed below:

* Improved understanding
* build an argument for your thoughts or attitudes
* encourage a deeper understanding of terms, their applicability in different contexts and their connection with other terms or for the acquisition of new meanings;
* collaborative learning: learning from each other, sharing knowledge and experience and supporting colleagues;
* critical thinking
* feedback for the mentor
* Etc.

Mentors should be aware of the goals or purposes of each discussion and communicate it clearly to participants.

## How to organize a discussion?

Special attention should be paid to the organization of online discussion. Attendees need to know what is expected of them during participation. Discussions need to be organized in such a way that participants realize that by participating in the discussion they will learn more and share experiences with others.

Here is an example of how a mentor can start a discussion:

* "Online discussions are an important part of the training. To obtain a certificate of attendance, we expect you to participate regularly by reading the discussions and contributing to them. You should sign up for discussions at least three times a week and contribute to each discussion with at least one message. We also expect you to respond to comments on your contributions.
* Discussions give you the opportunity to share knowledge and experiences, seek feedback on your ideas from colleagues and mentors, and help others.
* You are expected to answer the topic, questions or comments in a way that reflects your personal opinions, experiences and knowledge. Feel free to list sources you think might be of interest to others in your group. Try to stay focused on the topic.
* If you do not understand the exact instructions for each discussion, contact your mentor.
* Active participation in the discussion is expected and encouraged.

Every post should:

* add value to the discussion;
* present a new way of looking at the questions that are being asked;
* identify earlier contributions from other participants as needed;
* if possible, include other sources (quoting small passages is acceptable - try to limit citations to no more than three or four lines);
* answers are expected that will be more meaningful "... I agree with that ..." or "... and I think the same"[[1]](#footnote-1)

The challenge will be to find a balance between making participants need time to design their posts and making discussions seem inactive. The mentor should be active, but also give the participants time to think and publish their posts.

If discussions deviate from the topic, the mentor must refocus them. Attendees may not always guess what is required of them and will only give their opinion on the topic,

If the opinions of two or more participants differ or conflict in opinions, they should be asked to identify in the training materials the parts that support or challenge their opinions.

Participants may, of course, rightly disagree with the ideas or concepts in the program, but they should be encouraged, not only to state the reasons why they agree with these ideas, but also to properly refer to the content of the training in the discussion. The role of the mentor is to move participants from opinions based only on personal experience to reflections that are supported by evidence.

## How to encourage atendees?

Attendees will vary in their willingness to participate in online forums. There are many strategies to encourage participation. Probably the most important thing is to ensure that the discussions have meaning and significance for the attendees. Thus, the choice of topic and its connection to the tasks will encourage many to participate without additional motivation.

Here are some more ideas to motivate attendees:

**Setting a positive tone**

The mentor should create an environment that encourages participation, conversation among participants and with the mentor.

Direct negative criticism of individual participants ’comments by both mentors or other participants should be avoided, discouraged in doing so, or such situations avoided as much as possible. Attendees and mentors should look for value in every contribution, even if it does not seem so at first glance. The advantage of such comments is that based on the presentation of evidence or research of logic, that statement can be challenged.

If a student reacts aggressively to another's comment, the mentor must respond quickly, by modeling an appropriate response and recognizing the value of both participants' comments. For example "I'm glad that X made an interesting point, which is a pretty common view on this topic. However, Y's answer is also interesting, because ..... What do the others think?". Mentors should actively intervene and take responsibility when comments are too simple and do not go to the heart of the matter. At the same time, the mentor should avoid giving their opinions instead of the trainees.

**Supporting quieter attendees**

Mentors should pay attention to individuals who participate little or not at all. After the first two days, the mentor should check which participants have not joined the Teams and contact those who are inactive by e-mail or telephone, and ask them to report to the discussions, introduce themselves and start by answering some of the comments that were set by other attendees.

If the student lacks self-confidence, the mentor can ask him to prepare a response to any of the comments and send it to the mentor by email before posting. The mentor can give feedback and further encourage the trainee.

Additional reasons for contacting inactive participants may be their involvement in group assignments and exercises.

Care should be taken when contacting inactive participants. Some are inactive for legitimate reasons, such as a family crisis or too much work. It is therefore important that the mentor identifies the reason for non-participation before taking corrective action.

**Managing difficult learners**

Participants who dominate the discussions can also pose a problem. Such attendees will write long answers or respond to all attachments. They can also be aggressive, critical or criticize / reject the contributions of other participants. Such attendees can very quickly stifle discussion.

Still, such attendees can be a great resource because they have the ability to make quality contributions to the discussion. The goal of the mentor should be to keep such students active, but above all in a controlled and disciplined way.

The mentor strategy should begin with a private email, thanking the attendee for their contribution, but suggesting that a limit of posts of a maximum of 250 words per post be used. Additionally, it can be suggested to the trainee that in this way they will be more focused and thus the trainee's comments will be more convincing, as other trainees are unlikely to read long comments.

The next strategy that can be applied with such participants is to ask him to take the role of the initiator of the topic at the next discussion and / or to prepare a summary of the discussion and not to participate in the discussion so that he can prepare an objective summary in relation to the group.

# Tips for organizing project work

Participation in team tasks projects offers participants the opportunity to build relationships with colleagues and to increase the level of collective competencies because each member of the group brings something different to the group. However, in a networked environment, it may be more difficult to encourage learners to work than in the classroom, as not everyone is active at the same time and needs a little more negotiation to achieve a common understanding of the task, work plan and division of tasks. among team members.

Below are some of the best practices for working with students in an online environment.

**Forming teams**

The best teams are formed when each member can bring something different to the group. If we have more than one natural leader in a group, it can cause tension because no one wants to be led. At the same time, if there are no leading people, it can be difficult for the group to form a vision of the project or task and start working. It is good if you can get to know your students and their preferences. You can collect this information through pre-training questionnaires or from initial activities that take place before group activities begin. Are there participants who are more active in the discussions? Do some students work in the same organization?

**Small groups with an odd number of participants**

Each participant is very busy with professional and personal commitments, which makes it difficult to schedule team meetings. One of the most attractive features of online training is the ability to learn at a time that is convenient for the participant, without the need to be present at the training on certain days and times. The larger the teams, the more complex their schedule will be. The ideal number of attendees in a team is three attendees, but this will probably not always be possible. The odd number also eliminates the possibility of splitting the team into two parts when they have to make decisions. Teams should be encouraged to make unanimous decisions, but this may not always be possible. An odd number guarantees that there will always be a majority in the event of a team vote.

**Virtual group space**

It has already been stated above that each group gets its own channel in which to discuss assigned tasks, connect with each other and share ideas. These channels will include a space for discussions, a place to share files and the ability to talk in real time (audio / video and chat). Mentors should provide an overview of all the possibilities of a virtual shared space and give suggestions for their use. While this may seem intuitive to mentors, some attendees may not know how to make the most of virtual space or how to use individual opportunities. This can lead to underutilization of shared virtual space and a less efficient process during a team project.

**Monitoring the work of the group**

It is better not to wait for a message from the team when problems arise in performing tasks. The mentor should announce in advance that he or she will be “present” within the virtual space and consistently offer advice and feedback as the team progresses through the task. It is important to do this in a way that is not overly intrusive. The mentor should adapt and approach each group in the way they need, and provide individualized support. This is also useful for teams that are unable to transparently manage the process and communicate their needs.

# Tips for evaluating student work and giving feedback

Conducting evaluation activities is a powerful way to achieve learning outcomes and ensure the completion of training. Evaluation determines the level to which each learning goal is achieved - hence the level of success of the training.

On successful trainings, evaluation is conducted throughout the training, not just at the end. There are many ways to do this, not just, for example, a simple exam at the end of the training.

As in the classroom, we apply both formative and summative assessment in the online environment.

A key component of formative assessment is feedback, whether it is an automated test or a written assignment or the participation of participants in a discussion.

Additionally, we can apply "Authentic Assessment. Application activities, such as case studies, can be considered authentic activities. Authentic activities show not only the acquisition of knowledge, but also the ability to apply that knowledge in professional or other environments. Such activities become even more important when asked participants to reflect on what they have learned.When activities are closely aligned with learning objectives, participants are more willing to participate in activities.

Formative and authentic assessment will be included in this training. Assessment activities should be integrated into several parts of the training, providing ongoing feedback.

This means that the mentor can give feedback to the teams on their solution of tasks immediately after their completion and there is no need to wait for the end of the training. Short tests during training can also be applied.

Individual feedback to each participant can be about the quality of his or her participation in the discussions.

Feedback from teams and individual participants should be in the form of a few sentence comments.

1. Bates, A. Poole, G. (2003). Supporting Technology-Based Learning in Effective Teaching with Technology in Higher Education. San Francisco: Jossey-Bass/John Wiley. [↑](#footnote-ref-1)