



### AIM

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how to develop training  
content.

IMONED consortium

# Methodology for modules and topics design (IO2/A1)

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**Introduction on methodology**

**1 GENERAL**

<b>Project Title</b>	<b>Improvement of the knowledge, skills and competence of the teachers in on-line and distance education - IMONED</b> <b>Project No. 2020-1-ES01-KA201-082730</b>
<b>Aim</b>	<p>Project answers to the priority “Strengthening the profiles of the teaching profession” by elaborating dedicated for school education and teachers products. Those products are devoted to teachers who are not very familiar with distance learning problems in the current epidemic situation. Apart from the present situation the problem with gaps in knowledge among teachers in the area of distance learning will last. The IMONED project, by answering the priority “Innovative practices in the digital area” is going to help to reduce these problems in countries, where the problem appeared unexpectedly.</p> <p>Project IMONED aims also for long term needs of teachers to raise their skills and competences in elaboration of the modern educational content for their apprentices and permanent self-development in the innovative and modern technologies and tools.</p> <p>Meeting the objectives of the project will be developed intellectual outcomes:</p> <ul style="list-style-type: none"> <li>● <b>IO1</b> – New and innovative curriculum of the distance learning and training methodology</li> <li>● <b>IO2</b> – Technological abilities and devices for sorting out separation learning and tools for creating content for separation learning</li> </ul>
<b>Target Group</b>	<p>There are three main target groups:</p> <ol style="list-style-type: none"> <li>1. middle age teachers who are less familiar with the overall virtual environment;</li> <li>2. teachers less qualified in distance learning; teachers from rural areas</li> </ol>

	<p>3. school directors who are able to be aware of the possibilities of organizing effective distance learning.</p>
<b>Goals</b>	<p>The objectives of the training program are developing:</p> <ul style="list-style-type: none"> <li>• confidence in distance learning;</li> <li>• technical competences (IT, media, online tools) in teaching;</li> <li>• organizational competences (eg organizing working and working time, getting help and managing projects);</li> <li>• communication competence (eg verbal and non-verbal, replaced by emoticons or acronyms);</li> <li>• manager skills (eg leadership and targeting);</li> <li>• teachers' interpersonal competencies in teaching (eg working skills, relating to other people with the title);</li> <li>• teachers' interpersonal skills in teaching students;</li> <li>• skills of shaping students' personal competences (eg independence, creativity, development in the development phase);</li> <li>• and raising the level of education and training skills in teaching;</li> <li>• and increasing the teacher's motivation in terms of self-improvement;</li> <li>• students' improvement and motivation in the realization of tasks</li> </ul>

## 2 CONTENT

### 2.1 Specific Modules and Topics

Modules and Topics	Duration
Module 1 - Digital Learning Management Systems	3h
Module 2 - Systems built for use with basic mobile phones	3h
Module 3 - Strong offline functionality systems	3h
Module 4 - Mobile reading applications	3h
Module 5 - Cooperation platforms supporting live video communication	3h
Module 6 - External distance learning solution repositories	3h
Topic 1 Online class adapted to the student's abilities	3h
Topic 2 The learning course should be transparent	3h
Topic 3 E-learning materials should be attractive	3h
Topic 4 The course should retained the attention and interest of students	3h
Topic 5 Continuous support and contact with the e- teacher	3h

### 2.2 Learning Outcomes

**After the training program, attendees will know:**

- What are the online platforms and tools that support distance learning;
- What kind of tools to choose in specific situations in distance learning;
- The rules of work on the e-learning platform;
- How to deal with technical issues;
- The ways of adjusting the courses to the students' predispositions;
- The rules of transparent and logical course structure;
- How to increase the attractiveness of materials in distance learning;
- How to maintain students' attention and interest;
- How to establish and maintain contact with students;
- Know how to support students at different stages of distance learning.

**Are able to:**

- Conduct online classes using adequate tools;

- Improve their efficiency and performance during the online class;
- Adapt the materials to the students' predispositions;
- To construct online courses in a transparent and logical way;
- Create attractive materials supporting the teaching and learning process.

### **2.3 Learning materials and readings**

Materials for each topics will be available at [www.imoned.eu](http://www.imoned.eu)

### **2.4 Assessment**

Methods of learning outcomes verification:

- Involvement in teamwork;
- Activity during classes;
- A centralized pilot testing with skilled teachers, educators and experts.

### 3 MODULES

#### 3.1 MODULE 1: Digital Learning Management Systems

##### 3.1.1 General

<b>Specific module</b>	Digital Learning Management Systems
<b>Duration</b>	<b>3 hours</b>

##### 3.1.2 Specific Module

- 1 Systems for mobile phones in education
- 2 Key features of the systems built for use with basic mobile phones
- 3 Strengths and weaknesses
- 4 Recommendations for teachers to use LMS, i.e. Moodle, Google for education, Teams 365 or Edmodo.

##### 3.1.3 Summary

According to the Oxford glossary Learning management system (LMS) is a software system for managing training and education using the internet. The module is intended for learners, i.e. teachers and trainers, who would like to get more knowledge about the learning management systems and who after finishing this module will know the functionality, usability and effectiveness of LMS in online learning and will be able to choose the most appropriate LMS to implement online learning processes.

##### 3.1.4 Learning Outcomes

**After this module attendees will be able to:**

- 1 to identify the required functionality of LMS's
- 2 to evaluate the necessary effectiveness LMS for their study process implementation
- 3 to choose the mostly appropriate LMS, i.e. Moodle, Google for education, Teams 365 or Edmodo to implement online learning processes and to use it in practice.

##### 3.1.5 Guiding Concepts

- Getting familiar with LMS that some teachers can have towards getting into technological environments.
- Knowing the most suitable LMS for educational objectives optimises work time.
- LMS widens the range of accessibility to training programmes.

- Working with LMS students to get an environment in which they feel comfortable.
- Working with LMS to widen the range of activities and projects that teachers can carry out on their daily activity.
- Learning how to manage the systems enforces teachers' confidence and helps them to monitor their students' progress and abilities.

### 3.1.6 Guiding Questions

- 1) please identify 3 mostly used learning management systems
- 2) what I need to know before start teaching with LMS?
- 3) please identify the 5 main functions of the LMS
- 4) please describe the methods of learning could be delivered in the LMS
- 5) please provide the tools useful to integrate into into LMS for interactive learning objects design

### 3.1.7 Glossary

- Course
- Course design
- Curriculum
- Learning activities
- Learning outcomes
- Lifelong learning
- Learning management system
- e-learning

### 3.1.8 References

[1] Chen, D. (2003). Uncovering the Provisos behind Flexible Learning. Educational Technology & Society, 6(2), 25-30, (ISSN 1436-4522) [*An example*].



## 3.2 MODULE 2: Systems built for use with basic mobile phones

### 3.2.1 General

<b>Specific module</b>	Systems built for use with basic mobile phones
<b>Duration</b>	<b>3 hours</b>

### 3.2.2 Specific Module

- 1 Systems for mobile phones in education
- 2 Key features of the systems built for use with basic mobile phones
- 3 Strengths and weaknesses
- 4 Recommendations for teachers to use WhatsApp, [Signal](#), [Threema](#), [Telegram](#), [Riot.IM](#).

### 3.2.3 Summary

Mobile learning implies working with handheld devices. This offers the possibility of getting training anytime, anywhere. In the age of mobility, the technical solutions must necessarily be able to work with this kind of devices, but it is advisable to check their functionalities in advance when choosing the most suitable system according to our objectives.

### 3.2.4 Learning Outcomes

**After this module attendees will be able to:**

- 1 Identify the main features of systems built for use with basic mobile phones.
- 2 Recognise the strengths / weaknesses of the systems built for use with basic mobile phones in order to choose the one that fits their objectives.
- 3 Become familiar with the interface of the selected systems built for use with basic mobile phones

### 3.2.5 Guiding Concepts

- Getting familiar with Systems built for use with basic mobile phones would reduce the objections that some teachers can have towards getting into technological environments.
- Knowing the most suitable Systems built for use with basic mobile phones for educational objectives optimises work time.

- Systems built for use with basic mobile phones widens the range of accessibility to training programmes.
- Working with mobile phones enables students to get an environment in which they feel comfortable.
- Working with Systems built for use with basic mobile phones widens the range of activities and projects that teachers can carry out on their daily activity.
- Learning how to manage the systems enforces teachers' confidence and helps them to monitor their students' progress and abilities.

### 3.2.6 Guiding Questions

- 1) What are the main features that a Systems needs to work with basic mobile phones?
- 2) Does the Systems built for use with basic mobile phones support multiple formats of content?
- 3) Does the Systems built for use with basic mobile phones facilitate social and collaborative learning?
- 4) Is it easy to monitor learner process?
- 5) Does the Systems built for use with basic mobile phones allow synchronous and asynchronous tasks?

### 3.2.7 Glossary

- Systems –
- Mobile phone –
- Mobile technologies –
- Mobile learning -

### 3.2.8 References

[1] Chen, D. (2003). Uncovering the Provisos behind Flexible Learning. *Educational Technology & Society*, 6(2), 25-30, (ISSN 1436-4522) [*an example*].

### 3.3 MODULE 3. Strong offline functionality systems

#### 3.3.1 General

<b>Specific topic</b>	Strong offline functionality systems
<b>Duration</b>	<b>4 hours</b>

#### 3.3.2 Specific Module

- 1 Strong offline functionality systems
- 2 Key features of the strong offline functionality systems
- 3 Strengths and weaknesses
- 4 Recommendations for teachers to use Usdtad mobile, Kolibri, Rumie, Pocket

#### 3.3.3 Summary

Strong offline functionality systems widening the opportunity of getting training anytime, anywhere. In the age of mobility, the technical solutions must necessarily be able to work with mobile devices, but it is advisable to check their functionalities in advance when choosing the most suitable system according to our objectives.

#### 3.3.4 Learning Outcomes

**After this course, attendees will:**

- 1 Identify the main features of strong offline functionality systems.
- 2 Recognise the strengths / weaknesses of the systems built for use with basic mobile phones in order to choose the one that fits their objectives.
- 3 Become familiar with the interface of the selected systems built for use with basic mobile phones

#### 3.3.5 Guiding Concepts

- Getting familiar with strong offline functionality systems reduces the objections that some teachers can have towards getting into technological environments.
- Knowing the most suitable strong offline functionality systems for educational objectives optimises work time.

- Strong offline functionality systems widens the range of accessibility to the extra material and integrates into training programmes.
- Working with strong offline functionality systems enables students to get an environment in which they feel comfortable.
- Working with strong offline functionality systems widens the range of activities and projects that teachers can carry out on their daily activity.
- Learning how to manage the systems enforces teachers' confidence and helps them to monitor their students' progress and abilities.

### **3.3.6 Guiding Questions**

- 1) What are the main features that a strong offline functionality systems?
- 2) Does the strong offline functionality systems support multiple formats of content?
- 3) Does the strong offline functionality systems facilitate social and collaborative learning?
- 4) Is it easy to monitor learner process?
- 5) Does the strong offline functionality systems allow synchronous and asynchronous tasks?

### **3.3.7 Glossary**

- Strong offline functionality systems -
- Collaborative learning -
- Mobile technologies -
- Mobile learning -

### **3.3.8 References**

[1] Chen, D. (2003). Uncovering the Provisos behind Flexible Learning. Educational Technology & Society, 6(2), 25-30, (ISSN 1436-4522) [*an example*].

### 3.4 MODULE 4. Mobile reading applications

#### 3.4.1 General

<b>Specific topic</b>	Mobile reading applications
<b>Duration</b>	<b>3 hours</b>

#### 3.4.2 Specific Module

- 1 Mobile reading applications
- 2 Key features of the mobile reading applications
- 3 Strengths and weaknesses of Mobile reading applications: ibooks, Reading Prestigio, Colibro, Aldiko

#### 3.4.3 Summary

Mobile reading applications give a wide opportunity for online learners. However, teachers need to find friendly applications for sharing with learners. This offers the possibility of getting training anytime, anywhere. The technical solutions must necessarily be able to work with this kind of mobile reading applications, but it is advisable to check their functionalities in advance when choosing the most suitable according to our objectives.

#### 3.4.4 Learning Outcomes

**After this course, attendees will:**

- 1 Identify the main features of mobile reading applications.
- 2 Recognise the strengths / weaknesses of mobile reading applications.
- 3 Become familiar with ibooks, Reading Prestigio, Colibro, Aldikos.

#### 3.4.5 Guiding Concepts

- Getting familiar with mobile reading applications.
- Knowing the most suitable mobile reading applications for educational objectives optimises work time.
- Mobile reading applications widen the range of support with material to training programmes.
- Working with mobile reading applications students can get an environment in which they feel comfortable.

- Working with mobile reading applications widens the range of possibilities for teachers and learners to carry out on their daily activity.
- Learning how to manage the mobile reading applications enforces teachers' confidence and helps them to monitor their students' progress and abilities.

#### **3.4.6 Guiding Questions**

- 1) What are the main features of the mobile reading applications?
- 2) Does the mobile reading applications support multiple formats of content?
- 3) Does mobile reading applications facilitate social and collaborative learning?
- 4) Is it easy to monitor learner process?
- 5) Does the mobile reading applications allow synchronous and asynchronous tasks?

#### **3.4.7 Glossary**

- m-learning –
- Mobile applications –
- Mobile reading applications-
- e-learning systems -
- Synchronous learning –
- Asynchronous learning –
- Collaborative tools -

#### **3.4.8 References**

[1] Chen, D. (2003). Uncovering the Provisos behind Flexible Learning. *Educational Technology & Society*, 6(2), 25-30, (ISSN 1436-4522) [*an example*].

### 3.5 MODULE 5. Cooperation platforms supporting live video communication

#### 3.5.1 General

<b>Specific topic</b>	Cooperation platforms supporting live video communication
<b>Duration</b>	<b>3 hours</b>

#### 3.5.2 Specific Module

- 1 Cooperation platforms supporting live video communication
- 2 Key features of the Cooperation platforms supporting live video communication
- 3 Strengths and weaknesses of Google meet, Zoom, Youtube live, Microsoft teams.

#### 3.5.3 Summary

Cooperation platforms supporting live video communication give wide opportunities for online learners, However, teachers need cooperation platforms supporting live video communication that would be friendly for sharing and collaborative work online. This offers the possibility of getting training anytime, anywhere. The technical solutions must necessarily be able to work with this kind cooperation platforms supporting live video communication, but it is advisable to check their functionalities in advance when choosing the most suitable according to our objectives.

#### 3.5.4 Learning Outcomes

**After this course, attendees will:**

- 1 Identify the main features of cooperation platforms supporting live video communication.
- 2 Recognise the strengths / weaknesses of cooperation platforms supporting live video communication.
- 3 Become familiar with Google meet, Zoom, Youtube live, Microsoft teams.

#### 3.5.5 Guiding Concepts

- Getting familiar with cooperation platforms supporting live video communication would reduce the objections that some teachers can have towards getting into technological environments.
- Knowing the most suitable cooperation platforms supporting live video communication for educational objectives optimises work time.

- Cooperation platforms supporting live video communication widen the range of accessibility to training programmes.
- Working with cooperation platforms supporting live video communication students to get an environment in which they feel comfortable.
- Working with cooperation platforms supporting live video communication widens the range of activities and projects that teachers can carry out on their daily activity.
- Learning how to manage the cooperation platforms supporting live video communication enforces teachers' confidence and helps them to monitor their students' progress and abilities.

### 3.5.6 Guiding Questions

- 1) What are the main features of the cooperation platforms supporting live video communication?
- 2) Does the cooperation platforms supporting live video communication built for use with basic mobile phones support multiple formats of content?
- 3) Does cooperation platforms supporting live video communication facilitate social and collaborative learning?
- 4) Is it easy to monitor learner process?
- 5) Does the cooperation platforms supporting live video communication allow synchronous and asynchronous tasks?

### 3.5.7 Glossary

- Cooperation platforms –
- Collaborative learning –
- External distance learning –
- e-learning systems -
- Synchronous learning –
- Asynchronous learning –
- Collaborative tools -

### 3.5.8 References

- [1] Chen, D. (2003). Uncovering the Provisos behind Flexible Learning. *Educational Technology & Society*, 6(2), 25-30, (ISSN 1436-4522) [*an example*].



### 3.6 MODULE 6. External distance learning solution repositories

#### 3.6.1 General

<b>Specific topic</b>	External distance learning solution repositories
<b>Duration</b>	<b>3 hours</b>

#### 3.6.2 Specific Module

- 1 External distance learning solution repositories
- 2 Key features of the external distance learning solution repositories
- 3 Strengths and weaknesses
- 4 Recommendations for teachers to use Freedcamp, nTask, Asana, Trello, Monday

#### 3.6.3 Summary

External distance learning solutions are related more or less to the collaboration online. Teachers need for collaboration external tools, that would be friendly for sharing and collaborative work online. This offers the possibility of getting training anytime, anywhere. The technical solutions must necessarily be able to work with this kind of external distance learning repositories, but it is advisable to check their functionalities in advance when choosing the most suitable according to our objectives.

#### 3.6.4 Learning Outcomes

**After the course, attendees will:**

- 1 Identify the main features of external distance learning solution repositories.
- 2 Recognise the strengths / weaknesses external distance learning solution repositories.
- 3 Become familiar with the interface of the External distance learning solution repositories.

#### 3.6.5 Guiding Concepts

- Getting familiar with external distance learning solution repositories would reduce the objections that some teachers can have towards getting into technological environments.
- Knowing the most suitable external distance learning solution repositories for educational objectives optimises work time.
- External distance learning solution repositories widen the range of accessibility to training programmes.

- Working with external distance learning solution repositories students to get an environment in which they feel comfortable.
- Working with External distance learning solution repositories widens the range of activities and projects that teachers can carry out on their daily activity.
- Learning how to manage the external distance learning solution repositories enforces teachers' confidence and helps them to monitor their students' progress and abilities.

### 3.6.6 Guiding Questions

- 1) What are the main features of the external distance learning solution repositories?
- 2) Does the external distance learning solution repositories built for use with basic mobile phones support multiple formats of content?
- 3) Does the external distance learning solution repositories facilitate social and collaborative learning?
- 4) Is it easy to monitor learner process?
- 5) Does the external distance learning solution repositories allow synchronous and asynchronous tasks?

### 3.6.7 (Glossary)

- Systems -
- External distance learning -
- e-learning systems -
- Synchronous learning -
- Asynchronous learning -
- Collaborative tools -

### 3.6.8 References

[1] Chen, D. (2003). Uncovering the Provisos behind Flexible Learning. Educational Technology & Society, 6(2), 25-30, (ISSN 1436-4522) [*an example*].

## 4 TOPICS

### 4.1 TOPIC 1. Online class adapted to the student's abilities

#### 4.1.1 General

<b>Specific topic</b>	<b>Online class adapted to the student's abilities</b>
<b>Duration</b>	<b>3 hours</b>

#### 4.1.2 Specific Topic

##### Topic

- Areas of adaptation of courses and materials in terms of the conditions of the educational process (i.e. principles, methods, forms, teaching aids)
- Areas for customizing courses and materials in terms of teaching organization (e.g. student's time and place of work)
- Areas of adjusting courses and materials in terms of the conditions for checking the level of knowledge and skills (methods and forms of checking knowledge and skills, assessment criteria)
- Adapting online courses to students' problems (e.g. disability, risk of social maladjustment, behavioral or emotional disorders, special giftedness, specific learning difficulties, competence deficits and language skills disorders, chronic diseases, crisis or traumatic situations, educational failures, environmental negligence related to the living situation of the student and his family, adaptation difficulties related to cultural differences or a change in the educational environment)
- External and internal factors influencing the teacher in distance learning
- External and internal factors influencing the student in distance learning

#### 4.1.3 Summary

The main purpose of this topic is to provide knowledge about the necessity and ways of adapting online materials and courses to the individual needs of students. Lack of knowledge and competence in this area is usually the main cause of emerging or escalating problems and disorders in the emotional and motivational sphere of students. The individualization of the teaching process is therefore the main goal when designing and conducting educational activities.

#### 4.1.4 Learning Outcomes

**After this course, attendees will:**

- 1 Understand the need to adapt online materials to the individual needs of the student;
- 2 Identify individual and group problems of students;
- 3 Identify the most common causes of student problems during distance learning;
- 4 Anticipate the consequences of inadequate actions in the event of inability to adapt online courses to students' abilities;
- 5 Select appropriate strategies for reacting and dealing with difficult situations;
- 6 Identify and name the needs and expectations of one's own knowledge and skills in adapting online courses to students' abilities;
- 7 Help learners to develop their personal, social and digital competences;

#### 4.1.5 Guiding Concepts

- The students' sense of security is a basic condition for the proper conduct of the teaching and upbringing process.
- Instrumental treatment of students by teachers and educators generates and deepens behavioral disorders.
- Relationships based on connectedness and shared responsibility reduce the manifestation of behavioral problems.
- Creating a team climate conducive to meeting the need for belonging, social acceptance and self-fulfillment reduces the manifestations of students' problems.
- Building relationships based on acceptance, authenticity, openness and commitment helps correct students' problems.
- The teachers' awareness of their own needs, expectations and limitations is the basic condition for proper interpersonal relations with students.
- Teachers' verbal and non-verbal communication skills during distance teaching are a basic condition for the proper conduct of the educational process.
- The ability to set limits, norms, requirements and rules of conduct and their proper enforcement helps to reduce difficulties in the learning and teaching process.
- Formulating requirements not adapted to students' abilities deepens their problems.
- Helping students express their emotional states in an acceptable way enhances their personal and social competences.

- Being aware of the most common mistakes in learners' relationships (eg, asking "why?", Reproaching, ignoring, name calling, hostility, blaming, blaming, threatening, punishing, etc.) reduces the likelihood of committing them.
- Being able to talk about their difficulties and seeking help and support in difficult situations reduces students' problems.

#### **4.1.6 Guiding Questions**

- 1) What are the most common manifestations of students' problems?
- 2) What are the most common mistakes teachers make in their relationship with their students in the course of distance learning?
- 3) How should teachers and educators react to inappropriate student behavior while teaching distance?
- 4) How to prepare for work with students who need help and support?
- 5) What is the awareness of teachers and educators in identifying and expressing their own problems, needs and expectations during distance learning?
- 6) What is the awareness of teachers in identifying and naming problems, needs and expectations of students in distance learning?
- 7) How to communicate with a student who needs help and support?
- 8) How to support students with individual development problems?
- 9) How to develop personal, social and digital competences in students and pupils in the process of distance learning?

#### **4.1.7 Anchor Text(s)**

The basic condition for the effectiveness of didactic and educational work is the creation of appropriate relationships based on mutual understanding, reasonable tolerance towards each other, a sense of responsibility for one's fate and commitment. Such a social bond gives a sense of being accepted, a sense of security, belonging and community. The correct teacher-student relationship is influenced by such factors as: acceptance, openness, authenticity, mutual respect, understanding of the difficulties and limitations of students, noticing efforts and their strengths, devoting time and attention to students, the ability to set limits, norms, requirements and expectations, enforcing requirements and the correct way of communicating. The ability to recognize one's own needs, possibilities and limitations, as well as the correct identification of students' problems and needs is the basis of proper relations during distance learning. Conducting systematic self-reflection on one's own personal, social

and digital competences serves their development, while reducing problems in the didactic and educational process. Noticing students' problems, the ability to effectively intervene, resolve conflicts and provide appropriate forms of help and support in difficult situations are the conditions for effectiveness in didactic and educational work. It should also be remembered that the platforms and tools used in distance learning alone offer many opportunities, but are not sufficient to make learning effective due to the specific difficulties and capabilities of students.

#### **4.1.8 Vocabulary**

- Problems of students in the learning process in distance learning
- Individual development problems
- Individual possibilities of students
- Individual abilities and interests of students
- Adapting online courses to students' abilities
- Personal and social competences
- Digital competences
- Teaching and educational mistakes in distance learning
- Getting to know students
- Strategies for coping with difficult situations
- Needs and expectations
- Learning styles (visual, auditory, kinesthetic)
- Adapting the course to the age of the students
- Setting tasks, requirements and expectations
- Ways of verifying knowledge adjusted to the students' abilities

## 4.2 TOPIC 2. The learning course should be transparent

### 4.2.1 General

<b>Specific topic</b>	The learning course should be transparent
<b>Duration</b>	<b>3 hours</b>

### 4.2.2 Specific Topic

#### Topic

- Principles of effective work of a teacher in remote teaching
- The ability to formulate clear and specific didactic and educational goals
- Structure of a lecture, lesson, course (introduction, development, conclusion)
- Knowledge and ability to formulate clear and logical conclusions
- Principles of constructing clear and logical courses and materials
- Skills of formulating clear and logical verbal messages
- Skills in drafting clear and logical written information
- The principle of 3 x JUST

### 4.2.3 Summary

The main purpose of considering this issue is to adapt and optimize the organization and course of remote education. The specificity of distance learning in the context of traditional teaching allows for the design of more effective education, taking into account the individualized needs of students and concretizing the tasks and role of the teacher - mentor. Transparent and clear structure and logical construction of courses affect the process of memorizing and understanding of the transmitted content, the motivation of students and the development of their logical thinking.

### 4.2.4 Learning Outcomes

**After this course, attendees will:**

- 1 Know the principles of designing effective lesson plans
- 2 Know the principles of formulating clear and logical didactic and educational objectives
- 3 Know the ways to enforce and evaluate student work results
- 4 Be able to construct in a clear and logical way different forms of courses (e.g. lecture, discussion, exercises)

- 5 Know the rules of formulating conclusions
- 6 Be familiar with the 3 x JUST principle
- 7 Be able to apply the 3 x JUST principle
- 8 Recognize the need to formulate clear and logical verbal messages
- 9 Be able to develop students' ability to formulate clear and logical verbal and written messages
- 10 Know how to write information and instructions in a clear and logical way.
- 11 Identify students' problems relating to lack of understanding of oral and written information

#### **4.2.5 Guiding Concepts**

- Awareness of the differences between distance learning and traditional teaching promotes better, more effective organization of education.
- Limitation or exclusion of direct contact between teachers and students or students with each other causes a change in their relationship - verbal communication is very often replaced by written communication.
- Less intensive relations may foster the undesirable phenomenon of students' social alienation.
- Implementation of the 3 x JUST principles (Just for me, Just in time, Just enough) in distance education supports full individualization and optimization of learning.
- Teachers' development of the ability to design online activities in accordance with the principles of distance learning promotes the construction of clear and logical courses.
- Conducting synchronous and asynchronous online meetings and learning activities serves to establish and maintain communication, collaboration, motivation and exchange of experience.
- Knowledge of asynchronous online platforms allows you to share educational materials in different forms, organize them logically and access them anytime and anywhere.
- Knowledge of objectives (main and detailed - individual stages) - measurable, presented in the form of a description of behavior (action), criteria for its implementation, conditions of presentation and predictable results affects the perception and attention of its participants.
- Division of educational material into lessons/modules or other fragments, determination of the thematic/thematic scope corresponding to each individual lesson/module and determination of the content and accompanying activities within the framework of own work, which takes place between lessons/modules, influences better understanding and remembering of the presented content.



- The logical construction of online activities is facilitated by the separation of the following parts of the lesson/module: multimedia resources, presenting the content of the lesson, interactive resources, giving students the opportunity to practice, consolidate and self-test their knowledge / skills.
- The ability to formulate logical messages reduces misunderstandings and conflicts with students.

#### 4.2.6 Guiding Questions

- 1) Is traditional teaching possible in e-learning?
- 2) What are the principles of effective work of a teacher in e-learning?
- 3) How to formulate clear and specific didactic and educational goals?
- 4) What should be the structure of a lecture, a lesson, a course?
- 5) How to formulate clear and logical conclusions?
- 6) What are the principles of constructing clear and logical courses and teaching materials?
- 7) How to formulate clear and logical verbal messages?
- 8) How to formulate clear and logical written information?
- 9) How to develop among students the ability to formulate clear and logical oral and written messages?
- 10) How to use the principle of **3 x JUST** in the organization and conduct of distance learning?
- 11) How to recognize students' expectations in terms of distance learning?
- 12) How to develop teachers' knowledge and competence in clear and logical designing of lesson/module scenarios?

#### 4.2.7 Anchor Text(s)

E-learning has become the dominant form of education, resulting from the need to adapt to the widely existing crisis caused by COVID-19.

Lessons and workshops conducted as part of distance learning involve not only the use of appropriate digital resources/tools (the Internet), but above all, the need to use appropriate working methods that reflect the principles of the on-line environment. The way they are implemented should correspond to the didactic and educational goals, and above all - be consistent with the needs, expectations and abilities of students. When planning the educational process, teachers should first of all pay attention to the clarity of prepared materials and their logical structure. Well-designed didactic materials affect both the process of understanding and memorizing the content and the level of students' motivation

to seek knowledge on their own. Proper organisation of the didactic and educational process also reduces conflicts and misunderstandings in teacher-student relationships and facilitates establishing and maintaining peer relations. The ability to clearly and logically construct statements, expectations also promotes the identification of problems and the search for effective coping strategies.

#### **4.2.8 Vocabulary**

- Synchronous communication
- Asynchronous communication
- Moderation
- The **3 x JUST** Principles
- Lecture, lesson and course structure
- Designing a scenario for on-line classes
- Principles of online course design
- Principles of the teacher's work in distance learning
- Principles of student work in distance learning
- Logical structure of a verbal message
- Logical structure of the text message
- Legibility and clarity of the text material

### 4.3 TOPIC 3: E-learning materials should be attractive

#### 4.3.1 General

<b>Specific topic</b>	E-learning materials should be attractive
<b>Duration</b>	<b>3 hours</b>

#### 4.3.2 Specific Topic

##### Topic

- Knowledge of students' preferred learning styles
- Ability to create engaging materials that accommodate learning styles
- Variety and interactivity of educational materials
- Ability to adapt educational materials to the didactic and educational goals
- Factors influencing the increase of attractiveness of visual and graphic communication
- Factors influencing the increase of attractiveness of verbal messages
- Knowledge of the specific impact of modern didactic aids on learning effectiveness
- Principles of creating attractive educational materials

#### 4.3.3 Summary

The main purpose of this topic is to draw teachers' attention to the importance of attractiveness of materials used in distance learning. Knowledge of the factors that affect the increase in the attractiveness of the visual and verbal message is a basic condition for effective teaching. Improvement in the area of independent creation of attractive teaching materials, as well as the selection of suitable ready-made applications or visualizations is a prerequisite for the teacher's work.

#### 4.3.4 Learning Outcomes

**After this course, attendees will:**

- 1 Know students' preferred learning styles;
- 2 Know how to adapt learning materials to learning styles;
- 3 Know the principles of creating and using attractive learning materials;
- 4 Know how to create or select attractive educational materials for teaching and learning purposes
- 5 Know the factors influencing the attractiveness of a visual message;

- 6 Know the factors influencing the attractiveness of a visual message; Be able to use the factors influencing the attractiveness of a visual message;
- 7 Know the factors influencing the attractiveness of a verbal message; Know how to use the factors influencing the attractiveness of a verbal message;
- 8 Know the factors influencing the attractiveness of a visual message; Be able to use the factors influencing the attractiveness of a visual message
- 9 Know the specific impact of modern didactic means on learning effectiveness
- 10 Help students develop their personal, social and digital competences;
- 11 Comply with the rules for the visual side of materials (e.g. uniform font and size, maximum of four colors in diagrams, limited number of objects on the screen, simple and consistent messages, clear instructions on how to use attachments, etc.)
- 12 Use an appropriate instructional medium for the level of student activity in the lesson;

#### **4.3.5 Guiding Concepts**

- Proper organization of classes/modules in distance learning moderates the learning and teaching process.
- Knowledge of students' preferred learning styles increases the attractiveness of learning materials.
- Formulation of requirements not adjusted to students' abilities aggravates their problems.
- Interactivity of teaching materials increases their attractiveness.
- Using various media during online classes allows to adjust them to a given situation.
- Skills related to the use of the platform on which the course takes place and visual and graphically working on the learning content increases the possibility to make full use of online resources.
- Knowledge of the principles of creating and using attractive materials in remote learning increases student engagement in the educational process.
- The ability to create or select attractive materials for teaching and educational purposes reduces the level of students' school failure.
- Knowledge of factors influencing attractiveness of visual message is a basic element of effective didactic work of a teacher.
- The ability to use factors influencing the attractiveness of a visual message is the key to create materials that are interesting for students.

- Knowledge of factors influencing the attractiveness of a verbal message increases the level of pupils' interest.
- The ability to use factors affecting the attractiveness of verbal message increases the level of students' concentration on the task

#### **4.3.6 Guiding Questions**

- 1) What learning styles are most often preferred by students?
- 2) How can material be adapted to students' learning styles?
- 3) What elements enhance the attractiveness of learning materials?
- 4) How should the material be adapted for teaching and learning purposes?
- 5) What are the basic factors that influence the attractiveness of the visual message?
- 6) What are the basic factors influencing the increase in attractiveness of verbal messages?
- 7) What are the specifics of the impact of modern didactic means on the effectiveness of students' learning?

#### **4.3.7 Anchor Text(s)**

The necessity of using information and communication technology in the current situation has already become a fact. Educational platforms eliminate the problem of space and time, and individualization of interactions provides opportunities for better assimilation and processing of knowledge by students. In addition, the multimedia character of electronic resources increases the attractiveness of topics implemented in accordance with educational objectives. However, it should be remembered that the use of excessive resources and teaching aids as well as exaggerated focus on the attractiveness of materials may result in lowering the level of content reception in favor of the form in which it will be presented. Hence, it is desirable to use a variety of media, so that they can be matched to the given educational situation.

When designing remote classes, one should also remember about the elements ensuring maximum interactivity (e.g. navigation, readability, illustrations, feedback, exercises, elements of fun, discussion), which may increase their attractiveness and effectiveness. Text material enriched with sound effects, animations, and video sequences is better absorbed by students. At the same time, it is worth noting that the creation or use of attractive materials and multimedia aids promotes comprehensive development of the child only when the selection of these means is made by a teacher who is aware of educational goals.

#### **4.3.8 Vocabulary**

- Learning materials adapted to learning styles
- Interactivity of learning materials
- Learning goals
- Educational goals
- Visual and graphic attractiveness of materials
- Attractiveness of the verbal message
- Modern didactic means
- Effectiveness of learning
- Teaching Efficiency
- Principles of constructing attractive materials

#### 4.4 TOPIC 4: The course should retained the attention and interest of students

##### 4.4.1 General

<b>Specific topic</b>	The course should retained the attention and interest of students
<b>Duration</b>	<b>4 hours</b>

##### 4.4.2 Specific Topic

###### Topic

- External and internal factors affecting students' attention focus
- External and internal factors that influence students' motivation, arousal, and sustained interest
- Students' abilities and limitations in focusing attention
- Ways to increase students' attention levels
- Ways to effectively motivate, arouse and sustain students' interest
- Areas of adaptation of the conditions of remote education process (i.e. rules, methods, forms, didactic means) in the context of sustaining students' attention)
- Areas of adjustment of the conditions of the remote education process (i.e. principles, methods, forms, didactic means) in the context of arousing and sustaining student interest
- Areas of adaptation of the conditions for testing the level of knowledge and skills in remote learning (methods, forms, assessment criteria) taking into account the activity, motivation, attention and interest of the student
- Consequences of the lack of skills to focus attention in remote teaching
- Consequences of lack of teachers' skills in arousing and maintaining students' interest

##### 4.4.3 Summary

This topic deals with the essential elements of the learning process, which undoubtedly include the ability of students to focus their attention on the tasks at hand. In this area, the competence of teachers to systematically arouse and sustain students' interests should be a primary consideration. Both of these factors are an integral part of effective education. On the one hand, they influence the increase of students' engagement in the educational process, implying better learning results, on the other hand, they limit the scope of school failures. In this regard, the course of distance learning should undoubtedly include 2 areas of tasks for teachers. The first one is defined by the conditions of

teaching during online classes, while the second one concerns supporting students' independent work.

#### 4.4.4 Learning Outcomes

**After this course, attendees will:**

- 1 Know the external and internal factors affecting students' attention focus,
- 2 Know the external and internal factors that influence the motivation, arousal and maintenance of pupils' interest
- 3 Know the capacity of students to focus attention;
- 4 Know the ways to improve the level of attention of students;
- 5 Know ways to effectively motivate, stimulate and sustain students' interest.
- 6 Recognize the need to adapt materials in the field of students' attention;
- 7 Recognize the need to create materials that positively influence students' motivation and interest;
- 8 Identify factors that interfere with students' attention, motivation and interest;
- 9 Consider instructional principles in terms of modified media tools;
- 10 Anticipate consequences of actions that do not address students' attention span;
- 11 Anticipate the consequences of actions that do not address student interest
- 12 anticipate the consequences of actions that do not take into account the growth of the learner's independence;
- 13 Select appropriate methods, means of education using digital technology

#### 4.4.5 Guiding Concepts

- The ability to focus attention is a basic requirement for effective learning.
- Attention deficit disorder generates behavioral disorders and educational failures in students.
- Lack of motivation and interest of students results in lowering of their level of knowledge.
- Concentration of attention can be developed through the use of appropriate methods, techniques and exercises.
- Systematic reference to previously acquired knowledge accelerates the process of assimilation and consolidation of new learning content.
- The use of different forms of communication (image, text, sound, action, interactive elements) significantly affects their level of attention, motivation and interest.



- Presentation of the taught content in various forms available on the platforms (lectures, case studies, charts, tests, discussions, chat, video conferencing) stimulates students' motivation and interest.
- Encouraging students to become active on their own by creating an environment conducive to various forms of student engagement (e.g., discussion groups) significantly influences the formation of new interests.
- Providing students with feedback on the quality of their assignments increases their level of motivation and interest in the learning process.
- Group work, in which students learn to cooperate by sharing ideas and collaboratively seeking solutions to problems, strengthens students' interests and motivation.
- Knowledge of principles and rules of effective development of teaching materials affects the level of attention, motivation and interest of students.
- Use of activating materials, i.e. self-tests (self-evaluation tests), increases the level of concentration, motivation and interest of students.

#### **4.4.6 Guiding Questions**

- 1) What are the most important external and internal factors that influence students' attention span?
- 2) What are the most important external and internal factors that affect motivation and arousing and sustaining students' interest?
- 3) What are students' abilities and limitations in focusing attention?
- 4) How can students' attention levels be improved?
- 5) What are the ways to effectively motivate, stimulate and sustain students' interests?
- 6) What principles, methods, forms and didactic means should be used in distance learning to maintain students' attention more effectively?
- 7) What principles, methods, forms and didactic means should be used to more effectively arouse and sustain students' motivation and interest?
- 8) What methods, forms, criteria of checking and evaluating knowledge should be used to motivate students to learn?
- 9) What are the most common consequences of lack of attention skills in remote learning?
- 10) What are the most common consequences of lack of teachers' skills in arousing and maintaining students' interest?

#### 4.4.7 Anchor Text(s)

In e-learning, the tasks of the various actors in the educational process change. The transformation of traditional teaching into technology-assisted learning is perfectly illustrated by the SAMR model, which means:

1. **Substitution** - replacing traditional methods with technology without changing the type of tasks: instead of using a pen, students write in a word processor; instead of using a chalkboard, the teacher uses an electronic whiteboard;
2. **Augmentation** - extension - we start using the e-tool feature, e.g., sharing lesson e-notes with students, getting an e-document for review, students solving an online test get instant feedback;
3. **Modification** - there is a significant shift in emphasis to student work using digital technology. At this level, the teacher differentiates tasks, adapting them to the individual needs and abilities of the student. This promotes increased student motivation, engagement, and interest;
4. **Redefinition** - it requires the use of technology for collaboration of students working on the task; the role of the teacher changes from that of a lecturer to a moderator and coordinator of student learning. Enabling students to collaboratively edit documents (learning materials) created in the form of videos, images, sounds, animations, texts or numerical data, process them and present them in shared virtual spaces (movie channels, network folders, web boards, websites, etc.) strengthens their interest in the topic.

Another important aspect is the selection of interesting content for each student, which should combine what the student is expected to learn with what the student already knows. The material should be structured and the students' activities properly integrated (i.e. the methodological idea of how to teach and the substantive idea of how to present the material to the students). Tasks must be authentic, complex, and directly related to real-world activities. Feedback assigned to the tasks must be direct, provide guidance in the right direction, and offer opportunities for self-evaluation and improvement. Only at the end can there be a final evaluation. Implementation of the above examples of instructional principles will support both the students' attention span, correct task motivation, and the development of their interests.

#### 4.4.8 Vocabulary

- Focus of attention
- Attention deficit disorder

- Task motivation
- Student interest
- Ways to maintain attention
- Ways to motivate students
- Ways to develop and maintain students' interest

#### 4.5 TOPIC 5: Continuous support and contact with the e- teacher

##### 4.5.1 General

<b>Specific topic</b>	Continuous support and contact with the e- teacher
<b>Duration</b>	<b>5 hours</b>

##### 4.5.2 Specific Topic

###### Topic

- The importance of interpersonal and social relationships in distance learning
- Teachers' interpersonal and social competences in virtual space
- Students' interpersonal and social competences in virtual spaces
- Ways of establishing and maintaining interpersonal and social relations
- in e-learning
- Causes of interpersonal and social communication disorders in distance learning
- Consequences of interpersonal and social communication disorders in virtual reality
- Ways of teachers' coping with difficulties in interpersonal and social communication
- Ways of students' coping with difficulties in interpersonal and social communication
- Skills of identifying students' crisis situations
- Supporting pupils in crisis situations

##### 4.5.3 Summary

In distance learning, special attention should be paid to the relationships between the subjects involved in the learning process, as they form the basic conditions for effective teaching. Proper interpersonal and group relations are fundamental to all educational activities. Feelings of threat, alienation or loneliness are strong stressors that disrupt students' development, negatively affecting the entire educational process. Therefore, interpersonal and group competencies of teachers and students should be considered as a basic principle of any educational activity. The ability to perceive difficult and crisis situations and the competence to deal with them in particular are new tasks for teachers working in virtual space.

##### 4.5.4 Learning Outcomes

**After the course, attendees will:**

- 1 Know the importance of interpersonal relationships in remote learning.
- 2 Improve own interpersonal and social competencies in virtual space.
- 3 Support and develop students' interpersonal and social competencies in virtual spaces.
- 4 Be able to apply various ways of establishing and maintaining interpersonal and social contacts in remote teaching
- 5 Know the causes of interpersonal and social communication disorders in remote teaching.
- 6 Know the consequences of interpersonal and social communication disorders in virtual reality.
- 7 Be able to apply effective ways of coping with interpersonal and social communication difficulties.
- 8 Shape effective ways for students to cope with difficulties in interpersonal and social communication.
- 9 Be able to identify students' crisis situations.
- 10 Support students in crisis situations.
- 11 Apply the rules of etiquette.

#### **4.5.5 Guiding Concepts**

- The search for what connects individuals is the basis for community building.
- The ability to see the positive sides of any situation provides an opportunity for growth.
- Awareness of one's own emotions and feelings caused by a crisis limits the occurrence of disorders in the psychological and social sphere of students and teachers.
- Proficient expression of emotions (naming one's emotions, sharing one's emotions (modeling), encouraging the expression of emotions in individual and group conversations) helps to build proper relations.
- Knowledge of the possibilities of communication and information technology increases the effectiveness of mediated communication.
- Rational use of synchronous and asynchronous communication prevents failures in teacher-student relationships.
- The introduction of netiquette rules promotes the building of proper relationships.
- Teachers' skills in verbal and non-verbal communication are a basic condition for the proper conduct of the educational process.
- Helping students express their emotional states in an acceptable way increases their personal and social competences.

- The ability to identify crisis situations prevents the development of emotional and social disorders.
- Supporting pupils in difficult situations is the basic condition of didactic and educational activities.

#### **4.5.6 Guiding Questions**

- 1) What is the importance of interpersonal and social relationships in remote teaching?
- 2) What interpersonal and social competences should teachers have when teaching in a virtual space?
- 3) How should teachers support and develop students' interpersonal and social competencies in virtual space?
- 4) How to establish and maintain interpersonal and social contacts in remote teaching?
- 5) What are the causes of interpersonal and social communication disorders in distance learning?
- 6) What are the consequences of interpersonal and social communication disorders in distance teaching?
- 7) How can teachers deal with interpersonal and social communication difficulties in remote teaching?
- 8) How can teachers support and develop effective strategies for coping with students' interpersonal and social communication difficulties?
- 9) How to identify students' crisis situations?
- 10) How to support students in crisis situations?
- 11) How to build proper mediated communication?
- 12) What is the utility of synchronous and asynchronous communication in remote teaching?
- 13) To what extent are the principles of netiquette useful in forming correct relations between subjects in remote teaching?

#### **4.5.7 Anchor Text(s)**

Remote learning assumes that all educational activities are carried out with the exclusion of direct contact between the participating subjects. The direct communication is replaced by the mediated communication, i.e. using digital technologies (information and communication). All forms of the didactic process, such as: learning, teaching, checking and assessing knowledge and skills are carried out without direct contact between the teacher and the learner. And it is the correct relations between

the subjects that create the conditions and foundation of educational interactions. The state of pandemic forcing this form of education is in fact a state of emergency, crisis, a strong stressor that does not promote cognitive activity, motivation or interest of students. In the conditions of remote education, it is particularly easy to interpret such states as an aversion to cooperation or simple laziness.

Stress is a natural enemy of memorizing and learning anything. Therefore, taking care of the relationship, understanding both the needs and emotions of the student in remote education must be considered the basic principle of operation. In no other form of education is this principle as decisive as in this case. A variety of asynchronous and synchronous communication tools available on the educational platform allow the teacher to have constant contact with the students. Their selection, however, should depend on the type of audience (individual and/or group) and on the objectives pursued.

Teachers should have adequate interpersonal and social competences, which will undoubtedly help them to identify the first symptoms of students' difficult situations. Prompt and effective assistance in problem situations prevents the appearance and aggravation of emotional, behavioral, and social disorders among students.

#### **4.5.8 Vocabulary**

- Interpersonal and social relationships
- Interpersonal and social competence
- Interpersonal and social communication disorders causes
- Consequences of interpersonal and social communication disorders
- Ways of dealing with interpersonal and social communication difficulties
- Crisis situations
- Social support
- Principles of mediated communication
- Synchronous communication and asynchronous communication
- Etiquette