Innovative Agile
Project-based
Learning



# Agile2Learn Curriculum Annex III

Description of the educational materials in each module's unit TB3 documents

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# **Project Inception (Planning)**

TB3: I	TB3: Learning Object	
1	Learning object code	1.1.a
2	Learning object title	Project environment and stakeholder analysis
3	Learning object description	<ul> <li>The aim of this LO is to introduce the concepts of project environment and stakeholder management.</li> <li>It is focusing on: <ul> <li>Defining the product vision</li> <li>Defining the project environment</li> <li>Defining the terms stakeholder and stakeholder management</li> <li>Describing concepts of stakeholder management such as relative processes, principles, major activities and stakeholder types.</li> </ul> </li> </ul>
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	30 minutes
8	Key words	Project environment analysis, project stakeholder management, project strategy
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut4 List the main project stakeholders. LOut5 Identify the concept of project vision and strategy. LOut6 Recognize the concepts of interests and influence of stakeholders.
10	Extended learning object description	<ul> <li>Defining the product vision</li> <li>Defining the project environment</li> <li>Defining the terms stakeholder and stakeholder management.</li> <li>Describing concepts of stakeholder management such as relative processes, principles, major activities, and stakeholder types.</li> </ul>





TB3: L	TB3: Learning Object		
1	Learning object code	1.1.b	
2	Learning object title	Develop a Project Strategy In 8 Steps	
3	Learning object description	How your business/personal/educational strategy is aligned with your project strategy.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Text/paper	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	20 minutes	
8	Key words	Project strategy	
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut5 Identify the concept of project vision and strategy	
10	Extended learning object description	It is a document that presents in 8 steps how to develop a project strategy. The text is available at https://www.clearpointstrategy.com/project-strategy	

TB3: L	TB3: Learning Object	
1	Learning object code	1.1.3
2	Learning object title	Stakeholders register & Power Interest Grid
3	Learning object description	How to develop a stakeholder register and how to develop a power interest grid.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	5 minutes





8	Key words	Project stakeholders. Stakeholders' registry
9	Learning outcomes (LOut)	<ul> <li>Upon completion of this course, attendants will be able to:</li> <li>LOut6 Recognize the concepts of interests and influence of stakeholders.</li> </ul>
10	Extended learning object description	It is a video presenting how to develop a stakeholder register and how to develop a power/interest grid. The video is available at <a href="https://youtu.be/2QhvKIQhleQ">https://youtu.be/2QhvKIQhleQ</a>

ТВЗ: І	TB3: Learning Object		
1	Learning object code	1.2.a	
2	Learning object title	Formulating and assessing project ideas – Feasibility assessment	
3	Learning object description	This LO introduces the learners to the formulation and assessment of project ideas and at the end of project feasibility assessment More specifically learners will learn:  How to formulate new ideas How to conduct a feasibility analysis How to develop a project charter	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	20 minutes	
8	Key words	Ideation, idea formulation, feasibility, project feasibility	
9	Learning outcomes (LOut)	<ul> <li>Upon completion of this LO, attendants will be able to: <ul> <li>LOut1 Define the basic methods to test an idea.</li> <li>LOut2 Define the components of a feasibility analysis.</li> <li>LOut3 List the main methods for assessing the project investment.</li> <li>LOut8 To understand project formulation techniques.</li> <li>LOut9 To formulate and test the feasibility of an</li> </ul> </li> </ul>	





		idea
10	Extended learning object description	There will be a PowerPoint presentation of up to 20 slides. The presentation includes:  How to formulate new ideas  How to conduct a feasibility analysis  How to develop a project charter

ТВЗ: І	TB3: Learning Object		
1	Learning object code	1.2.b	
2	Learning object title	Idea Generation – Techniques, Tools, Examples, Sources and Activities	
3	Learning object description	This LO introduces the learners to idea generation techniques. The initial phase of every product development is idea generating. You must therefore look for workable product solutions that can be implemented.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Text	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	20 minutes	
8	Key words	Ideation, idea formulation, feasibility, project feasibility	
9	Learning outcomes (LOut)	Upon completion of this LO, attendants will be able to:  • LOut1 Define the basic methods to test an idea	
10	Extended learning object description	This text explains.  • the basic concepts on the idea generation process  • idea generation techniques  The text is available at <a href="https://alcorfund.com/insight/idea-generation-2/">https://alcorfund.com/insight/idea-generation-2/</a>	

TB3: Learning Object		
1	Learning object code	1.2.c





2	Learning object title	How to use a feasibility study in project management
3	Learning object description	This LO introduces the learners to feasibility studies key concepts. More specifically it focuses on technical and financial feasibility.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	Feasibility study, project feasibility
9	Learning outcomes (LOut)	Upon completion of this LO, attendants will be able to:  • LOut2 Define the components of a feasibility analysis
10	Extended learning object description	This text explains.  • The purpose of a feasibility study  • The key elements of a feasibility study The text is available at <a href="https://asana.com/resources/feasibility-study">https://asana.com/resources/feasibility-study</a>

ТВЗ: І	TB3: Learning Object	
1	Learning object code	1.3.a
2	Learning object title	Creating User stories and the project backlog
3	Learning object description	This LO introduces the learners to user stories and product backlog as the main tools of project inception phase.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Product backlog, user stories





9	Learning outcomes (LOut)	<ul> <li>Upon completion of this LO, attendants will be able to:         <ul> <li>LOut7 Understand the concept of user stories for recording requirements.</li> <li>LOut10 To create the initial product backlog using user stories</li> </ul> </li> </ul>
10	Extended learning object description	There will be a PowerPoint presentation of up to 12 slides. The aim of this presentation is to introduce the concept of product backlog. It is focusing on:  Defining the need for product backlog Defining the user stories Defining the product backlog

TR3	TB3: Learning Object		
1	Learning object code	1.3.b	
2	Learning object title	User stories with examples and a template	
3	Learning object description	This LO introduces the learners to user stories, how to develop them, the template that should be used and gives many examples.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Text	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	20 minutes	
8	Key words	user stories	
9	Learning outcomes (LOut)	Upon completion of this LO, attendants will be able to:  • LOut7 Understand the concept of user stories for recording requirements	
10	Extended learning object description	The text is available at User stories with examples and a template https://www.atlassian.com/agile/project-management/user- stories Useful user stories examples https://www.mountaingoatsoftware.com/agile/scrum/scrum- tools/product-backlog/example	



TB3: L	TB3: Learning Object	
1	Learning object code	1.3.c
2	Learning object title	What is a Product Backlog?
3	Learning object description	This LO introduces the learners to the concepts of product backlog and how to develop a product backlog.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	User stories, product backlog
9	Learning outcomes (LOut)	<ul> <li>Upon completion of this LO, attendants will be able to:         <ul> <li>LOut7 Understand the concept of user stories for recording requirements.</li> <li>LOut10 To create the initial product backlog using user stories</li> </ul> </li> </ul>
10	Extended learning object description	The text is available at What is a Product Backlog? <a href="https://asana.com/resources/product-backlog">https://asana.com/resources/product-backlog</a>





# **Agile Methods & Fundamentals**

ТВЗ: І	TB3: Learning Object	
1	Learning object code	2.1.a
2	Learning object title	Introduction to agile approach, values and principles and Introduction to SCRUM methodology
3	Learning object description	This unit introduces the learners to basic concepts of agile paradigm and of agile learning. More specifically learners will be presented with:  • Agile concepts  • Agile principles and values  • Introduction to Scrum
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation and video
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	30 minutes
8	Key words	Agile, agile learning
9	Learning outcomes (LOut)	<ul> <li>Upon completion of this course, attendants will be able to:         <ul> <li>LOut1 Describe the core values of agile approach</li> <li>LOut2 Define the key principles of the agile approach</li> </ul> </li> <li>LOut3 To know the key advantages of the agile approach         <ul> <li>Lout4 To be able to list popular agile methodologies</li> <li>LOut6 To be able to describe in detail one agile methodology</li> </ul> </li> </ul>
10	Extended learning object description	There will be a PowerPoint presentation of up to 40 slides. The presentation aims at introducing to learners to agile concepts. It includes:  Manifesto for Agile Methods Principles behind Agile Manifesto Empiricism is the foundation of Scrum





• Scrum at a glance

TB3: L	TB3: Learning Object	
1	Learning object code	2.1.b
2	Learning object title	The Scrum Guide
3	Learning object description	The Scrum Guide contains the definition of Scrum. Each element of the framework serves a specific purpose that is essential to the overall value and results realized with Scrum.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text/paper
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	60 minutes
8	Key words	Scrum, Agile, agile learning.
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to:  • LOut6 To be able to describe in detail one agile methodology
10	Extended learning object description	It is a document that presents all Scrum constituents, namely: Scrum theory, principles, team, events, artifacts, etc.

TB3: L	TB3: Learning Object	
1	Learning object code	2.2.a
2	Learning object title	Introduction to agile based learning
3	Learning object description	This LO introduces the learners to basic concepts of agile paradigm and of agile learning. More specifically learners will learn:  • what constitutes agile learning and  • how agile approach is used in the classroom
4	Language	English





5	Learning recourse type (IEEE LOM)	Presentation and video
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Agile, agile learning
9	Learning outcomes (LOut)	<ul> <li>Upon completion of this course, attendants will be able to:         <ul> <li>LOut5 To be able to describe the key principles agile-based learning</li> <li>Lout7 To be able to apply in a practical term two agile principles in the classroom</li> </ul> </li> </ul>
10	Extended learning object description	There will be a PowerPoint presentation of up to 20 slides. The presentation includes:  • What is agile based learning?  • Manifesto for agile learning  • Principles of agile based learning  • Practices of agile based learning

TB3: L	TB3: Learning Object	
1	Learning object code	2.2.b
2	Learning object title	Agile Manifesto for Teaching and Learning
3	Learning object description	This LO introduces the learners to Agile Manifesto for Teaching and Learning that can be used to direct the work in the classroom and beyond.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text/paper
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	40 minutes
8	Key words	Agile, agile learning
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to:  • LOut5 To be able to describe the key principles agile-based learning





		<ul> <li>Lout7 To be able to apply in a practical term two agile principles in the classroom</li> </ul>
10	Extended learning object description	It will be an introductory paper on agile learning explaining how agile principles were applied in the classroom and what are the results after the application.





# Digital collaboration at professional and learning level

TB3: Learning Object		
1	Learning object code	3.1
2	Learning object title	Self-evaluation
3	Learning object description	This unit will reflect the tools the learners use commonly for their work, how these tools work (what are they used for) and what are their advantages and disadvantages.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Self-evaluation, Digital collaboration tools
9	Learning outcomes (LOut)	The reflection of the learner`s way of work
10	Extended learning object description	

TB3: L	TB3: Learning Object	
1	Learning object code	3.2
2	Learning object title	Introduction of the tools of the digital collaboration
3	Learning object description	The participant will learn about the tools available for the digital collaboration and will get the overview what tool is suitable for a certain kind of activity.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time)	75 minutes





	(min)	
8	Key words	Collaboration, communication, sharing or work, project management, digital collaboration tools
9	Learning outcomes (LOut)	LOut1: List tools and solutions available for online communication or materials share LOut2: List tools and solutions available for task distribution and follow up LOut3: List tools and solutions available for simultaneous work on outputs
10	Extended learning object description	

ТВЗ: І	TB3: Learning Object	
1	Learning object code	3.3
2	Learning object title	The Project Journey
3	Learning object description	The participant will learn about the appropriate digital collaboration tools used in accordance with the particular phase of the project creation and lifetime (form the initial idea to the project closure). The learner will gain knowledge of the existence.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	Project stages, digital collaboration tools, digital collaboration
9	Learning outcomes (LOut)	LOut4: Match the solutions available with needs identified
10	Extended learning object description	





TB3: L	TB3: Learning Object	
1	Learning object code	3.4
2	Learning object title	Case study
3	Learning object description	The participant will get a short task to think about a digital solution for the project collaboration with regard to the specific conditions of the project participants.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Digital collaboration tools, project stages, digital collaboration
9	Learning outcomes (LOut)	LOut5: Identify specific needs of all the stakeholders involved LOut6: Describe the advantages and disadvantages of the various tools and solutions LOut8: Compare the available solutions
10	Extended learning object description	





### Communication

TB3: L	TB3: Learning Object	
1	Learning object code	4.1a
2	Learning object title	Introduction to the topic of communication
3	Learning object description	This unit introduces learners to an overview of communication, channels, kind of messages and most recent approaches. Axioms of communication will be described with specific reference to literature and practical example. In addition, styles of communication will be listed out with description of related behaviours to each different communicative approach.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	PPT document
7	Workload (Estimated study time) (min)	7 mins
8	Key words	Communication, channels, sender, receiver, feedback, models.
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut1 List different styles of communication LOut2 Name and describes the axioms of communication
10	Extended learning object description	There will be a PowerPoint presentation of 14 slides. The presentation aims at introducing to learners to Communication concepts.  It includes:  Definition of communication; Roots of communication; Categories of communication

TB3: Learning Object		
1	Learning object code	4.1b
2	Learning object title	Definition of axioms of communication





3	Learning object description	This unit introduces learners to an overview of communication, channels, kind of messages and most recent approaches. Axioms of communication will be described with specific reference to literature and practical example. In addition, styles of communication will be listed out with description of related behaviours to each different communicative approach.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	PPT document
7	Workload (Estimated study time) (min)	9 mins
8	Key words	Communication, channels, sender, receiver, feedback, models, axioms, Watzlawick.
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut1 List different styles of communication LOut2 Name and describes the axioms of communication
10	Extended learning object description	There will be a PowerPoint presentation of 16 slides. The presentation aims at introducing to learners to Communication models.  It includes:  • Models of communication;  • Transmission model;  • Pragmatic of communication;  • Axioms of communication

ТВ	TB3: Learning Object		
1	Learning object code	4.1c	
2	Learning object title	Which are the different styles of communication	
3	Learning object description	This unit introduces learners to an overview of communication, channels, kind of messages and most recent approaches. Axioms of communication will be described with specific reference to literature and practical example. In addition, styles of communication will be listed out with description of related behaviours to	





		each different communicative approach.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	PPT document
7	Workload (Estimated study time) (min)	6 mins
8	Key words	Communication, channels, sender, receiver, feedback, assertive, collaborative, dominant, dramatic.
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to:  LOut1 List different styles of communication  LOut2 Name and describes the axioms of communication
10	Extended learning object description	There will be a PowerPoint presentation of 16 slides. The presentation aims at introducing to learners to Communication models.  It includes:  Communication styles;  Norton's Communication styles;  Communication styles as attitude

TB3:	TB3: Learning Object	
1	Learning object code	4.2a
2	Learning object title	Which are the different styles of communication
3	Learning object description	This unit introduces learners to most frequent communicative style: how teachers communicate with students, how students communicate with teachers.  Communication from a dyadic perspective.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	PPT document
7	Workload (Estimated study time) (min)	7 mins





8	Key words	Communication, styles, teachers, behaviour.
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to:  LOut3 Recognize nonverbal communication  LOut4 Select the correct communication channel with respect to the school's various stakeholders  LOut5 Recognize the message of nonverbal behaviour
10	Extended learning object description	There will be a PowerPoint presentation of 14 slides. The presentation aims at introducing to learners to Communication models.  It includes:  Communicative styles in teaching; Interpersonal teacher communication; Communication Typologies.

TB3: L	TB3: Learning Object	
1	Learning object code	4.2b
2	Learning object title	The Power of Nonverbal Communication
3	Learning object description	This unit introduces learners to nonverbal communication: the messages conveyed through behaviours and how to detect the correct meanings.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	Youtube video
7	Workload (Estimated study time) (min)	9 mins (https://www.youtube.com/watch?v=fLaslONQAKM)
8	Key words	Communication, non-verbal, behaviour.
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut3 Recognize nonverbal communication LOut4 Select the correct communication channel with respect to the school's various stakeholders LOut5 Recognize the message of nonverbal behaviour
10	Extended learning object description	There will be a YouTube Video of 9 minutes (starting from 3'30 until the end) explaining the role of non-verbal communication, its meaning and the effective use of





behaviours as communication.

ТВ3: І	TB3: Learning Object	
1	Learning object code	4.2c
2	Learning object title	Towards a change in communication styles for teaching
3	Learning object description	This unit introduces learners to recognize a communicative style: based on the behavioural and descriptive items of each communication style, learners can focus on how to recognize their style and which would be the best according to students' needs
4	Language	English
5	Learning recourse type (IEEE LOM)	Scientific paper
6	Technical type (IEEE LOM)	PDF document
7	Workload (Estimated study time) (min)	5 mins (https://www.youtube.com/watch?v=fLaslONQAKM)
8	Key words	Communication, styles, behaviour, teachers.
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to:  LOut3 Recognize nonverbal communication  LOut4 Select the correct communication channel with  respect to the school's various stakeholders  LOut5 Recognize the message of nonverbal behaviour
10	Extended learning object description	There will be a PDF file presenting most recent communication styles adopted by teachers, and how these are changing.

TB3: Learning Object		
1	Learning object code	4.2d
2	Learning object title	How miscommunication happens (and how to avoid it)
3	Learning object description	This unit introduces learners to communicate with other school actors: miscommunication and strategies to avoid it





4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	YouTube video
7	Workload (Estimated study time) (min)	4 mins (https://www.youtube.com/watch?v=gCfzeONu3Mo)
8	Key words	Communication, styles, miscommunication, teachers.
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to:  LOut3 Recognize nonverbal communication  LOut4 Select the correct communication channel with  respect to the school's various stakeholders  LOut5 Recognize the message of nonverbal behaviour
10	Extended learning object description	There will be a Youtube video presenting most frequent errors in communication, and some tips to avoid them.

ТВЗ: І	TB3: Learning Object		
1	Learning object code	4.3a	
2	Learning object title	Agile communication strategies	
3	Learning object description	This unit introduces learners to agile strategies on how to communicate with different school environment stakeholders, as well as to apply agile strategies to improve classroom communication. At the same time, teachers can provide students with necessary knowledge to improve their communication skills and to adopt different agile styles according to each life/school situation.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	PPT document	
7	Workload (Estimated study time) (min)	18 minutes	
8	Key words	Agile communication, agile strategies.	





9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut6: Recognize and select agile communication strategies LOut7: Practice agile communitive strategies
10	Extended learning object description	There will be a PPT presentation of 19 slides about: Why Agile communication; Features of Agile Communication; Identify effective communication patterns; Presentations as main tool of communication; Non-verbal communication; Set clear expectations, goals and deadlines; Establish feedback loops; Osmotic communication; Shape communication on user needs.

TB3: L	TB3: Learning Object		
1	Learning object code	4.3b	
2	Learning object title	Agile communication tools (and how to effectively use them)	
3	Learning object description	This unit introduces learners to agile tools for effective communication within school environment.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	PPT document	
7	Workload (Estimated study time) (min)	5 minutes	
8	Key words	Agile communication, agile strategies, agile tools, teams, videoconferencing.	
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut6: Recognize and select agile communication strategies LOut7: Practice agile communitive strategies	
10	Extended learning object description	There will be a PPT presentation of 11 slides about:  • Video Conferencing;	





	<ul> <li>Instant messaging;</li> <li>E-mail and groups;</li> <li>Cloud resources;</li> <li>Educational resources on the web.</li> </ul>
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TB3: Learning Object		
1	Learning object code	4.4a
2	Learning object title	Promoting Active Listening in the Classroom
3	Learning object description	This unit introduces learners to active listening from teacher and student's perspective.
4	Language	English
5	Learning recourse type (IEEE LOM)	Scientific article
6	Technical type (IEEE LOM)	PDF document
7	Workload (Estimated study time) (min)	7 minutes
8	Key words	Active listening; skills; principles; listening activities;
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut 4: Select the correct communication channel with respect to the school's various stakeholders LOut6: Recognize and select agile communication strategies LOut 7: Practice agile communitive strategies
10	Extended learning object description	There will be a pdf article describing good listening, teacher and student's role in active listening and basic active listening principles.

7	TB3: Learning Object		
	1	Learning object code	4.4b
	2	Learning object title	Using Active Listening to Improve Collaboration With Parents: The LAFF Don't CRY Strategy
	3	Learning object description	This unit introduces learners to strategies to improve





		active listening in classroom
4	Language	English
5	Learning recourse type (IEEE LOM)	Scientific article
6	Technical type (IEEE LOM)	PDF document
7	Workload (Estimated study time) (min)	7 minutes
8	Key words	Active listening; skills; principles; listening activities;
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut 4: Select the correct communication channel with respect to the school's various stakeholders LOut6: Recognize and select agile communication strategies LOut 7: Practice agile communitive strategies
10	Extended learning object description	There will be a pdf article describing LAFF don't CRY strategy for active listening.

ТВЗ: L	TB3: Learning Object		
1	Learning object code	4.4c	
2	Learning object title	list of activities to promote active listening	
3	Learning object description	This unit introduces learners to practical activities to improve active listening in classroom	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	PPT document	
7	Workload (Estimated study time) (min)	6 minutes	
8	Key words	Active listening; activities;	
9	Learning outcomes (LOut)	Upon completion of this course, attendants will be able to: LOut 4: Select the correct communication channel with respect to the school's various stakeholders	





		LOut6: Recognize and select agile communication strategies LOut 7: Practice agile communitive strategies
10 Extend descrip	ed learning object otion	There will be a PPT presentation of 8 slides: List of activities to promote active listening; Blindfolded; Back-to-back; Play the quiet game.





### **Teamworking**

TB3: L	TB3: Learning Object		
1	Learning object code	5.1a	
2	Learning object title	Introduction to agile teams and agile teamworking skills	
3	Learning object description	This unit introduces learners to the characteristics of agile teams and various agile teamworking skills.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Text	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	20 Minutes	
8	Key words	Agile teams, teamworking skills, 21st century workplace, collaboration	
9	Learning outcomes (LOut)	Upon completing this unit, learners will be able to: LOut1: List various agile teamworking skills LOut3: Describe the concept of agility within the context of agile teams LOut4: Understand the characteristics of agile teams	
10	Extended learning object description		

TB3: L	TB3: Learning Object	
1	Learning object code	5.1b
2	Learning object title	Team Learning – a valuable tool for 21st century skills
3	Learning object description	This article describes the use team-based learning as a pedagogical tool in Finnish high schools.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text





6	Technical type (IEEE LOM)	<u>Website</u>
7	Workload (Estimated study time) (min)	5 Minutes
8	Key words	collaboration, team-based learning, TBL
9	Learning outcomes (LOut)	LOut3: Describe the concept of agility within the context of agile teams  LOut4: Understand the characteristics of agile teams
10	Extended learning object description	

TB3: L	TB3: Learning Object	
1	Learning object code	5.2a
2	Learning object title	List of agile teamwork methods for the classroom
3	Learning object description	This unit introduces learners to different agile methods that can be used in the classroom to boost teamworking skills.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	30 Minutes
8	Key words	Agile methods, brainstorming, Reciprocal Teaching, Think- Pair-Share, Fishbowl, Placemat
9	Learning outcomes (LOut)	Upon completing this unit, learners will be able to: LOut2: List various agile methods that foster teamwork skills LOut5: Discover the functions and usability of various agile methods that foster agility and teamwork
10	Extended learning object description	





ТВЗ: L	TB3: Learning Object		
1	Learning object code	5.2b	
2	Learning object title	Ideas for Practice: A Collaborative Look to the Classroom	
3	Learning object description	This unit introduces learners to various classroom activities that can be used to foster collaboration.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Text	
6	Technical type (IEEE LOM)	<u>Document</u>	
7	Workload (Estimated study time) (min)	20 Minutes	
8	Key words	Agile methods, brainstorming, Reciprocal Teaching, Think- Pair-Share, Fishbowl, Placemat	
9	Learning outcomes (LOut)	Upon completing this unit, learners will be able to: LOut2: List various agile methods that foster teamwork skills LOut5: Discover the functions and usability of various agile methods that foster agility and teamwork	
10	Extended learning object description	Only read pages 25-27.	

ТВ	TB3: Learning Object		
1	l	Learning object code	5.2c
2	2	Learning object title	Using agile teamworking methods in the classroom – The Learning Squad Method
3	3	Learning object description	This unit introduces learners to the Learning Squad method that can be used to foster collaboration in the classroom.
4	1	Language	English
5	5	Learning recourse type (IEEE LOM)	Video





6	Technical type (IEEE LOM)	<u>Video</u>
7	Workload (Estimated study time) (min)	20 Minutes
8	Key words	Agile methods, Classroom Activity, Learning Squad
9	Learning outcomes (LOut)	Upon completing this unit, learners will be able to: LOut2: List various agile methods that foster teamwork skills LOut5: Discover the functions and usability of various agile methods that foster agility and teamwork
10	Extended learning object description	

ТВЗ: І	TB3: Learning Object		
1	Learning object code	5.3a	
2	Learning object title	Teaching Group Work: Building Student Collaboration and Agency	
3	Learning object description	This unit will show learners how to use group work activities in teaching scenarios to build student collaboration.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Video	
6	Technical type (IEEE LOM)	<u>Video</u>	
7	Workload (Estimated study time) (min)	10 Minutes	
8	Key words	21st century classroom, agile methods, teamwork, collaboration, group work	
9	Learning outcomes (LOut)	Upon completing this unit, learners will be able to: LOut7: Select one or more agile methods for application based on the setup of the individual learning setting LOut8: Apply the selected method(s) in the classroom through a creation of a teaching scenario including one or more agile teamwork methods	
10	Extended learning object		





description

TB3: L	TB3: Learning Object		
1	Learning object code	5.3c	
2	Learning object title	Teaching Teamwork	
3	Learning object description	This unit will describe how university instructors integrate instruction on teamwork into their regular courses to help student succeed in short-term and long-term class projects.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Video	
6	Technical type (IEEE LOM)	<u>Video</u>	
7	Workload (Estimated study time) (min)	10 Minutes	
8	Key words	21st century classroom, agile methods, teamwork, collaboration, group work	
9	Learning outcomes (LOut)	Upon completing this unit, learners will be able to: LOut7: Select one or more agile methods for application based on the setup of the individual learning setting LOut8: Apply the selected method(s) in the classroom through a creation of a teaching scenario including one or more agile teamwork methods	
10	Extended learning object description		





### **Self-Managed Teams**

ТВЗ: І	TB3: Learning Object	
1	Learning object code	6.1a
2	Learning object title	Introduction to teams
3	Learning object description	This unit presents to learners the fundamentals of different types of teams.  It includes:  Distinctions between groups and teams;  Types and purposes of teams;  Team success criteria and preconditions.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Teams, Types of Teams, Team Success
9	Learning outcomes (LOut)	LOut1 Understand the concept of groups and teams LOut2 Describe the types and purposes of teams LOut3 Explain the criteria and the preconditions for successful teams
10	Extended learning object description	There will be a PowerPoint presentation of up to 16 slides. The presentation aims at introducing to learners to teams It includes:  Team definition Types of teams How to choose a type of team Dimensions of teams

TB3: Learning Object		
1	Learning object code	6.1b
2	Learning object title	Working Cross-Functionally





3	Learning object description	This unit presents to the learners the type of a cross- functional team
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	3 minutes
8	Key words	Cross-functional, team
9	Learning outcomes (LOut)	LOut2 Describe the types and purposes of teams LOut3 Explain the criteria and the preconditions for successful teams
10	Extended learning object description	https://youtu.be/FiUeG5CJWuo

твз: і	TB3: Learning Object	
1	Learning object code	6.1c
2	Learning object title	Making Virtual Teams Work
3	Learning object description	This unit presents to the learners how a virtual team works
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	12 minutes
8	Key words	Types of teams, virtual teams
9	Learning outcomes (LOut)	LOut2 Describe the types and purposes of teams LOut3 Explain the criteria and the preconditions for successful teams
10	Extended learning object description	https://youtu.be/95hRrCysWQw





TB3: Learning Object		
1	Learning object code	6.1d
2	Learning object title	How to keep your team motivated
3	Learning object description	This unit presents to the learners the steps to keep a team motivated
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	4 minutes
8	Key words	Successful teams, motivation
9	Learning outcomes (LOut)	LOut2 Describe the types and purposes of teams LOut3 Explain the criteria and the preconditions for successful teams LOut4 Identify the boundaries of a successful self- managed team LOut6 Identify the characteristics that distinctly set great self-managed teams apart from other team structures
10	Extended learning object description	https://youtu.be/H9LSopkLbpw

TB3: L	TB3: Learning Object		
1	Learning object code	6.1.e	
2	Learning object title	What Makes the Highest Performing Teams in the World	
3	Learning object description	This unit introduces the learners to the secrets to build a high performing team	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Streaming media-Video	





7	Workload (Estimated study time) (min)	2 minutes
8	Key words	Successful teams, performing teams
9	Learning outcomes (LOut)	LOut3 Explain the criteria and the preconditions for successful teams LOut5 Explain which competences are needed before seeing the benefits of a successful self-managed team LOut6 Identify the characteristics that distinctly set great self-managed teams apart from other team structures
10	Extended learning object description	https://youtu.be/zP9jpxitfb4

TB3: Learning Object		
1	Learning object code	6.2.a
2	Learning object title	Characteristics and roles of self-managed teams
3	Learning object description	This unit presents to learners the basic characteristics of a self-managed team, its benefits, and the roles in it.  It includes:  Characteristics of self-managed teams;  Roles in self-managed teams;  Benefits of a self-managed team.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	Characteristics of self-managed teams, roles of self-managed teams, benefits of self-managed teams
9	Learning outcomes (LOut)	LOut1 Describe the characteristics of a self-managed team LOut2 Recognize the alternating/informal roles of self-managed teams' members LOut3 Describe the benefits of a self-managed team
10	Extended learning object	There will be a PowerPoint presentation of up to 13 slides.





The presentation aims at introducing to learners to recognize the characteristics of a self-managed team.
It includes:
<ul> <li>Definition of self-managed team</li> </ul>
<ul> <li>Characteristics and roles of self-managed team</li> </ul>

TB3: Learning Object		
1	Learning object code	6.2.b
2	Learning object title	Self-Managed Teams / How do self-managed teams work?
3	Learning object description	This unit presents to the learners the self-managed teams and how they work
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	4 minutes
8	Key words	self-managed teams, roles of self-managed teams, benefits of self-managed teams
9	Learning outcomes (LOut)	LOut1 Describe the characteristics of a self-managed team LOut2 Recognize the alternating/informal roles of self- managed teams' members LOut3 Describe the benefits of a self-managed team
10	Extended learning object description	https://youtu.be/95IH8VAUVTo

ТВ	TB3: Learning Object	
1	Learning object code	6.2.c
2	Learning object title	Are Self-managed teams possible?
3	Learning object description	This unit presents to the learners how a self-managed team can become a successful team
4	Language	English





5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	Types of teams, virtual teams
9	Learning outcomes (LOut)	LOut3 Explain the criteria and the preconditions for successful teams
10	Extended learning object description	https://youtu.be/KTy17AW8fYs

TB3: L	TB3: Learning Object	
1	Learning object code	6.3.a
2	Learning object title	The steps for a self-managed team
3	Learning object description	This unit presents to learners the steps and the conditions that lead in creating a successful managed-team It includes:  • How self-managed team works;  • Innovative steps to ease into self-managed teams; Requested competences to move toward self-managed teams.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	Steps, changes, build, self-managed teams
9	Learning outcomes (LOut)	LOut1 Describe how a self-managed team work LOut2 Explain which competences are needed before seeing the benefits of a successful self-managed team LOut3 Describe the steps to build a self-managed team





10	Extended learning object description	There will be a PowerPoint presentation of up to 12 slides. The presentation aims at presenting to learners the steps to build a self-managed team. It includes:
		<ul> <li>Essential steps to build a successful self-managed team</li> <li>Advantages of a self-managed team</li> </ul>

TB3: Learning Object		
1	Learning object code	6.3.b
2	Learning object title	How to Build a Self-Managed Team
3	Learning object description	This unit presents to the learners the way to build a self- managed team
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	2 minutes
8	Key words	Steps, changes, build, self-managed teams
9	Learning outcomes (LOut)	LOut3 Describe the steps to build a self-managed team
10	Extended learning object description	https://youtu.be/CbpfWz771ng

ТВЗ: Ц	TB3: Learning Object	
1	Learning object code	6.3.c
2	Learning object title	How to Lead Self-Managed Teams
3	Learning object description	This unit presents to the learners how to lead a self- managed team
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation





6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	4 minutes
8	Key words	Lead, self-managed teams
9	Learning outcomes (LOut)	LOut2 Explain which competences are needed before seeing the benefits of a successful self-managed team LOut3 Explain the criteria and the preconditions for successful teams Lout4 Identify the boundaries of a successful self-managed team LOut5 Explain which competences are needed before seeing the benefits of a successful self-managed team LOut6 Identify the characteristics that distinctly set great self-managed teams apart from other team structures
10	Extended learning object description	https://youtu.be/fypfjVuOMKE

TB3:	TB3: Learning Object	
1	Learning object code	6.3.d
2	Learning object title	How HR can help build better teams (the power of Agile retrospectives)
3	Learning object description	This unit presents to the learners how team members can build better teams
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	9 minutes
8	Key words	build, better self-managed teams
9	Learning outcomes (LOut)	LOut2 Explain which competences are needed before seeing the benefits of a successful self-managed team LOut3 Explain the criteria and the preconditions for successful teams





10 Extended learning object description

https://youtu.be/fypfjVuOMKE





# **Agile Artifacts**

ТВ3: І	TB3: Learning Object	
1	Learning object code	7.1a
2	Learning object title	Introduction to Agile artifacts
3	Learning object description	This unit introduces the learners to the basic concepts of agile artifacts.  Basic concepts of agile artifacts
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Agile Scrum artifacts, Product backlog, Sprint backlog, Product increment
9	Learning outcomes (LOut)	LOut1 Describe the basic concepts of the agile artifacts LOut2 Define the stages of agile artifacts in Scrum LOut3 Match every agile artifact with the stage of project development
10	Extended learning object description	There will be a PowerPoint presentation of up to 16 slides. The presentation aims at introducing to learners to Agile artifacts It includes:  • What are the three scrum artifacts • Product Backlog • Sprint backlog • Product Increment

TB3: Learning Object		
1	Learning object code	7.1b
2	Learning object title	Goals of Scrum artifacts
3	Learning object description	This unit presents to the learners the goals of the three scrum artifacts





4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	4 minutes
8	Key words	goals, scrum artifacts
9	Learning outcomes (LOut)	LOut1 Describe the basic concepts of the agile artifacts
10	Extended learning object description	https://youtu.be/U5T4GwMCs9E

TB3: Learning Object		
1	Learning object code	7.1c
2	Learning object title	The Increment and Definition of Done
3	Learning object description	This unit presents to the learners the product increment
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	2 minutes
8	Key words	Scrum artifacts, product increment
9	Learning outcomes (LOut)	LOut2 Define the stages of agile artifacts in Scrum LOut3 Match every agile artifact with the stage of project development
10	Extended learning object description	https://youtu.be/jkdlsW_yM6o

TB3: Learning Object		
1	Learning object code	7.1d





2	Learning object title	Sprint backlog
3	Learning object description	This unit analyses to the learners the sprint backlog
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	3 minutes
8	Key words	Sprint backlog, agile artifacts
9	Learning outcomes (LOut)	LOut1 Describe the basic concepts of the agile artifacts LOut2 Define the stages of agile artifacts in Scrum LOut3 Match every agile artifact with the stage of project development
10	Extended learning object description	https://youtu.be/orqfbBs6hk8

TB3: L	TB3: Learning Object	
1	Learning object code	7.2.a
2	Learning object title	A healthy product backlog – Steps to build it
3	Learning object description	This unit presents to learners the basic steps to create a product backlog  It includes:  Product Backlog definition  What product backlog includes  Steps to create a product backlog  How to prioritize product backlog items  Product backlog example
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes





8	Key words	Product backlog, development of product backlog, prioritizing items
9	Learning outcomes (LOut)	LOut4 Describe the steps to create a scrum product backlog LOut5 Explain the role of backlog LOut3 Use the product backlog in an educational/school project
10	Extended learning object description	There will be a PowerPoint presentation of up to 18 slides. The presentation aims at analysing to the learners the steps to create a product backlog and how to prioritize product backlog items

TB3: Learning Object		
1	Learning object code	7.2.b
2	Learning object title	Product backlog
3	Learning object description	This unit analyses to the learners the product backlog
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	3 minutes
8	Key words	Agile artifacts, product backlog
9	Learning outcomes (LOut)	LOut4 Describe the steps to create a scrum product backlog LOut5 Explain the role of backlog
10	Extended learning object description	https://youtu.be/vbKcZiA_4iM

TB3: Learning Object		
1	Learning object code	7.2.c
2	Learning object title	Product Backlog Refinement in Scrum/Importance of





		Backlog Refinement
3	Learning object description	This unit presents to the learners the way to keep product backlog updated, clean and orderly
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	4 minutes
8	Key words	Product backlog refinement, user stories
9	Learning outcomes (LOut)	LOut4 Describe the steps to create a scrum product backlog LOut5 Explain the role of backlog
10	Extended learning object description	https://youtu.be/pSguy2FuC2c

ТВ	TB3: Learning Object		
1	Learning object code	7.2.d	
2	Learning object title	Using product backlog in an educational environment- Play Scrum - A Card Game to Learn the Scrum Agile Method	
3	Learning object description	This unit presents to the learners the use of product backlog in an educational environment	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Text	
7	Workload (Estimated study time) (min)	15 minutes	
8	Key words	Product backlog, educational environment	
9	Learning outcomes (LOut)	LOut6 Use the product backlog in an educational/school project	





10 Extended learning object description

https://www.researchgate.net/publication/221238613 PlayScrum -A Card Game to Learn the Scrum Agile Method





# **Agile Ceremonies**

TB3: L	TB3: Learning Object	
1	Learning object code	8.1a
2	Learning object title	Introduction to Agile Ceremonies
3	Learning object description	This unit introduces the learners to the basic concepts of agile ceremonies  Basic concepts of agile ceremonies
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	30 minutes
8	Key words	Agile ceremonies, Scrum ceremonies, Agile meetings, Scrum meetings, agile events, Scrum events
9	Learning outcomes (LOut)	LOut1 To define what agile ceremonies are.  LOut2 To identify team members that should participate at each ceremony.  LOut3 To identify challenges at each ceremony.  LOut4 To describe agile ceremonies.  LOut5 To explain the role of each ceremony.  LOut6 To describe the purpose of each ceremony.
10	Extended learning object description	There will be a PowerPoint presentation of up to 23 slides. The presentation aims at introducing to learners to Agile ceremonies. It includes:  Definition a term ceremony Presentation of Scrum/Kanban ceremonies

TB3: Learning Object		
1	Learning object code	8.1b
2	Learning object title	Scrum Foundations: Scrum Events Explained
3	Learning object description	This unit introduces the learners to the basic concepts of





		agile ceremonies and especially on Scrum ceremonies/events.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	Agile ceremonies, Scrum ceremonies, Agile meetings, Scrum meetings, agile events, Scrum events
9	Learning outcomes (LOut)	LOut1 To define what agile ceremonies are.  LOut2 To identify team members that should participate at each ceremony.  LOut3 To identify challenges at each ceremony.  LOut4 To describe agile ceremonies.  LOut5 To explain the role of each ceremony.  LOut6 To describe the purpose of each ceremony.
10	Extended learning object description	https://youtu.be/hgmOS_MxvNI

ТВЗ: Ц	TB3: Learning Object	
1	Learning object code	8.2a
2	Learning object title	Agile ceremonies in a classroom/ best practices.
3	Learning object description	This unit introduces the learners to how to adapt agile ceremonies to a classroom environment.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	45 minutes
8	Key words	Agile in classroom, agile meetings in classroom, agile ceremonies in classroom, agile practices in classroom, scrum in classroom, teaching with scrum, agile teaching





9	Learning outcomes (LOut)	LOut2 To identify team members that should participate at each ceremony.  LOut3 To identify challenges at each ceremony.  LOut6 To describe the purpose of each ceremony.  Lout 7 To be able to organize agile ceremonies in a school/classroom environment
10	Extended learning object description	<ul> <li>There will be a PowerPoint presentation of up to 30 slides.</li> <li>The presentation aims at introducing to learners to how to apply agile ceremonies to a classroom environment.</li> <li>It includes:         <ul> <li>Mapping agile ceremonies elements to classroom elements</li> <li>Implementation of agile ceremonies to a classroom environment</li> </ul> </li> </ul>

TB3: Learning Object		
1	Learning object code	8.2b
2	Learning object title	eduScrum in Class
3	Learning object description	This unit introduces the learners to eduScrum methodology
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Agile in classroom, agile meetings in classroom, agile ceremonies in classroom, agile practices in classroom, scrum in classroom, teaching with scrum, agile teaching
9	Learning outcomes (LOut)	LOut2 To identify team members who should participate at each ceremony.  LOut3 To identify challenges at each ceremony.  LOut6 To describe the purpose of each ceremony.  Lout 7 To be able to organize agile ceremonies in a school/classroom environment.
10	Extended learning object	https://youtu.be/uRgBBaiUc58





description	
description	





# **Selecting digital resources**

ТВЗ: І	TB3: Learning Object	
1	Learning object code	9.1a
2	Learning object title	Why use digital resources?
3	Learning object description	This video will introduce learners to the concept of digital resources and explain the difference between digital resources and digital learning resources
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	<u>Video</u>
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Digital resources, digital learning resources, digital educational resources, e-learning
9	Learning outcomes (LOut)	LOut1: Identify digital resources LOut5: Discuss the purposes and needs for digital resources
10	Extended learning object description	

ТВЗ: І	TB3: Learning Object	
1	Learning object code	9.1b
2	Learning object title	Types of digital resources
3	Learning object description	This text will introduce learners to the concept of digital resources, explain the difference between digital resources and digital learning resources, establish a classification and present examples of digital resources.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text





6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	30mins
8	Key words	Digital resources, digital learning resources, digital educational resources, e-learning
9	Learning outcomes (LOut)	LOut1: Identify digital resources LOut5: Discuss the purposes and needs for digital resources
10	Extended learning object description	

ТВЗ: І	TB3: Learning Object	
1	Learning object code	9.2a
2	Learning object title	Learners and context
3	Learning object description	This presentation will list factors that should influence the selection process when working with digital resources, discuss them in more detail and support learners in establishing their own set of criteria.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15min
8	Key words	Digital resources, digital learning resources, digital educational resources, e-learning, accessibility,
9	Learning outcomes (LOut)	LOut2: List criteria for useful digital resources LOut4: Distinguish selection criteria
10	Extended learning object description	





ТВЗ: Ц	TB3: Learning Object	
1	Learning object code	9.2b
2	Learning object title	Digital Accessibility
3	Learning object description	This presentation will list factors that should influence the selection process when working with digital resources, discuss them in more detail and support learners in establishing their own set of criteria.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Digital resources, digital learning resources, digital educational resources, e-learning, accessibility,
9	Learning outcomes (LOut)	LOut2: List criteria for useful digital resources LOut4: Distinguish selection criteria
10	Extended learning object description	

TB3: L	TB3: Learning Object	
1	Learning object code	9.2c
2	Learning object title	Availability, access and ability
3	Learning object description	This presentation will list factors that should influence the selection process when working with digital resources, discuss them in more detail and support learners in establishing their own set of criteria.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation





6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Digital resources, digital learning resources, digital educational resources, e-learning, accessibility,
9	Learning outcomes (LOut)	LOut2: List criteria for useful digital resources LOut4: Distinguish selection criteria
10	Extended learning object description	

ТВЗ: Ц	TB3: Learning Object	
1	Learning object code	9.2d
2	Learning object title	Checklist for digital accessibility
3	Learning object description	This checklist will provide important factors to consider for making digital resources accessible to learners.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	5min
8	Key words	Digital resources, digital learning resources, digital educational resources, e-learning, accessibility,
9	Learning outcomes (LOut)	LOut2: List criteria for useful digital resources LOut4: Distinguish selection criteria
10	Extended learning object description	





TB3: L	TB3: Learning Object	
1	Learning object code	9.3a
2	Learning object title	Selection of digital resources
3	Learning object description	This presentation will walk learners through the process of researching, finding and selecting appropriate digital resources.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Digital resources, digital learning resources, digital educational resources, e-learning, accessibility, access
9	Learning outcomes (LOut)	LOut3: Select digital resources for learning purposes LOut6: Choose digital resources for own teaching settings LOut7: Choose digital resources for own learning settings
10	Extended learning object description	

TB3: L	TB3: Learning Object	
1	Learning object code	9.4a
2	Learning object title	Demonstration of a professional learning scenario supported by a digital resource
3	Learning object description	This practical assignment will challenge learners to apply their newly gained knowledge on digital resources in a practical teaching scenario-
4	Language	English
5	Learning recourse type (IEEE LOM)	Text
6	Technical type (IEEE LOM)	Document





7	Workload (Estimated study time) (min)	30 minutes
8	Key words	Digital resources, digital learning resources, digital educational resources, e-learning
9	Learning outcomes (LOut)	LOut8: Create a teaching scenario and include a digital resource
10	Extended learning object description	Practical Assignment





## **Creating and modifying digital resources**

ТВЗ: Ц	TB3: Learning Object	
1	Learning object code	10.1a
2	Learning object title	Introduction
3	Learning object description	This unit introduces learners to the module so as to gain an overall view of the material and its structure.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	keywords
9	Learning outcomes (LOut)	
10	Extended learning object description	There will be a PowerPoint presentation of up to 16 slides.

ТВЗ:	TB3: Learning Object	
1	Learning object code	10.1b
2	Learning object title	Introduction to OER
3	Learning object description	This unit introduces learners to the concept of Open Educational Resources (OER). It introduces the 5R activities / permissions and the advantages and challenges of using OER.
4	Language	English
5	Learning recourse type (IEEE LOM)	Online source
6	Technical type (IEEE LOM)	Document





7	Workload (Estimated study time) (min)	15 minutes
8	Key words	OER, educational resources.
9	Learning outcomes (LOut)	LOut1: Describe the concept of OER.
10	Extended learning object description	https://en.wikipedia.org/wiki/Open_educational_resources

TB3: L	TB3: Learning Object	
1	Learning object code	10.1c
2	Learning object title	Creating and modifying digital educational resources
3	Learning object description	This unit introduces learners to specific digital tools they can choose and use for the creation, modification and sharing of their educational resources.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media – Video
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	educational resources, Cmap Tools, Padlet
9	Learning outcomes (LOut)	Lout2: Name digital tools for creating educational material / resources. Lout3: Recognize of the technical features of digital tools for the creation of educational material / resource
10	Extended learning object description	Video from Helliwood

TB3: Learning Object		
1	Learning object code	10.1d
2	Learning object title	Cmap Tools in the Cloud. How to construct a concept map





3	Learning object description	This unit introduces learners how to construct a concept map using Cmap Tools in the Cloud, the web-based concept map editor.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media – video
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Cmap Tools
9	Learning outcomes (LOut)	Lout4: To construct digital concepts maps.
10	Extended learning object description	https://www.youtube.com/watch?v=SjaJ67xFC28

ТВЗ: І	TB3: Learning Object	
1	Learning object code	10.1e
2	Learning object title	Using Padlet
3	Learning object description	This unit introduces learners to the Padlet platform and the way they can use it as a digital noticeboard in their classroom.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Padlet
9	Learning outcomes (LOut)	Lout4: T use digital notice boards.
10	Extended learning object description	There will be a PowerPoint presentation of up to 17 slides. The presentation aims at introducing to learners to Padlet. It includes:  • What is Padlet • Get started with Padlet





	<ul> <li>The Dashboard</li> <li>Create your first Padlet</li> <li>Design the Padlet</li> <li>Control the privacy of your Padlet</li> <li>Share your Padlet</li> <li>Joining a Padlet</li> </ul>
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ТВЗ: І	TB3: Learning Object	
1	Learning object code	10.2a
2	Learning object title	How to insert multimedia in Libreoffice Impress
3	Learning object description	This unit introduces learners to the ways they can insert multimedia files (audio and video) in their Libreoffice Impress presentations.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Libreoffice Impress
9	Learning outcomes (LOut)	LOut1: To develop digital educational material / resource using tools such slide creation software.
10	Extended learning object description	There will be a PowerPoint presentation of up to 18 slides. The presentation aims at introducing to learners to multimedia insertion in Libreoffice Impress. It includes:  • Multimedia insertion on Libreoffice Impress • Import media file (audio and video files) • Media connection • Media playback • Photo album

TB3: Learning Object		
1	Learning object code	10.2b
2	Learning object title	How to Edit a Video with Edpuzzle
3	Learning object description	This unit introduces learners to the ways they can edit a





		video with Edpuzzle platform
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Media streaming – video
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	EDpuzzle
9	Learning outcomes (LOut)	LOut1: To develop digital educational material / resource using tools for creating educational videos. Lout2: To expand / modify digital educational material / resource depending on the educational framework that will integrate it, what specifications have been set, the learning needs of the trainees and the expected learning outcomes.
10	Extended learning object description	https://www.youtube.com/watch?v=0_Sg9Bd7CoE&list=PLK l8fZYdu71EZy8p3oEmbV_ikMvq4hXL5&index=4&t=32s

TB3: Le	TB3: Learning Object	
1	Learning object code	10.2c
2	Learning object title	How to use Quizizz to make quiz
3	Learning object description	This unit introduces learners to the Quizziz platform and the ways they can use it to make their quizzes for the classroom.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media - video
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Quizizz
9	Learning outcomes (LOut)	LOut1: To develop digital educational material / resource using platforms for online quizzes. Lout2: To expand / modify digital educational material / resource depending on the educational framework that will integrate it, what specifications have been set, the learning





		needs of the trainees and the expected learning outcomes.
10	Extended learning object description	https://www.youtube.com/watch?v=JRxLIdemLPw&t=56s

ТВЗ: І	TB3: Learning Object	
1	Learning object code	10.2d
2	Learning object title	How to find a quiz on Quizizz, or a video in EDpuzzle
3	Learning object description	This unit introduces learners to how they can search for and use a quiz on the Quizizz platform or search for and use a video on the EDpuzzle platform
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	EDpuzzle, Quizizz
9	Learning outcomes (LOut)	Lout2: To expand / modify digital educational material / resource depending on the educational framework that will integrate it, what specifications have been set, the learning needs of the trainees and the expected learning outcomes.
10	Extended learning object description	There will be a PowerPoint presentation of up to 18 slides.  It includes:  The ways the learner can find a quiz in Quizizz's platform  The ways the learner can search for videos in EDpuzzle





### Managing, protecting and sharing digital resources

TB3: L	TB3: Learning Object	
1	Learning object code	11.1a
2	Learning object title	Introduction
3	Learning object description	This unit introduces learners to the module so as to gain an overall view of the material and its structure.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	keywords
9	Learning outcomes (LOut)	
10	Extended learning object description	There will be a PowerPoint presentation of up to 16 slides.

TB3: L	TB3: Learning Object	
1	Learning object code	11.1b
2	Learning object title	Personal data and GDPR in education
3	Learning object description	This unit introduces learners to the concepts of personal data, sensitive data and the application of GDPR in education.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	20 minutes





8	Key words	GDPR, sensitive data
9	Learning outcomes (LOut)	Lout1: Defines sensitive personal data.
10	Extended learning object description	There will be a PowerPoint presentation of up to 27 slides. The presentation aims at introducing to learners to the concepts of personal and sensitive data and the application of GDPR in the school environment. It includes:  • What is personal data • Personal data in school • What is sensitive personal data • Sensitive data in school • Why protection of our personal data is important • What GDPR change to protection of our privacy • General advices for schools

ТВЗ: І	TB3: Learning Object	
1	Learning object code	11.1c
2	Learning object title	GDPR awareness for school staff
3	Learning object description	This unit introduces learners to simple ideas and things they can to do to ensure data protection is an integrated part of their role in school.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media - video
7	Workload (Estimated study time) (min)	3 minutes
8	Key words	GDPR, Sensitive data
9	Learning outcomes (LOut)	Lout1: Defines sensitive personal data.
10	Extended learning object description	https://www.youtube.com/watch?v=4yPxs4D9u_c





TB3: L	TB3: Learning Object	
1	Learning object code	11.1d
2	Learning object title	Creative Commons licenses
3	Learning object description	This unit introduces learners to the concept of Creative Commons Licenses system and how they can apply a license to their work.
4	Language	English
5	Learning recourse type (IEEE LOM)	Online source
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Creative Commons
9	Learning outcomes (LOut)	LOut2: Recognizes the marking of Creative Commons licenses.
10	Extended learning object description	https://creativecommons.org/about/cclicenses/

TB3: L	TB3: Learning Object	
1	Learning object code	11.1e
2	Learning object title	Copyright Management
3	Learning object description	This unit introduces learners to the concepts of Intellectual property rights, copyright infringement and the steps one should follow to make use of third-party content.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Media streaming - video
7	Workload (Estimated study time) (min)	10 minutes





8	Key words	Copyright
9	Learning outcomes (LOut)	Lout3: Respect possible copyright restrictions to using, reusing and modifying digital resources.
10	Extended learning object description	Video from Helliwood

ТВЗ: І	TB3: Learning Object	
1	Learning object code	11.2a
2	Learning object title	Share files from Google Drive
3	Learning object description	This unit introduces learners to the ways they can share files from Google Drive with specific people or groups of people, add expiration date, allow general access to a file or share a file publicly.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	Sharing files, Google Docs, share link
9	Learning outcomes (LOut)	LOut1: Share resources using links or as attachments, e.g. to e-mails. Lout3: Take measures to protect sensitive data and resources (e.g. students' grades, exams). Lout4: Share administrative and student-related data with colleagues, students and parents, as appropriate.
10	Extended learning object description	https://support.google.com/drive/answer/2494822?hl=e n&co=GENIE.Platform%3DDesktop

TB3: L	TB3: Learning Object		
1	Learning object code	11.2b	



2	Learning object title	Google Drive: Sharing and Collaborating
3	Learning object description	This unit introduces learners to the ways they can use Google Drive to: Share files Share files with a group and with a link Collaborate with others
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Media streaming - video
7	Workload (Estimated study time) (min)	3 minutes
8	Key words	Sharing files, Google Docs, share link
9	Learning outcomes (LOut)	LOut1: Share resources using links or as attachments, e.g. to e-mails. Lout3: Take measures to protect sensitive data and resources (e.g. students' grades, exams). Lout4: Share administrative and student-related data with colleagues, students and parents, as appropriate.
10	Extended learning object description	https://www.youtube.com/watch?v=xapBM5iOnn4

TB3: Learning Object		
1	Learning object code	11.2c
2	Learning object title	Share OneDrive files and folders
3	Learning object description	This unit introduces learners to the ways they can share OneDrive files and folders with specific people, share by using "Copy Link" and the options / permissions they can set.
4	Language	English
5	Learning recourse type (IEEE LOM)	Online source
6	Technical type (IEEE LOM)	Document





7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Sharing files, OneDrive, share link
9	Learning outcomes (LOut)	LOut1: Share resources using links or as attachments, e.g. to e-mails. Lout3: Take measures to protect sensitive data and resources (e.g. students' grades, exams). Lout4: Share administrative and student-related data with colleagues, students and parents, as appropriate.
10	Extended learning object description	https://support.microsoft.com/en-us/office/share- onedrive-files-and-folders-9fcc2f7d-de0c-4cec-93b0- a82024800c07

ТВ3: І	TB3: Learning Object		
1	Learning object code	11.2d	
2	Learning object title	Share video with others in EDpuzzle platform	
3	Learning object description	This unit introduces learners to the ways they can share videos in EDpuzzle platform, create classes in EDpuzzle platform, invite students and assign a video to the class.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	15 minutes	
8	Key words	Share link, EDpuzzle	
9	Learning outcomes (LOut)	Lout2: Share resources on online platforms or personal or organizational websites/blogs.	
10	Extended learning object description	There will be a PowerPoint presentation of up to 13 slides. The presentation aims at introducing to learners to the ways the can share EDpuzzle video to the classroom. It includes:  Creating classes in EDpuzzle Invite students to EDpuzzle's classes	





- Assign an EDpuzzle video
- Share a video with others in EDpuzzle platform

ТВЗ: І	TB3: Learning Object		
1	Learning object code	11.2e	
2	Learning object title	Share a link in Quizziz platform	
3	Learning object description	This unit introduces learners to the ways they can create and share a link for their quizzes on Quizizz platform	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Streaming media - video	
7	Workload (Estimated study time) (min)	2 minutes	
8	Key words	Share link, Quizizz	
9	Learning outcomes (LOut)	Lout2: Share resources on online platforms or personal or organizational websites/blogs.	
10	Extended learning object description	https://www.youtube.com/watch?v=FNFbNG25zx4	





#### Creativity

TB3: Learning Object		
1	Learning object code	12.1a
2	Learning object title	Introduction to the concept of Creativity
3	Learning object description	This module introduces learners to the concept and characteristics of Creativity, Innovation and its applications in the 21st century.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Pptx file
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Creativity, creative thinking, creative process, innovation, entrepreneurship
9	Learning outcomes (LOut)	LOut1: Define the concept of Creativity
10	Extended learning object description	PowerPoint presentation with up to 16 slides

TB3: L	TB3: Learning Object		
1	Learning object code	12.1b	
2	Learning object title	Definition of the concept of Creativity	
3	Learning object description	This module is a short presentation that introduces learners to the concept of Creativity in the 21st century.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Online source	
6	Technical type (IEEE LOM)	Copyright 2019 Video	
7	Workload (Estimated study time)	1,5 minutes	





	(min)	
8	Key words	Creativity, creative solutions, problem solving
9	Learning outcomes (LOut)	LOut1: Define the concept of Creativity
10	Extended learning object description	https://www.youtube.com/watch?v=MTCOExd0hDk

TB3: L	TB3: Learning Object	
1	Learning object code	12.1c
2	Learning object title	Towards an understanding of creativity and its measurements (page 10-12)
3	Learning object description	This module introduces learners to the key characteristics of creativity.
4	Language	English
5	Learning recourse type (IEEE LOM)	Research article
6	Technical type (IEEE LOM)	Pdf file
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Definitions of Creativity, main characteristics
9	Learning outcomes (LOut)	LOut1 Define the concept of Creativity LOut2 Illustrate creativity's basic characteristics
10	Extended learning object description	https://andrei.clubcisco.ro/5master/aac- sac/misc/Measuring%20Creativity.pdf

TB3: Learning Object		
1	Learning object code	12.1d
2	Learning object title	The 6 characteristics of truly creative people.
3	Learning object description	This module introduces learners to the main characteristics of a creative thinker and analyses the optimal conditions for enhancing creativity.





4	Language	English
5	Learning recourse type (IEEE LOM)	Online Source
6	Technical type (IEEE LOM)	Streaming Media - Video
7	Workload (Estimated study time) (min)	14 minutes
8	Key words	Innovation, Knowledge, Imagination, Culture, Attitude
9	Learning outcomes (LOut)	LOut2 Illustrate creativity's basic characteristics
10	Extended learning object description	https://www.youtube.com/watch?v=SjaJ67xFC28

ТВЗ: І	TB3: Learning Object	
1	Learning object code	12.2a
2	Learning object title	The importance of Creativity and how it was widely recognized as a skill of the 21st century
3	Learning object description	This module introduces learners to the importance of creativity for the social, educational and business aspects of life in the 21st century.
4	Language	English
5	Learning recourse type (IEEE LOM)	Online Source
6	Technical type (IEEE LOM)	Streaming Media - Video
7	Workload (Estimated study time) (min)	6,5 minutes
8	Key words	21st century skills, creativity, creative thinking
9	Learning outcomes (LOut)	LOut4 Discover the applications of creative thinking in everyday life.
10	Extended learning object description	https://www.youtube.com/watch?v=nl0Cxz0iG8o&t=1s





TB3:	TB3: Learning Object		
1	Learning object code	12.2b	
2	Learning object title	Innovation and creativity in education and training in EU Member States: Promoting creativity Learning and Supporting Innovative Teaching	
3	Learning object description	This module introduces learners to the definitions and relationships that exist between the concepts of creativity and innovation.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	OER – Online Source	
6	Technical type (IEEE LOM)	Pdf file	
7	Workload (Estimated study time) (min)	10 minutes	
8	Key words	Creativity, Innovation, innovative teaching	
9	Learning outcomes (LOut)	LOut3 Relate creativity to innovation	
10	Extended learning object description	https://www.kent.ac.uk/teaching/documents/academic- practice/Established%20Teaching%20Staff/Innovation%20in %20teaching%20and%20creativity%20in%20learning.pdf	

TB3: I	TB3: Learning Object	
1	Learning object code	12.2c
2	Learning object title	What creativity and innovation look like in everyday life
3	Learning object description	This module introduces learners to the applications of creativity in everyday life
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	Streaming media - video
7	Workload (Estimated study time) (min)	8 minutes
8	Key words	Creativity in the Classroom





9	Learning outcomes (LOut)	LOut4 Discover the applications of creative thinking in everyday life
10	Extended learning object description	https://www.youtube.com/watch?v=JRxLIdemLPw&t=56s

TB3: L	TB3: Learning Object	
1	Learning object code	12.3a
2	Learning object title	Creative thinking: How to increase connecting dots.
3	Learning object description	This module introduces learners to creative thinking techniques and creative problem solving.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	Copyright 2019 Streaming Media. All Rights Reserved.
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Adaption Innovation theory, divergent thinking, creativity, innovation, creative problem solving
9	Learning outcomes (LOut)	LOut5 Assemble techniques aimed at the enhancement of creative skills
10	Extended learning object description	https://www.youtube.com/watch?v=cYhgIITy4yY

TB3: I	TB3: Learning Object	
1	Learning object code	12.3b
2	Learning object title	Innovative thinking. Can you be taught?
3	Learning object description	This unit analyses ways to teach creativity and innovation in the classroom.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	Copyright 2019 Video





7	Workload (Estimated study time) (min)	13 minutes
8	Key words	Innovative thinking skills, innovative teaching, creativity
9	Learning outcomes (LOut)	LOut5 Assemble techniques aimed at the enhancement of creative skills
10	Extended learning object description	https://www.youtube.com/watch?v=B2pjN4Ne1ag

ТВЗ:	TB3: Learning Object		
1	Learning object code	12.3c	
2	Learning object title	Techniques and methods of creative management as part of management education: analytical study of students' perceptions.	
3	Learning object description	This module introduces learners to the applications of creativity in everyday life through creative problem solving.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Online Source – OER - Research article	
6	Technical type (IEEE LOM)	Pdf file	
7	Workload (Estimated study time) (min)	15 minutes	
8	Key words	Creativity, Education, Innovation	
9	Learning outcomes (LOut)	LOut4 Discover the applications of creative thinking in everyday life	
10	Extended learning object description	https://www.researchgate.net/publication/280941819 Creative Management Techniques and Methods as a Part of the Management Education Analytical Study on Students' Perceptions	

TB3: Learning Object		
1	Learning object code	12.3d
2	Learning object title	How do we create a school that inspires creativity?
3	Learning object description	This module introduces trainees to innovative practices that encourage creativity at school.
4	Language	English





5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	Copyright 2019 Streaming Media. All Rights Reserved.
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Educational Time, Success, divergent thinking, creativity, innovation, boosting creativity and innovation, creative teaching, and learning
9	Learning outcomes (LOut)	LOut5 Assemble techniques aimed at the enhancement of creative skills
10	Extended learning object description	https://www.youtube.com/watch?v=OdKUEtID43A

TB3: I	TB3: Learning Object	
1	Learning object code	12.4a
2	Learning object title	Creativity in the transformation of corporate culture.
3	Learning object description	This module introduces learners to creative thinking techniques and creative problem solving.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	Copyright 2019 Streaming Media. All Rights Reserved.
7	Workload (Estimated study time) (min)	13 minutes
8	Key words	Environment, experimentation, prototyping, storytelling
9	Learning outcomes (LOut)	LOut6 Recommend exercises aimed at the enhancement of creative skills
10	Extended learning object description	https://www.youtube.com/watch?v=01Y7qlPFpqw

твз:	TB3: Learning Object	
1	Learning object code	12.4b
2	Learning object title	Creative Thinking Patterns
3	Learning object description	This section presents the patterns of Creative Thinking.





4	Language	English
5	Learning recourse type (IEEE LOM)	Online Source – OER – Research Article
6	Technical type (IEEE LOM)	Pdf File
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Creative Thinking Patterns, creative thinking techniques, teaching creativity
9	Learning outcomes (LOut)	LOut6 Recommend exercises aimed at the enhancement of creative skills
10	Extended learning object description	https://www.hillside.net/plop/2012/papers/Group%201% 20-%20Elk/Patterns%20for%20Creative%20Thinking.pdf

твз: і	TB3: Learning Object	
1	Learning object code	12.4c
2	Learning object title	The art of innovation.
3	Learning object description	This module introduces learners to the applications of creativity and innovation in entrepreneurship.
4	Language	English
5	Learning recourse type (IEEE LOM)	Copyright 2019 Streaming Media. All Rights Reserved.
6	Technical type (IEEE LOM)	Video
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Creativity, Innovation, Entrepreneurship
9	Learning outcomes (LOut)	LOut6 Recommend exercises aimed at the enhancement of creative skills
10	Extended learning object description	https://www.youtube.com/watch?v=Mtjatz9r-Vc

TB3: Learning Object		
1	Learning object code	12.4d
2	Learning object title	Digital tools that spark creativity.



3	Learning object description	This module introduces learners to the open digital tools, available online, which can be used to train students in creativity and creative thinking at school.
4	Language	English
5	Learning recourse type (IEEE LOM)	Website
6	Technical type (IEEE LOM)	Website
7	Workload (Estimated study time) (min)	1 minutes
8	Key words	Digital tools, boosting creativity and innovation, creative teaching, and learning
9	Learning outcomes (LOut)	LOut5 Assemble techniques aimed at the enhancement of creative skills
10	Extended learning object description	https://blog.cambridgeinternational.org/digital-tools-to- spark-creativity





#### **Time Management**

TB3: L	TB3: Learning Object		
1	Learning object code	13.1	
2	Learning object title	Self-evaluation	
3	Learning object description	This unit is intended to self-evaluate the learner's ability to manage its time productively and efficiently and the knowledge of the time management tools.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	10 minutes	
8	Key words	Self-evaluation, Time management	
9	Learning outcomes (LOut)	LOut1: Recognise stakeholder's non-desirable behaviours leading to waste of time and procrastination	
10	Extended learning object description		

ТВЗ: Ц	TB3: Learning Object		
1	Learning object code	13.2	
2	Learning object title	Time Management Introduction	
3	Learning object description	This unit will briefly introduce the topic of time management to the participant.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time)	10 minutes	





	(min)	
8	Key words	Time management, Agile time management, History of time management
9	Learning outcomes (LOut)	LOut1: Recognise stakeholder's non-desirable behaviours leading to waste of time and procrastination
10	Extended learning object description	

TB3: L	TB3: Learning Object	
1	Learning object code	13.3
2	Learning object title	Mind Mapping
3	Learning object description	This unit will provide the information about the mind mapping technique and the related tools.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Mind mapping, Time management, Mind mapping tools
9	Learning outcomes (LOut)	LOut7: Use of time management tools and various selfmanagement techniques.
10	Extended learning object description	

TB3: Learning Object		
1	Learning object code	13.4
2	Learning object title	Eisenhower Matrix
3	Learning object description	This unit will provide the learner with the knowledge about how to prioritise the tasks.





4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Eisenhower Matrix, Prioritisation, Time management
9	Learning outcomes (LOut)	LOut2: Identify how much time is needed for a task to be delivered.  LOut3: Identify key priorities in real-time in relation to their goals.  LOut4: Distinguish which types of tasks can be delegated.  LOut5: Distinguish which types of tasks can be eliminated.  LOut7: Use of time management tools and various selfmanagement techniques.  LOut8: Analyse tasks based on their urgency and importance.
10	Extended learning object description	

TB3: L	TB3: Learning Object	
1	Learning object code	13.5a
2	Learning object title	Case study - The Journey of the Tribe — the problem
3	Learning object description	This unit is intended to present a case study on prioritisation of tasks according to the Eisenhower Matrix prioritisation tool.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Case study, Time management, Prioritisation of tasks





9	Learning outcomes (LOut)	LOut2: Identify how much time is needed for a task to be delivered.  LOut3: Identify key priorities in real-time in relation to their goals.  LOut4: Distinguish which types of tasks can be delegated.  LOut5: Distinguish which types of tasks can be eliminated.
10	Extended learning object description	

ТВЗ: L	TB3: Learning Object		
1	Learning object code	13.5b	
2	Learning object title	Case study - The Journey of the Tribe — the problem solution	
3	Learning object description	This unit is intended to present a case study on prioritisation of tasks according to the Eisenhower Matrix prioritisation tool.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	video	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	10 minutes	
8	Key words	Case study, Time management, Prioritisation of tasks	
9	Learning outcomes (LOut)	LOut2: Identify how much time is needed for a task to be delivered.  LOut3: Identify key priorities in real-time in relation to their goals.  LOut4: Distinguish which types of tasks can be delegated.  LOut5: Distinguish which types of tasks can be eliminated.	
10	Extended learning object description		





TB3: L	TB3: Learning Object		
1	Learning object code	13.6	
2	Learning object title	Procrastination and other time wasters	
3	Learning object description	This unit will provide the learner with the information about the time wasters and what changes can be done for improving the time organisation.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	20 minutes	
8	Key words	Procrastination, Timewasters, Time management	
9	Learning outcomes (LOut)	LOut6: Identify specific needs of all the stakeholders involved LOut7: Describe the advantages and disadvantages of the various tools and solutions LOut8: Compare the available solutions	
10	Extended learning object description		





## **Problem Solving and Decision Making**

TB3: Learning Object		
1	Learning object code	14.1
2	Learning object title	Pre-course reflection
3	Learning object description	This unit is intended to reflect the learners most common problems with the school projects – how satisfied are they with their results or solutions and how is the impact of their results or solutions - whether it is in favour of the project or are they missing something? What is functional, useful and what did not work.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Self-evaluation, Reflection
9	Learning outcomes (LOut)	The reflection of the learner`s way of work
10	Extended learning object description	

TB3:	TB3: Learning Object	
1	Learning object code	14.2
2	Learning object title	Problem Solving and Root Cause Analysis
3	Learning object description	This presentation will shortly introduce problem solving and after the root cause analysis for identification of problem. In the end, the learner will acquire knowledge of special way to analyse his/her own problem.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation





6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	25 minutes
8	Key words	Problem Solving, Root cause analysis
9	Learning outcomes (LOut)	<ul> <li>LOut1: Identify a root cause</li> <li>LOut7: To be able to compare data</li> <li>LOut8: To be able to design a solution for a given practical problem</li> </ul>
10	Extended learning object description	

TB3: L	TB3: Learning Object		
1	Learning object code	14.3	
2	Learning object title	Strategies and Tools for Problem Solving	
3	Learning object description	This unit will shortly introduce strategies and tools to acquire additional knowledge how the problems can be solved. After completion of this unit, the participant will acquire additional knowledge how to analyse his/her own problem.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	35 minutes	
8	Key words	Project stages, digital collaboration tools, digital collaboration	
9	Learning outcomes (LOut)	<ul> <li>Upon completing this unit, learners will be able to:</li> <li>LOut1: Identify a root cause</li> <li>LOut2: Select an appropriate solution</li> <li>LOut7: To be able to compare data</li> </ul>	
10	Extended learning object		





description

TB3: Learning Object		
1	Learning object code	14.4
2	Learning object title	Decision Making and Design Thinking
3	Learning object description	This unit will introduce to the learner a short introduction of problem solving with respect to agile methods. Then, a specific iterative process - Design Thinking - to solve a problem regarding better understanding of the target user, challenging assumptions, redefinition of problems and creation of innovative solutions will be introduced.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	40 minutes
8	Key words	Digital collaboration tools, project stages, digital collaboration
9	Learning outcomes (LOut)	LOut6: Identify specific needs of all the stakeholders involved LOut7: Describe the advantages and disadvantages of the various tools and solutions LOut8: Compare the available solutions
10	Extended learning object description	Design thinking, Creative thinking, Innovative solution, Decision Making

TB3: Learning Object		
1	Learning object code	14.5
2	Learning object title	Some Other Decision-Making techniques
3	Learning object description	This unit will present to the course participant the decision-making techniques – e.g. group decision making,



		advice-based decision making etc.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	27 minutes
8	Key words	Group Decision Making, Advice Process, Criteria Based Decision Making
9	Learning outcomes (LOut)	<ul> <li>LOut2: Select an appropriate solution</li> <li>LOut3: Describe the design thinking methodology</li> <li>LOut4: Translate needs into solutions</li> <li>LOut5: To demonstrate creative thinking ability</li> <li>LOut6: To be able to choose an appropriate solution</li> <li>LOut8: To be able to design a solution for a given practical problem</li> <li>LOut9: To be able to assess needs of various stakeholders</li> </ul>
10	Extended learning object description	





# **Digital Problem Solving**

ТВЗ: І	TB3: Learning Object		
1	Learning object code	15.1a	
2	Learning object title	Problem solving fundamentals	
3	Learning object description	This unit introduces the learners to the basic concepts of problem solving:  • Problem solving techniques  • Problem solving fundamentals (principles, steps)  • Necessary competences skills for problem solving	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Presentation	
6	Technical type (IEEE LOM)	Document	
7	Workload (Estimated study time) (min)	40 minutes	
8	Key words	Problem-solving, problem-solving steps, problem solving skills, problem solving fundamentals	
9	Learning outcomes (LOut)	LOut1: To be able to categorize problems LOut2: To be able to provide solutions to problems Lout5: To develop alternative solutions to problems	
10	Extended learning object description	There will be a PowerPoint presentation of up to 28 slides. The presentation aims at introducing to learners to problem solving process It includes:  Definition of problem solving Problem solving principles Problem solving process steps/stages Skills for problem solving	

ТВЗ:	TB3: Learning Object	
1	Learning object code	15.1b
2	Learning object title	How to solve problems in four steps
3	Learning object description	This learning object present problem-solving process as





		well as the tools and techniques can be used in this process.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Problem-solving, problem-solving steps, problem solving skills, problem solving fundamentals
9	Learning outcomes (LOut)	LOut2: To be able to provide solutions to problems
10	Extended learning object description	https://youtu.be/QOjTJAFyNrU

ТВЗ: І	TB3: Learning Object	
1	Learning object code	15.2a
2	Learning object title	Digital tools for problem solving
3	Learning object description	<ul> <li>This unit introduces the learners to:</li> <li>Digital problem-solving definition,</li> <li>Dimensions of digital problem solving</li> <li>Activities related to digital problem solving</li> <li>Educator's role in Digital problem solving</li> <li>Skills required for solving problems using digital tools</li> <li>A set of digital tools that can be used to solve problems in a classroom environment</li> </ul>
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	30 minutes
8	Key words	Digital problem solving, digital skills, digital tools





9	Learning outcomes (LOut)	LOut3: To be able to use digital tools for problem solving LOut4: To Select the appropriate technologies for different type of problems LOut6: To use digital tools for various types of problems in classrooms.  Lout7: To analyse problems using digital tools
10	Extended learning object description	<ul> <li>There will be a PowerPoint presentation of up to 19 slides.</li> <li>The presentation aims at presenting to learners: <ul> <li>Definition of digital problem solving</li> <li>Dimensions of digital problem solving</li> <li>Activities of digital problem solving</li> <li>Educator's role in Digital problem solving</li> <li>Skills required for solving problems using digital tools</li> <li>Digital tools to solve problems in a classroom environment</li> </ul> </li> </ul>

ТВЗ: І	TB3: Learning Object	
1	Learning object code	15.2b
2	Learning object title	What are digital capabilities?
3	Learning object description	This learning object define the term digital capabilities and present basic digital capabilities.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	2 minutes
8	Key words	Digital capabilities, Digital skills
9	Learning outcomes (LOut)	LOut3: To be able to use digital tools for problem solving
10	Extended learning object description	https://youtu.be/ZK9K_a0fq5o





ТВЗ: І	TB3: Learning Object	
1	Learning object code	15.2c
2	Learning object title	Digital problem-solving skills
3	Learning object description	This learning object presents a set of basic digital skills required for problem solving.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Streaming media-Video
7	Workload (Estimated study time) (min)	3 minutes
8	Key words	Digital capabilities, Digital skills
9	Learning outcomes (LOut)	LOut3: To be able to use digital tools for problem solving
10	Extended learning object description	https://youtu.be/Mv5aO4C_e_E





# **Handling Ambiguity**

TB3: L	TB3: Learning Object	
1	Learning object code	16.1
2	Learning object title	Introduction to ambiguity
3	Learning object description	This unit introduces learners to the topic of ambiguity and how ambiguous situations can occur.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	PPT
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	handling ambiguity, ambiguous situations, sources of ambiguity
9	Learning outcomes (LOut)	LOut1: List various sources of ambiguity
10	Extended learning object description	

TB3:	TB3: Learning Object	
1	Learning object code	16.2a
2	Learning object title	Coping With Uncertainty
3	Learning object description	This video introduces learners to the various coping mechanisms against ambiguity
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	YT video
7	Workload (Estimated study time) (min)	7 minutes
8	Key words	Ambiguity, Embracing Ambiguity, Coping mechanisms
9	Learning outcomes (LOut)	LOut2: List various strategies for embracing and tackling ambiguity
10	Extended learning object description	





TB3: Learning Object		
1	Learning object code	16.2b
2	Learning object title	Tackling Ambiguity
3	Learning object description	This presentation introduces learners to the concept of Tolerance of Ambiguity and to several strategies how to approach and how to master ambiguous situations
4	Language	English
5	Learning recourse type (IEEE LOM)	Document
6	Technical type (IEEE LOM)	PPT
7	Workload (Estimated study time) (min)	30 minutes
8	Key words	Tolerance of Ambiguity, emotional regulation, critical thinking, transparent communication, coping activities, practicing empathy
9	Learning outcomes (LOut)	LOut2: List various strategies for embracing and tackling ambiguity LOut3: Describe the concept of tolerance of ambiguity (ToA) LOut4: Understand the concept of ambiguity within project-based learning
10	Extended learning object description	

TB3:	TB3: Learning Object	
1	Learning object code	<b>16.3a</b>
2	Learning object title	Navigating Ambiguity feat. students from the Stanford school
3	Learning object description	This video shares student's experiences in ambiguous situations. It shows which mentality is needed when approaching ambiguity.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	YT Video
7	Workload (Estimated study time) (min)	7 minutes
8	Key words	Navigating ambiguity
9	Learning outcomes (LOut)	LOut5: Discover the usability of strategies that embrace and tackle ambiguity
10	Extended learning object	





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TB3: Learning Object		
1	Learning object code	16.3b
2	Learning object title	Exercises to Navigate Ambiguity
3	Learning object description	This presentation presents several exercises and activities that help teachers and students alike to navigate ambiguity.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	PPT
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Navigating ambiguity, Journey Road Map, Learning Zone Reflection
9	Learning outcomes (LOut)	LOut5: Discover the usability of strategies that embrace and tackle ambiguity LOut6: Demonstrate the usability of strategies against ambiguity in your professional learning/teaching setting LOut7: Select one or more exercises suited for in-class application based on the setup of the individual learning setting LOut8: Apply strategies against an ambiguous situation in a project-based learning scenario.
10	Extended learning object description	

TB3: Learning Object		
1	Learning object code	16.3c
2	Learning object title	Navigating Ambiguity feat. Sarah Stein Greenberg and Scott Doorley
3	Learning object description	This video shows educators' perspectives on how to navigate ambiguity.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	YT video
7	Workload (Estimated study time) (min)	7 minutes
8	Key words	Navigating ambiguity





9	Learning outcomes (LOut)	LOut6: Demonstrate the usability of strategies against ambiguity in your professional learning/teaching setting LOut8: Apply strategies against an ambiguous situation in a project-based learning scenario.
10	Extended learning object description	





### **Critical Thinking**

TB3: L	TB3: Learning Object		
1	Learning object code	17.1a	
2	Learning object title	Critical thinking in pills	
3	Learning object description	This unit introduces learners to the topic of critical thinking, defining main theories, constructs, and approaches. This can be considered as a critical review of critical thinking.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Video	
6	Technical type (IEEE LOM)	A2L video	
7	Workload (Estimated study time) (min)	10 minutes	
8	Key words	Critical thinking, theories, approaches.	
9	Learning outcomes (LOut)	LOut 1: Identify process of reasoning LOut3: Identify wrong reasoning	
10	Extended learning object description	There will be a video presentation introducing learners to critical thinking approaches, also according to school environment.	

TB3: Learning Object		
1	Learning object code	17.1b
2	Learning object title	The Importance of Critical Thinking
3	Learning object description	This unit introduces learners to the topic of critical thinking, with an overview of its application and importance for young students.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	YT video
7	Workload (Estimated study time) (min)	7 minutes
8	Key words	Critical thinking, school, subjects.





	9	Learning outcomes (LOut)	LOut 1: Identify process of reasoning;
			LOut3: Identify wrong reasoning
	10	Extended learning object	There will be a YT video presentation introducing
ı		description	learners to critical thinking, with its specific application
			to school environment and school subjects.

TB3:	TB3: Learning Object	
1	Learning object code	17.1c
2	Learning object title	Methods for evaluating information
3	Learning object description	This unit introduces learners to the topic of critical thinking, with an overview of its application and importance for young students.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text
6	Technical type (IEEE LOM)	PDF document
7	Workload (Estimated study time) (min)	10 minutes
8	Key words	Critical thinking, evaluation, information, sources of information.
9	Learning outcomes (LOut)	LOut 1: Identify process of reasoning; LOut 2: Select and evaluate sources of information; LOut3: Identify wrong reasoning;
10	Extended learning object description	There will be a PDF scientific paper introducing learners to different methods to evaluate information. In particular:  • Peer review;  • Examining the coverage of controversial views;  • Evidence based evaluation;  • Comparative studies;  • Author credentials;  • Publisher reputation;  • Journal impact factor;  • Sponsoring;  • Book review;  • Broader criteria.

TB3: Learning Object		
1	Learning object code	17.1d
2	Learning object title	Critical thinking in education: a review
3	Learning object description	This unit introduces learners to the topic of critical
		thinking, with an overview of its application and





		importance for young students.
4	Language	English
5	Learning recourse type (IEEE LOM)	Text
6	Technical type (IEEE LOM)	PDF document
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Critical thinking, evaluation, information, education, review.
9	Learning outcomes (LOut)	LOut 1: Identify process of reasoning; LOut 2: Select and evaluate sources of information; LOut3: Identify wrong reasoning;
10	Extended learning object description	There will be a PDF scientific paper introducing learners to a review of application of critical thinking within the school environment. In particular,

TB3: I	TB3: Learning Object		
1	Learning object code	17.2a	
2	Learning object title	This tool will help improve your critical thinking	
3	Learning object description	This unit is aimed to highlight logical reasoning supporting pathfinding between different school subjects.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Video	
6	Technical type (IEEE LOM)	YT video	
7	Workload (Estimated study time) (min)	5 minutes	
8	Key words	Critical thinking, tools, improvement, skills.	
9	Learning outcomes (LOut)	LOut 4: Explain logical path between subjects and disciplines; LOut 5: Recognize inconsistencies, weaknesses, and errors in different subjects	
10	Extended learning object description	There will be a YT video supporting learners to improve their critical thinking abilities.	



TB3: I	TB3: Learning Object	
1	Learning object code	17.2b
2	Learning object title	5 tips to improve your critical thinking
3	Learning object description	This Unit is aimed to provide some smart suggestions to be applied in everyday reasoning.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	YT video
7	Workload (Estimated study time) (min)	5 minutes
8	Key words	Critical thinking, tools, improvement, skills.
9	Learning outcomes (LOut)	LOut 4: Explain logical path between subjects and disciplines LOut 5: Recognize inconsistencies, weaknesses, and errors in different subjects
10	Extended learning object description	There will be a YT video supporting learners to improve their critical thinking abilities.

TB3:	TB3: Learning Object		
1	Learning object code	17.2c	
2	Learning object title	Critical thinking in elementary school children	
3	Learning object description	This Unit is aimed to provide information of how critical thinking is conceptualized in the school environment, implementation of reading and writing cognitive skills and methodological recommendation for activity in small groups.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Text	
6	Technical type (IEEE LOM)	PDF document	
7	Workload (Estimated study time) (min)	10 minutes	
8	Key words	Critical thinking, cognitive, reading, writing, skills.	
9	Learning outcomes (LOut)	LOut 4: Explain logical path between subjects and disciplines LOut 5: Recognize inconsistencies, weaknesses, and errors in different subjects	
10	Extended learning object description	There will be a PDF scientific paper explaining some basic info about critical thinking and methods and techniques for working in small groups to develop	





critical thinking.

TB3:	TB3: Learning Object		
1	Learning object code	17.3a	
2	Learning object title	Agile critical thinking	
3	Learning object description	This Unit is aimed to provide information of how critical thinking is conceptualized in the school environment, implementation of reading and writing cognitive skills and methodological recommendation for activity in small groups.	
4	Language	English	
5	Learning recourse type (IEEE LOM)	Text	
6	Technical type (IEEE LOM)	Website page article	
7	Workload (Estimated study time) (min)	20 minutes	
8	Key words	Critical thinking, agile, agile critical thinking, skills.	
9	Learning outcomes (LOut)	LOut 6: Apply agile critical reasoning approach, to everyday teaching	
10	Extended learning object description	There will be a website presenting a scientific article which will explain how Agile framework considers critical thinking.	





# **Entrepreneurial Thinking**

TB3: Learning Object		
1	Learning object code	18.1
2	Learning object title	Introduction to Entrepreneurship
3	Learning object description	This unit introduces learners to the topic of Entrepreneurial thinking, defining main theories, constructs, and approaches. This can be considered as an initial review of Entrepreneurial thinking.
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	A2L video
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Entrepreneurial thinking, theories, approaches.
9	Learning outcomes (LOut)	LOut1: Describe the basic concepts of entrepreneurship and the characteristics of entrepreneurs.
10	Extended learning object description	There will be a video presentation introducing learners to Entrepreneurial thinking approaches and concepts

TB3:	TB3: Learning Object	
1	Learning object code	18.2
2	Learning object title	Entrepreneurial thinking – Strategy and Entrepreneurship
3	Learning object description	This unit introduces learners to the topic of Strategy and strategy formulation tools as well as entrepreneurship as a concept and attitude
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	A2L video
7	Workload (Estimated study time) (min)	35 minutes
8	Key words	Strategy, Strategy formulation, Porter, SWOT Business





		Canvas, Entrepreneurship
9	Learning outcomes (LOut)	Lout1: Identify different roles of an entrepreneur. Lout2: Describe the entrepreneurial competence areas based on the EntreComp framework. LOut3: Outline some key entrepreneurial attitudes.
10	Extended learning object description	There will be a video presentation introducing learners to strategy and strategy formulation tools and analysis.

TB3:	TB3: Learning Object	
1	Learning object code	18.3a & 3b
2	Learning object title	From Business Ideas and Business Planning to success
3	Learning object description	This unit introduces learners to the basic steps Business Ideas and Business Planning
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	A2L video
7	Workload (Estimated study time) (min)	35 minutes
8	Key words	Business Idea, Business Plan, Start-Ups
9	Learning outcomes (LOut)	LOut1 Describe the basic concepts of business plan.  LOut2 Distinguish between different sources of financing.  LOut3 Outline some key entrepreneurial attitudes.
10	Extended learning object description	There will be a video presentation introducing learners to the process of business idea formulation and drafting a business plan

TB3:	B3: Learning Object	
1	Learning object code	18.4
2	Learning object title	Entrepreneurship in Education
3	Learning object description	This unit introduces learners to the topic of Entrepreneurship adapted to school reality
4	Language	English
5	Learning recourse type (IEEE LOM)	Video
6	Technical type (IEEE LOM)	A2L video
7	Workload (Estimated study time) (min)	35 minutes
8	Key words	Entrepreneurship, STEM Education, Defining problems, Teamwork Skills, School Unit





9	Learning outcomes (LOut)	Lout1: Recognize the importance of Teamwork Skills in Entrepreneurial Effort.  Lout2: Describe the entrepreneurial competence areas based on the EntreComp framework.  Lout3: Create an Example of Virtual Business Entrepreneurship in the School Unit
10	Extended learning object description	There will be a and a video presentation Entrepreneurship as a process or/and as an instinct and how the entrepreneur can formulate ideas, organize resources, draft a business plan and address the markets with products and services.





#### **Social Skills**

TB3: L	TB3: Learning Object	
1	Learning object code	19.1a
2	Learning object title	Social skills: definitions and related behaviours
3	Learning object description	This unit introduces learners to definition of social skills according to different approaches. Also, learners will be able to explore social skills classification, as well as their dimensions and related classroom behaviours.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document (PPT)
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Social skills, dimensions, behavioural approach, social skills behaviours.
9	Learning outcomes (LOut)	LOut1 Define, name, recognize at least 3 social skills LOut2 Define the characteristics of a positive school environment LOut 3 Classify social skills in relation to students' social behaviour
10	Extended learning object description	There will be a PowerPoint presentation of up to 15 slides. The presentation aims at introducing to learners to social skills. It includes:  Definition of social skills; Classification of social skills; Dimensions of social skills; Social skills dimensions and related behaviours.

TB3: Learning Object		
1	Learning object code	19.2a
2	Learning object title	Teaching social skills





3	Learning object description	This unit introduces learners to the role of social skills at school, in the community and workplace. Also, specific dimensions of social skills will be addressed in relation to those needed for cooperative learning approach in the school environment.
4	Language	English
5	Learning recourse type (IEEE LOM)	PDF document
6	Technical type (IEEE LOM)	Document (PDF)
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Social skills, cooperative learning, social skills role playing.
9	Learning outcomes (LOut)	LOut4 Give examples of how to foster positive relationships
10	Extended learning object description	There will be a PDF scientific paper. The paper aims at introducing to learners to social skills application program in the school environment.

TB3: Learning Object		
1	Learning object code	19.2b
2	Learning object title	Social skills teaching techniques
3	Learning object description	This unit introduces learners to the different techniques to be applied in the classroom according to behavioural approach.  It includes:
4	Language	English





5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document (PPT)
7	Workload (Estimated study time) (min)	30 minutes
8	Key words	Social skills, behavioural approach, task-analysis, checklist, lesson plan.
9	Learning outcomes (LOut)	LOut5 Select correct social skill in different classroom situations
10	Extended learning object description	There will be a PowerPoint presentation of up to 20 slides. The presentation aims at introducing to learners to social skills teaching techniques. It includes:

TB3: Learning Object		
1	Learning object code	19.3a
2	Learning object title	Lesson plans – social skills for teamwork
3	Learning object description	This unit introduces learners to some practical activities teachers can use to develop students' social skills, with a particular focus to teamwork and school community.
4	Language	English
5	Learning recourse type (IEEE LOM)	PPT document
6	Technical type (IEEE LOM)	Document (PPT)
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	Social skills, lesson plan, teamwork, setting goals, feedback, minding one's own business.





9	Learning outcomes (LOut)	LOut6 Apply correctly a social skill in a real classroom environment
10	Extended learning object description	There will be a PPT presentation of up to 20 slides. The presentation aims at introducing to learners to social skills teaching techniques in the classroom.  It includes:  Setting goals for work;  Asking for feedback on the job;  Minding one's own business on the job.





## **Actively engaging learners**

TB3: L	TB3: Learning Object	
1	Learning object code	20.1
2	Learning object title	Pre-course evaluation
3	Learning object description	This unit will reflect the tools and their pros and cons concerning their usage. They should evaluate what did work and what did not work during on-line classes (e.g., when students were paying less attention, when the camera did not work, and they were hidden etc.).
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 minutes
8	Key words	Self-evaluation, student engagement, engagement digital tools
9	Learning outcomes (LOut)	N/A
10	Extended learning object description	

твз	TB3: Learning Object	
1	Learning object code	20.2
2	Learning object title	Introduction of active engagement, related digital tools and gamification features
3	Learning object description	The participant will be introduced the topic of the active engagement of students and also learn about the relevant available tools. They will get the overview what tool is suitable for a certain kind of activity. Also, they will be introduced to gamification features that can be included to support the student's engagement.





4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation with external links and embedded videos
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	40 minutes
8	Key words	Student engagement, engagement digital tools, gamification in education
9	Learning outcomes (LOut)	LOut1: List digital tools for team collaboration LOut7: Develop strategies for active participation in an online and offline group work, while using digital tools LOut8: Judge which techniques and tools suit learners' individual needs
10	Extended learning object description	

TB3: Learning Object		
1	Learning object code	20.3
2	Learning object title	The examples for different phases of the lesson
3	Learning object description	The participant will learn about the appropriate techniques and digital collaboration tools used in accordance with the particular phases of the lesson (form ice break, the way of presentation by the teacher, group exercises, individual work in a creative way, to assessment and reflection). The learner will gain knowledge of the existence of the specific techniques and appropriate digital tools.
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation with external links and embedded videos
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	50 minutes





8	Key words	Student engagement, engagement digital tools, phases of school lessons
9	Learning outcomes (LOut)	LOut2: Recognise tools suitable for a specific outcome LOut3: Identify which tools and approaches suit individual needs of a particular group and situation. LOut4: Solve problems by creative collaborative group work LOut5: Apply mind mapping technique in an individual work and group work both online and offline. LOut6: Interpret the data collected via the collaborative digital tools LOut7: Develop strategies for active participation in an online and offline group work, while using digital tools LOut8: Judge which techniques and tools suit learners' individual needs
10	Extended learning object description	





### **Digital content creation**

TB3: I	TB3: Learning Object	
1	Learning object code	21.1
2	Learning object title	Fundamentals of digital content creation
3	Learning object description	The objective of this presentation is to;  a) discuss the advantages and challenges of digital content creation  b) provide roadmap for developing such content
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	digital content creation, stages of digital content creation
9	Learning outcomes (LOut)	LOut1 describe the advantages and challenges of digital content creation  LOut2 name the six stages of digital content creation
10	Extended learning object description	There will be a PowerPoint presentation of up to 19 slides

твз:	TB3: Learning Object	
1	Learning object code	21.2
2	Learning object title	Copyright and licensing issues
3	Learning object description	The objective of this presentation is to:  a) present the concept of intellectual property protection and elaborate on the important issue of copyright  b) identify sources of non-copyrighted material to use when creating digital content  c) familiarize with the concepts of fair use of copyrighted material and creative commons





		licensing
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	30 mins
8	Key words	digital content creation, intellectual property, copyright, fair use, public domain material, creative commons
9	Learning outcomes (LOut)	LOut3 Name the types of intellectual property forms of protection LOut4 select sources of non-copyrighted material when creating digital content LOut6 differentiate between the various licensing models
10	Extended learning object description	There will be a PowerPoint presentation of up to 27 slides

ТВЗ: L	TB3: Learning Object	
1	Learning object code	21.3a
2	Learning object title	Digital content creation related tools
3	Learning object description	The objective of this learning object is to present tools that can be used to create and/or modify digital content of various types (image, video, e-book, website, presentation, animation, quiz).
4	Language	English
5	Learning recourse type (IEEE LOM)	Presentation
6	Technical type (IEEE LOM)	Document
7	Workload (Estimated study time) (min)	15 min
8	Key words	digital content creation tools
9	Learning outcomes (LOut)	LOut5 identify the appropriate tools to use to create or





		modify digital content
	Extended learning object description	There will be a PowerPoint presentation of up to 18 slides

TB3: L	TB3: Learning Object	
1	Learning object code	21.3b
2	Learning object title	Make Animated PowerPoint Slide
3	Learning object description	Guidelines on creating animated ppts
4	Language	English
5	Learning recourse type (IEEE LOM)	Streaming media
6	Technical type (IEEE LOM)	Video
7	Workload (Estimated study time) (min)	20 minutes
8	Key words	digital content creation tools, animated presentations
9	Learning outcomes (LOut)	LOut5 identify the appropriate tools to use to create or modify digital content
10	Extended learning object description	https://www.youtube.com/watch?v=Gjev8RkqO1k

TB3: L	TB3: Learning Object	
1	Learning object code	21.3c
2	Learning object title	Infographic Design Do's and Don'ts
3	Learning object description	Guidelines on properly designing infographics
4	Language	English
5	Learning recourse type (IEEE LOM)	Streaming media
6	Technical type (IEEE LOM)	Video
7	Workload (Estimated study time)	20 minutes





	(min)	
8	Key words	digital content creation tools, infographics
9	Learning outcomes (LOut)	LOut5 identify the appropriate tools to use to create or modify digital content
10	Extended learning object description	https://www.youtube.com/watch?v=uBBmbdPbfhw













