COMPETENCE FRAMEWORK FOR TEACHER DIGITAL PREPARATION

MeLDE:

Media Literacy in the Digitalised Era: supporting teachers through a whole-school approach

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PROJECT INFORMATION

PROJECT ACRONYM: MeLDE

PROJECT TITLE: Media Literacy in the Digitalised Era: supporting teachers through a whole-school approach

PROJECT NUMBER: 2018-1-UK01-KA201-048041

SUB-PROGRAMME OR KA: KA2 COOPERATION FOR INNOVATION AND THE EXCHANGE OF GOOD PRACTICES

WEBSITE:

www.meldeproject.eu

CONSORTIUM:

Contemporary fast paced technological advancements have changed all aspects of modern life and have had a significant impact on human connectivity and all areas of activity. Education has also been affected by the evolution of technology; the ways we read, learn or teach have changed and continue to change at a blistering pace. While technology can enhance teaching in a way never seen before, opening up new opportunities and pedagogical approaches, it is also true that it is very difficult to keep up with new technological developments. Overwhelmed by information overload, teachers, students and education experts are commonly struggling to keep up with technology and always seem to be one step behind.

European teachers and students live in an increasingly complex digital world that is rapidly changing how they work, teach, learn, and act as active citizens. It is becoming a requisite that the digital revolution must be brought into the classroom to mirror the digital revolution in society. Is it unthinkable that one could thrive in today's technology-driven society without possessing an array of strong digital skills. However, European teachers and students have been repeatedly reported to lack the ability, skills and knowledge to exploit the full potential of digital technologies.

Using the European Digital Competence Framework for Citizens (European Union, 2016) as a starting point and following research conducted in 4 countries (see the country and comparative reports on http://meldeproject.eu), the MeLDE consortium has developed a tool that will help any educational institution ensure that teachers are using digital technologies in a meaningful way that will boost student engagement and collaboration in and outside of the classroom. The MeLDE framework for teacher digital preparation aims to help teachers revolutionise classroom teaching and make learning a fun and memorable experience whist knowing how to stay safe online. Essentially, the framework identifies competences in key areas that European teachers must have to revolutionize the way they teach and to keep up with the new technological developments. We aim to not only impart knowledge but also change teachers' mind-set and encourage them to include technology in the curriculum in creative ways, regardless of the topic they are teaching.

Basic digital literacy training only it is not enough anymore, it is now the time to re-think education, to understand the way today's students learn and start testing new innovative approaches and teaching methods relevant for today's students. To help European schools prepare their teachers and students for a digital future we have designed the following modules that, if delivered in schools, will support both teachers and students in making sense of and using digital technologies more for purposes other than just playing games, shopping or socializing. The framework will enable teachers to understand what it means to be digitally competent in the classroom.

The MeLDE framework for teacher digital preparation includes four main knowledge pillars and 17 skills and competences areas is different than any other existing framework for teacher education (e.g. NCCA ICT framework, 2007; UNESCO ICT-CFT, 2011; Danish Pedagogic ICT licence, in Ferrari, 2012) by focusing more on the acquisition of practical skills and including up-to-date topics, such as: social media and classroom collaboration platforms, fake news, managing digital identity, cyberbullying, creating compelling digital content for educational purposes, distance learning, self-promotion, and digital citizenship. The framework can be used in teacher education as a reference tool and can be used in flexible ways. To monitor teachers' progress, we recommend that a competency matrix is used to compare participants' experience and skills at the beginning and end of the module. Any institution which wants to prepare their teachers to have a digital approach to teaching and help them gain the confidence to transfer this knowledge to students can use this framework, future-proofing new generations of students.

MeLDE Competence Framework for Teacher Digital Preparation
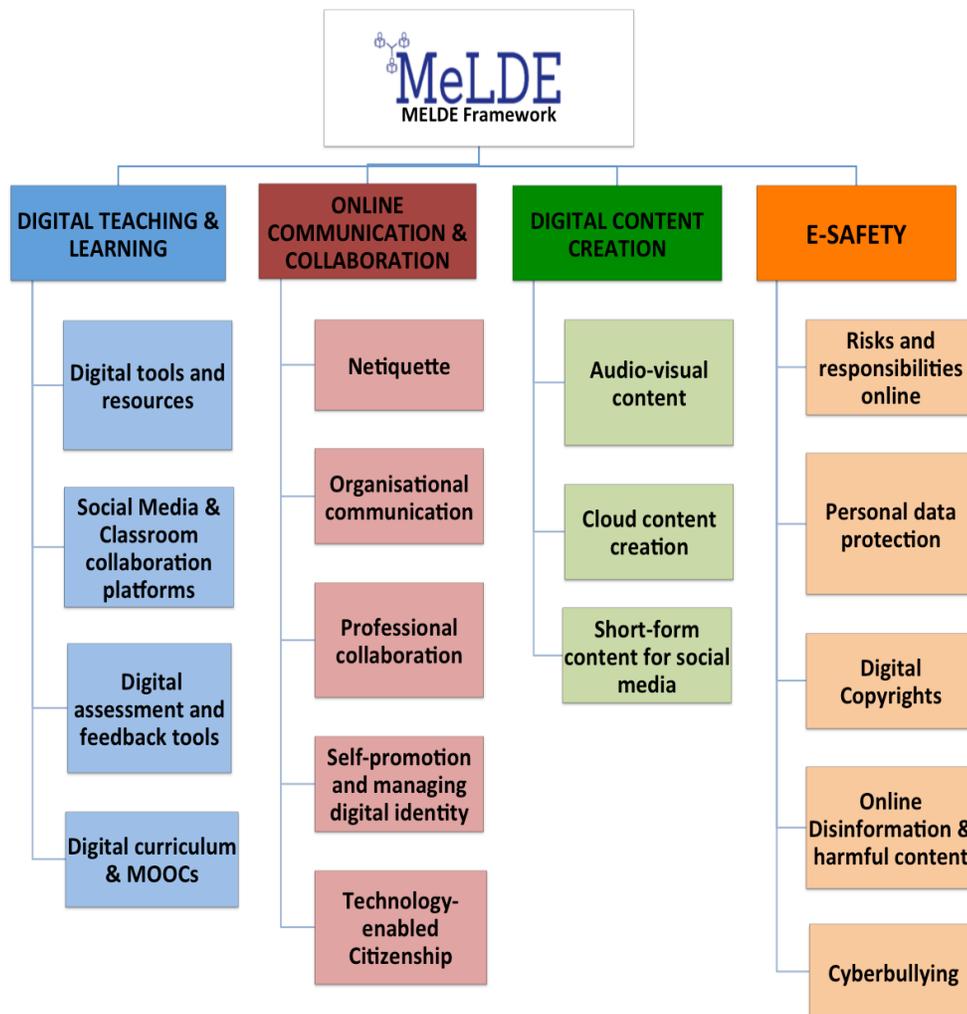
1.MODULE 1 (DIGITAL TEACHING AND LEARNING): MAIN OBJECTIVE

Main Objective: To introduce teachers to a range of digital resources, platforms, tools and techniques that can be used in a classroom setting to enhance learning and classroom collaboration and boost student engagement.

2.MODULE 1 (DIGITAL TEACHING AND LEARNING): GENERAL DESCRIPTION

General Description: This module will introduce teachers to a range of digital tools and techniques that can be used in a classroom setting. The module will analyze and explore a series of digital resources, tools, platforms, software and techniques that are free to use to enhance lecture preparation, learning, assessment design and feedback. The module will also include hands-on sessions that aim to boost teachers' confidence by allowing them to test some of the digital tools, platforms and techniques discussed throughout the module.

3.MODULE 1 (DIGITAL TEACHING AND LEARNING): TOPIC 1 (DIGITAL TOOLS AND RESOURCES)

Short Description: This topic will introduce teachers to a range of digital resources, tools and platforms easy to use in teaching. A series of case studies and examples will be discussed.

4.MODULE 1 (DIGITAL TEACHING AND LEARNING): TOPIC 2 (SOCIAL MEDIA AND CLASSROOM COLLABORATION PLATFORMS)

Short Description: This topic will introduce teachers to a range of classroom collaboration platforms. The topic also aims to explore a variety of ways in which social media platforms can be used in teaching and learning to foster and maintain group cohesion. A series of case studies and examples will be discussed.

5.MODULE 1 (DIGITAL TEACHING AND LEARNING): TOPIC 3 (DIGITAL ASSESSMENT AND FEEDBACK TOOLS)

Short Description: This topic aims to discuss and explore a variety of ways of using digital technology to support different types of assessment and to deliver effective feedback. Case studies and ideas of how to enhance assessment and feedback will be explored.

6.MODULE 1 (DIGITAL TEACHING AND LEARNING): TOPIC 4 (DIGITAL CURRICULUM AND MOOCS)

Short Description: This topic will explore how to use integrate digital technologies into the curriculum to revolutionize the learning process. Distance learning to complement in-class learning and designing massive open online courses (MOOCs)will also be discussed.

Module 1: (Digital Teaching and Learning)	
Main Objective: To introduce teachers to a range of digital platforms, tools and techniques that can be used in a classroom setting to enhance learning and boost student engagement.	
Topics:	**Learning Outcomes:**
1.1. **Digital Tools and Resources.**	1.1.1. Be aware of a range of open-access digital resources available to teachers and students. 1.1.2. Explore a range of digital platforms and tools that could be used in a variety of ways in the classroom to enhance student engagement. 1.1.3. Gain hands-on experience of how to use digital tools and platforms to support learning and boost student engagement.
1.2. **Social Media and Classroom collaboration platforms.**	1.2.1. Discuss and understand ways in which social media could be used in the classroom to boost students participation and group cohesion. 1.2.2. Discuss the advantages and disadvantages of using social media in the classroom. 1.2.3. Test a variety of other classroom collaboration platforms. 1.1.4. Analyze a series of case studies and examples and share good and bad practice.
1.3. **Digital assessment and feedback tools.**	1.3.1. Discuss and explore ideas, good practice and bad practice for enhancing feedback and feedback delivery with digital technology. 1.3.2. Explore a variety of ways of using digital technology to support different types of assessment. 1.3.3. Gain hands-on experience by designing assignments and exploring ways to delivering feedback using digital tools.
1.4. **Digital curriculum and MOOCs.**	1.4.1. Discuss new ways to include digital technologies in the curriculum in a non-repetitive way and non-overwhelming way that will benefit the students. 1.4.2. Design lessons plans that promote an innovative way of using digital technologies in the classroom. 1.4.3. Understand how distance learning can complement in-class learning. 1.4.4. Learn how to design a MOOC.

COMPETENCY MATRIX EXAMPLE FOR THIS MODULE							
		PARTICIPANT 1			PARTICIPANT 2		
Areas of Competence		KNOWLEDGE	EXPERIENCE	INTEREST	KNOWLEDGE	EXPERIENCE	INTEREST
Digital tools and resources	LO1						
	LO2						
	LO3						
Social Media and Classroom collaboration platforms	LO1						
	LO2						
	LO3						
	LO4						
Digital assessment and feedback tools	LO1						
	LO2						
	LO3						
Digital curriculum and MOOCs	LO1						
	LO2						
	LO3						
	LO4						

Knowledge

0- No knowledge.
1- Little or basic knowledge.
2- Considerable knowledge.
3- Advanced knowledge.

Experience

0 – No experience.

1- Little experience.

2- Notable experience.

3 - Expert experience.

Interest

0 – No interest in the topic and in applying any of these skills and competencies.

1- Moderate interest.

2- High interest in the topic and in applying the knowledge and skills gained.

1. MODULE 2 (ONLINE COMMUNICATION AND COLLABORATION): MAIN OBJECTIVE

Main Objective: To teach teachers about online self-promotion and event promotion and expose them to a variety of examples that they could use. Other issues like netiquette, organizational communication, professional collaboration, self-promotion through digital technology and how to teach students to be responsible digital citizens will be discussed.

2. MODULE 2 (ONLINE COMMUNICATION AND COLLABORATION): GENERAL DESCRIPTION

General Description: This module aims to address a gap in teachers' knowledge by introducing them to the benefits of personal branding and to best practice, strategies and tips for online self-promotion and event promotion. The module aims to inspire teachers to start promoting more of their events and work online. Other issues like netiquette, how to use digital technologies for collaboration, how to manage digital identity and how to teach students to be responsible digital citizens will be discussed.

3. MODULE 2 (ONLINE COMMUNICATION AND COLLABORATION): TOPIC 1 (NETIQUETTE)

Short Description: This topic will familiarize teachers with the concept of netiquette and with the rules for acceptable online behaviour and acceptable use of online resources.

4. MODULE 2 (ONLINE COMMUNICATION AND COLLABORATION): TOPIC 2 (ORGANISATIONAL COMMUNICATION)

Short Description: This topic will equip teachers with the knowledge on how to communicate more effectively with students, their parents and other colleagues and also on how to organize and promote an event using digital technologies.

5. MODULE 2 (ONLINE COMMUNICATION AND COLLABORATION): TOPIC 3 (PROFESSIONAL COLLABORATION)

Short Description: This topic will uncover the benefits of using digital tools and technologies for collaborative processes in education. It will introduce teachers on how to set the stage for a successful collaboration in the co-creation of educational materials and also on how to use professional collaborative networks to promote better practice and professional development.

6. MODULE 2 (ONLINE COMMUNICATION AND COLLABORATION): TOPIC 4 (SELF-PROMOTION AND MANAGING DIGITAL IDENTITY)

Short Description: This topic provides an introduction to the concepts of digital identity and digital footprints. The topic will equip the participants with knowledge on how to use digital technologies to build up their professional identities and how to manage and protect their reputation online.

7. MODULE 2 (ONLINE COMMUNICATION AND COLLABORATION): TOPIC 5 (ENGAGING IN CITIZENSHIP THOUGH DIGITAL TECHNOLOGY)

Short Description: This topic will focus on how to use digital technologies to engage and empower citizens and will equip teachers with the knowledge, skills and tools to teach their students about engaging in citizenship through digital technology.

Module 2: (ONLINE COMMUNICATION AND COLLABORATION)
Main Objective: To teach teachers about online self-promotion and event promotion and expose them to a variety of examples that they could use. Other issues like netiquette, organizational communication, professional collaboration, self-promotion through digital technology and how to teach students to be responsible digital citizens will be discussed.

Topics:	Learning Outcomes:
2.1. **Netiquette**	2.3.1. Understand what netiquette is and why it is important. 2.3.2. Be familiar with the basic rules of netiquette. 2.3.3. Learn how to react to breaking the rules of netiquette.
2.2. **Organizational Communication**	2.2.1. Understand why organizational communication is important and its benefits. 2.2.2. Be able to identify different ways to enhance communication with students and parents through digital technologies. 2.2.3. Be able to identify different ways to enhance communication with colleagues through digital technologies. 2.2.4. Understand how to organize and promote an event through digital technologies.
2.3. **Professional Collaboration**	2.3.1. Understand why professional collaboration is important and its benefits. 2.3.2. To be able to identify different ways to collaborate with others to co-create materials. 2.3.3. To be able to identify different ways to create professional collaborations for professional development.
2.4. **Self-promotion and managing digital identity**	2.4.1. Have a basic knowledge regarding digital identity and digital footprints. 2.4.2. Be able to identify different ways to protect your online reputation efficiently. 2.4.3. Be able to identify different ways to build your professional identity and promote yourself online.

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2.5. **Technology-enabled citizenship**	2.5.1. Discuss a range of ways in which technology can enable citizenship.
	2.5.2. Have a clear understanding of what digital citizenship means.
	2.5.3. Understand how to engage in citizenship using digital technology.
	2.5.4. Learn how to use digital technology to empower students and encourage them to become active citizens by using digital technology in a meaningful way.

COMPETENCY MATRIX EXAMPLE FOR THIS MODULE							
		PARTICIPANT 1			PARTICIPANT 2		
Areas of Competence		KNOWLEDGE	EXPERIENCE	INTEREST	KNOWLEDGE	EXPERIENCE	INTEREST
Netiquette	LO1						
	LO2						
	LO3						
Organizational Communication	LO1						
	LO2						
	LO3						
	LO4						
Professional Collaboration	LO1						
	LO2						
	LO3						
	LO4						

Self-promotion and managing digital identity	LO1					
	LO2					
	LO3					
Technology-enabled Citizenship	LO1					
	LO2					
	LO3					
	LO4					

Knowledge	Experience	Interest
0- No knowledge 1- Little or basic knowledge 2- Considerable knowledge **3-** Advanced knowledge	0 – No experience 1- Little experience 2- Notable experience 3 - Expert experience	0 – No interest in the topic and in applying any of these skills and competencies. 1- Moderate interest 2- High interest in the topic and in applying the knowledge and skills gained.

1. MODULE 3 (DIGITAL CONTENT CREATION): MAIN OBJECTIVE

Main Objective: To introduce teachers to a range of techniques that will help them produce compelling audio and video content to enrich their lectures and improve student experience, as well as enhancing their web content skills and social media awareness.

2. MODULE 3 (DIGITAL CONTENT CREATION): GENERAL DESCRIPTION

General Description: This hands-on module aims to teach teachers use a series of filming, recording and editing techniques and apps that will help them create compelling audio and video content to use in lectures.

3. MODULE 3 (DIGITAL CONTENT CREATION): TOPIC 1 (AUDIO-VISUAL CONTENT)

Short Description: This topic will familiarise teachers with a range of audio and video recording techniques and teach them how to create audiovisual content using their own digital devices or certain other tools that will help them with formal education as well as for their own personal use.

4. MODULE 3 (DIGITAL CONTENT CREATION): TOPIC 2 (CLOUD CONTENT CREATION)

Short Description: This topic will help teachers gain basic skills and competences when it comes to creating, editing, storing and sharing content via cloud and other web services. The focus will be on open source or other free-to-use digital properties.

5. MODULE 3 (DIGITAL CONTENT CREATION): TOPIC 3 (SHORT-FORM CONTENT FOR SOCIAL MEDIA)

Short Description: This topic will teach teachers how to plan, prepare and develop short-form content for social media. This short-form might be video, audio or image, accompanied with text. The characteristics of each platform will be discussed and teachers will learn how to adapt their content to each platform.

Module 3: (Digital Content Creation)	
Main Objective: To introduce teachers to a range of techniques that will help them produce compelling audiovisual and text-based content to enrich their lectures and improve student experience, as well as enhancing their web content skills and social media awareness.	
Topics	**Learning Outcomes**
3.1. **Audio-Visual Content**	3.1.1. Understand the importance of using audio-visual content in lectures and in the classroom.
	3.1.2. Learn how to record audio and video content in a variety of ways, using their own devices (mobile phone/tablets).
	3.1.3. Gain hands-on experience by producing/editing video content using certain digital tools (e.g. Powtoon, Camtasia).
	3.1.4. Attach audio-visual content on lecture slides.
3.2. **Cloud Content Creation**	3.2.1. Understand the use of web content creation in different settings (e.g. formal, informal etc.).
	3.2.2. Learn the fundamentals of web content creation through various types of digital technologies (e.g. Facebook, Wix, Canva etc.).
	3.2.3. Gain hands-on experience by creating content for online platforms that can be used for formal education or personal use (e.g. Edmodo, Trello, Instagram etc.).
	3.2.4. Build confidence in creating your own content that is unique, creative and engageable.
3.3**. Short-form content for social media**	3.3.1. Analyze a variety of short-form content available online and understand the importance of creating short-form content to reach a target audience.
	3.3.2. Learn how to plan, prepare and create short-form content.
	3.3.3. Create short-form content through specified social media platforms and understand how to engage properly in a formal or non-formal setting.

COMPETENCY MATRIX EXAMPLE FOR THIS MODULE							
		PARTICIPANT 1			PARTICIPANT 2		
Areas of Competence		KNOWLEDGE	EXPERIENCE	INTEREST	KNOWLEDGE	EXPERIENCE	INTEREST
Audio- Visual Content	LO1						
	LO2						
	LO3						
	LO4						
Cloud Content Creation	LO1						
	LO2						
	LO3						
	LO4						
Short-form content for social media	LO1						
	LO2						
	LO3						

Knowledge

- 0- No knowledge
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Experience

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Interest

0 – No interest in the topic and in applying any of these skills and competencies.

1- Moderate interest

2- High interest in the topic and in applying the knowledge and skills gained.

1.MODULE 4 (E-SAFETY): MAIN OBJECTIVE

Main Objective: This module aims to introduce teachers to a range of scenarios and ways to stay safe online. Issues including risks and responsibilities online, protecting personal data, online misinformation and harmful content, digital copyright, and cyberbullying effective and ineffective practice will be discussed.

2.MODULE 4 (E-SAFETY): GENERAL DESCRIPTION

General Description: This module aims to help teacher gain basic online safety skills, from data protection and privacy to more complex issues like recognizing and reporting fake websites and fake news or cyberbullying.

3.MODULE 4 (E-SAFETY): TOPIC 1 (RISKS AND RESPONSIBILITIES ONLINE)

Short Description: Teachers will be introduced to a series of risks they can encounter online and will discuss both risks and responsibilities in the digital world. The topic will cover different threats to hardware and software, and to Data/Information such as types of cybercrime, malware, financial loss and identity theft, Internet scammers and will teach individuals how to protect themselves against these risks and how to teach students about these threats.

4.MODULE 4 (E-SAFETY): TOPIC 2 (PROTECTING PERSONAL DATA)

Short Description: This topic aims to introduce teachers to the most common security measures, such as strong passwords, Antimalware software, data backup, encryption, firewall and shopping securely. The topic will also touch on how to stay safe on social media, how to keep your mobile devices safe, how to avoid harmful or offensive content on social media, and how to spot fake news.

5.MODULE 4 (E-SAFETY): TOPIC 3 (COPYRIGHTS)

Short Description: This topic will discuss copyright infringement and will introduce teachers to a range of open access sources, making them aware of what information is and isn't legal to re-use for educational purposes.

6.MODULE 4 (E-SAFETY): TOPIC 4 (ONLINE DISINFORMATION AND HARMFUL CONTENT)

Short Description: This topic introduces teachers to a series of Internet frauds (Internet scammers, fake websites) and aims to raise awareness and teach individuals how to spot phishing emails, fake website and fake news and how to protect themselves from Internet scammers. In addition, the topic highlights the importance of a clean healthy online environment, teaching the participants how everyone can contribute to keeping our online environment free of fake news.

7.MODULE 4 (E-SAFETY): TOPIC 5 (CYBERBULLYING)

Short Description: This topic will raise awareness about cyberbullying and introduce teachers to a range of procedures to identify and help both students at risk and students who have been victims of cyberbullying.

Module 4: (E-Safety)
Main Objective: This module aims to introduce teachers to a range of scenarios and ways to stay safe online. Issues like risks and responsibilities online, protecting personal data, online misinformation and harmful content, digital copyright, and cyberbullying effective and ineffective practice will be discussed.

Topics:	Learning Outcomes:
4.1. **Risks and responsibilities online**	4.1.1. Discuss a variety of potential threats to hardware and software, including computer viruses, adware and spyware and how to overcome them. 4.1.2. Understand the threats to Data/Information, such as (but not limited to): • Types of cybercrime: hacking (key logging), phishing, pharming, social engineering • Types of malware • Financial loss • Identity theft 4.1.3. Be aware of a variety of ways of reporting Internet scammers. 4.1.4. Identify and discuss one's online rights and responsibilities.
4.2. **Protecting personal data**	4.2.1. Understand how to create and keep strong passwords safe and away from scammers. 4.2.2. Understand the importance of always having an updated Anti-malware software and Operating system. 4.2.3. Understand that mobile devices can also be hacked and be familiar with ways to keep smartphones secure. 4.2.4. Recognize malicious emails and be familiar with what to do when you realized you clicked on a link and shared your password. 4.2.5. Explore ways of protecting personal data on social networking sites.
4.3. **Digital Copyrights**	4.3.1. Discuss new legal and policy developments in copyright law and understand how copyright has adapted to the digital age. 4.3.2. Understand how to protect digital content created and published by you or your students. 4.3.3. Understand plagiarism and how it can be avoided in the age

	of information overload where the content can be used and re-used in a variety of ways by countless sources.
	4.3.4. Explore a series of open access sources and understand what and when can digital content be used and re-used for educational purposes.
	4.3.5. Work in groups to produce a digital copyright short, easy-to read manual for their schools.
4.4. Online misinformation and harmful content	4.4.1. Understand the difference between a genuine and a copycat website.
	4.4.2. Evaluate and know how to report fake websites.
	4.4.3. Understand the concept of 'fake news' and know how to evaluate, identify and report fake news.
	4.4.4. Discuss why it is important to report fake websites and understand their detrimental impact on democracy, society and individuals.
4.5. Cyberbullying	4.5.1. Understand what cyberbullying is and why it is important.
	4.5.2. Differentiate between different forms of cyberbullying.
	4.5.3. Be able to identify students who are victims of cyberbullying in a variety of ways.
	4.5.4. Be familiar with a series of actions that will help students who are victims of cyberbullying.
	4.5.5. Discuss the importance of having a cyberbullying intervention and prevention strategy and start drafting a cyberbullying intervention and prevention strategy for your school.

COMPETENCY MATRIX EXAMPLE FOR THIS MODULE							
		PARTICIPANT 1			PARTICIPANT 2		
Areas of Competence		KNOWLEDGE	EXPERIENCE	INTEREST	KNOWLEDGE	EXPERIENCE	INTEREST
Risks and Responsibilities Online	LO1						
	LO2						
	LO3						
	LO4						
Protecting Personal Data	LO1						
	LO2						
	LO3						
	LO4						
	LO5						
	LO6						
Digital Copyrights	LO1						
	LO2						
	LO3						
	LO4						
	LO5						
Online misinformation and harmful content	LO1						
	LO2						
	LO3						
	LO4						
Cyberbullying	LO1						
	LO2						
	LO3						
	LO4						
	LO5						

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Emphasys CENTRE

DEMOKRITOS

ANT1

BÜRGERHAUS ENNOHAUS

Knowledge	Experience	Interest
0- No knowledge 1- Little or basic knowledge 2- Considerable knowledge **3-** Advanced knowledge	0 – No experience 1- Little experience 2- Notable experience 3 - Expert experience	0 – No interest in the topic and in applying any of these skills and competencies. 1- Moderate interest 2- High interest in the topic and in applying the knowledge and skills gained.

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