



## MICROCREDENTIALS FOR COMMUNICATION AND COLLABORATION

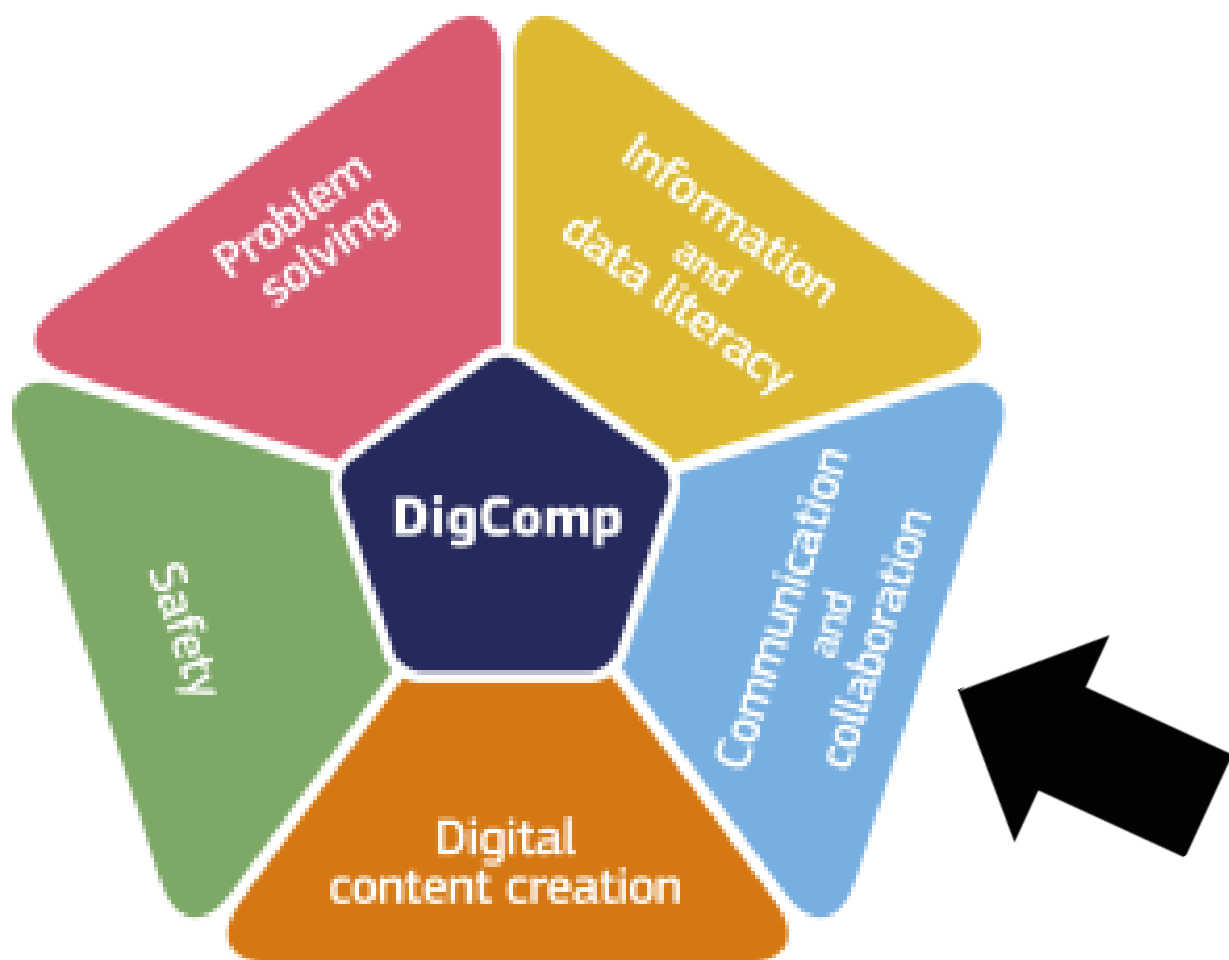
### Competence 2.1: INTERACTING THROUGH DIGITAL TECHNOLOGIES

**DSW**  
DIGITAL SKILLS WALLET



Co-funded by  
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



## Contents

FOUNDATION LEVEL .....	7
Digital Communication tools (MC 2.1.A.1) .....	8
Basic Information.....	8
Learning Outcomes.....	9
Description.....	9
Questions.....	9
Social Media: Advantages, Disadvantages and Funding (MC 2.1.A.2) .....	10
Basic Information.....	10
Learning Outcomes.....	11
Description.....	11
Questions.....	11
Communicating through messaging tools (MC 2.1.A.3).....	12
Basic Information.....	12
Learning Outcomes.....	13
Description.....	13
Questions.....	13
Composing and Sending Emails using Basic Features (MC 2.1.A.4) .....	14
Basic Information.....	14
Learning Outcomes.....	15
Description.....	15
Questions.....	15
Composing a Simple Social Media Post (MC 2.1.A.5).....	16
Basic Information.....	16
Learning Outcomes.....	17
Description.....	17
Questions.....	17
INTERMEDIATE LEVEL.....	18
Selection of appropriate digital communication tools (MC 2.1.B.1) .....	19
Basic Information.....	19
Learning Outcomes.....	20
Description.....	20
Questions.....	20
Composing and Sending Emails using Advanced Features (MC 2.1.B.2).....	21
Basic Information.....	21

Learning Outcomes.....	22
Description.....	22
Questions.....	22
Scheduling meetings and events (MC 2.1.B.3).....	23
Basic Information.....	23
Learning Outcomes.....	24
Description.....	24
Questions.....	24
Using Videoconferencing (MC 2.1.B.4).....	25
Basic Information.....	25
Learning Outcomes.....	26
Description.....	26
Questions.....	26
Social Media Manipulative Behaviour (MC 2.1.B.5).....	27
Basic Information.....	27
Learning Outcomes.....	28
Description.....	28
Questions.....	28
Content Development (MC 2.1.B.6).....	29
Basic Information.....	29
Learning Outcomes.....	30
Description.....	30
Questions.....	30
ADVANCED LEVEL.....	31
Asynchronous communication tools for file sharing, scheduling, project management, mind mapping and notes taking (MC 2.1.C.1).....	32
Basic Information.....	32
Learning Outcomes.....	33
Description.....	33
Questions.....	33
Communication Tools: File Sharing (MC 2.1.C.2).....	34
Basic Information.....	34
Learning Outcomes.....	35
Description.....	35
Questions.....	35

Communication Tools: Scheduling Meetings and Events (MC 2.1.C.3).....	36
Basic Information.....	36
Learning Outcomes.....	37
Description.....	37
Questions.....	37
Communication Tools: Project Management (MC 2.1.C.4).....	38
Basic Information.....	38
Learning Outcomes.....	39
Description.....	39
Questions.....	39
Digital Tools: Identifying key factors for comparison and evaluation of different digital tools (MC 2.1.C.5)...	40
Basic Information.....	40
Learning Outcomes.....	41
Description.....	41
Questions.....	41
EXPERT LEVEL .....	42
Fundamental Concepts in Artificial Intelligence (MC 2.1.D.1) .....	43
Basic Information.....	43
Learning Outcomes.....	44
Description.....	44
Questions.....	44
Artificial Intelligence Tools (MC 2.1.D.2) .....	45
Basic Information.....	45
Learning Outcomes.....	46
Description.....	46
Questions.....	46
Communicating with an AI conversational Agent (MC 2.1.D.3) .....	47
Basic Information.....	47
Learning Outcomes.....	48
Description.....	48
Questions.....	48
Interacting and providing feedback to AI (MC 2.1.D.4).....	49
Basic Information.....	49
Learning Outcomes.....	50
Description.....	50

Questions.....	50
Using Virtual Assistant Tools (MC 2.1.D.5).....	51
Basic Information.....	51
Learning Outcomes.....	52
Description.....	52
Questions.....	52
Using Chat Bots (MC 2.1.D.6).....	53
Basic Information.....	53
Learning Outcomes.....	54
Description.....	54
Questions.....	54
Mindset for AI (MC 2.1.D.7).....	55
Basic Information.....	55
Learning Outcomes.....	56
Description.....	56
Questions.....	56
APPENDIX I: LEARNING OUTCOMES FOR COMPETENCE AREA: INTERACTING THROUGH DIGITAL TECHNOLOGIES	57
INTRODUCTION:.....	59
PREREQUISITES: .....	60
FOUNDATION (LEVEL 1 and LEVEL 2).....	61
INTERMEDIATE (LEVEL 3 and LEVEL 4).....	65
ADVANCED (LEVEL 5 and LEVEL 6).....	70
EXPERT (LEVEL 7 and LEVEL 8).....	74

# FOUNDATION LEVEL (Level 1 and Level 2)



## Digital Communication tools (MC 2.1.A.1)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Digital Communication Tools <b>Code: MC 2.1.A.1</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3- 5 Hours
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review



## Learning Outcomes

Learning Outcomes (ref. Level 1 LOs 1.1, 1.2, 1.3, 1.4 and 1.5)

- Differentiate between synchronous and asynchronous communication tools
- Describe different social media that can be used as communication means
- List digital communication services to be used in social environment
- Describe instant messaging and list tools that may be used as instant messaging together with their key characteristics
- Differentiate social media according to their nature (public or reserved content, instant messaging etc)

## Description

The achievement of the micro credential “**Digital Communication Tools**” proofs that the learner is able to differentiate between synchronous and asynchronous communication tools as well as to recognise different types of social media like Facebook, LinkedIn, Instagram, Snapchat etc and different instant messaging tools such as WhatsApp, Viber, Instagram Direct, Facebook messenger and more. Additionally, the achievement of this micro-credential provides evidence that the learner is able to recognise various digital communication services such as instant messaging, posting and video conferencing. This micro-credential provides evidence on knowledge of different messaging tools together with their key characteristics such as WhatsApp, Facebook Messenger, Instagram Direct, Snapchat, Twitter Direct Messages (DMs), Telegram, Signal, LinkedIn Messaging, WeChat, Skype, Discord, Slack, Viber, Hangouts (Google Chat), Line, Kik, Reddit Chat, TikTok Messaging. The micro-credential confirms the ability of the learner to differentiate between different social media according to their nature (public or reserved content, instant messaging etc) as well as the ability of the learners to compare different social media.

## Questions

1. What is social media?
2. Why are social media important in the 21<sup>st</sup> century?
3. List synchronous communication tools.
4. List asynchronous communication tools.
5. List possible tools for instant messaging and describe their use.

## Social Media: Advantages, Disadvantages and Funding (MC 2.1.A.2)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Social Media: Advantages, Disadvantages and Funding <b>Code: MC 2.1.A.2</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 1 LOs 1.6, 1.7, 1.8 and 1.9)

- Explain the sources of funding of different social media
- Identify the reason for which the social media are free of charge
- Explain the advantages of social media
- Describe the disadvantages and challenges caused by social media

## Description

“Social Media: Advantages, Disadvantages and Funding” micro-credential demonstrates the broad knowledge of learners on sources of funding of different social media, as well as recognising that the main source of funding of social media is advertising. This micro-credential also proves the ability of the learner to identify the reasons for which social media such as Facebook, LinkedIn, Instagram, Snapchat, Tik Tok, X (former twitter), Viber and WhatsApp are free of charge, such as marginal revenue per user, to attract more users, the user's willingness to pay and more. This micro-credential also demonstrates the sensitization of the learner on what are the advantages of using social media, such as presenting social media as a way of building a strong network and connections locally and globally as well as discovering and discussing new topics, interests and motivations and having a better understanding on how social media can be seen as a tool for new inputs and opportunities. Finally, this micro-credential proves the ability of the learner to understand and describe the disadvantages and challenges caused by social media such as privacy concerns, cyberbullying, fake news and misinformation, addiction and mental health issues, reduced face to face interaction, security risks, impact on productivity, political polarization, content overload and information overload, impact on real world relationship, algorithm bias and filter bubbles.

## Questions

1. What is the main source of funding of social media?
2. Explain the reasons why various social media are free of charge.
3. Discuss the advantages of social media.
4. Discuss how social media can help to build strong connections/network.
5. Discuss the disadvantages and challenges due to social media.
6. Explain the terms privacy concerns, cyberbullying, fake news and misinformation in relation to social media.

## Communicating through messaging tools (MC 2.1.A.3)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Communicating through messaging tools <b>Code: MC 2.1.A.3</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	2-4 Hours
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 2 LOs 2.10 and 2.13)

- Select simple communication tools to be used for synchronous restricted interaction
- Use different types of messaging tools to communicate a message to a specific person or audience

## Description

“Communicating through messaging tools” micro-credential demonstrates the ability of the learners to select simple communication tools such as email, Messenger, Viber, WhatsApp etc, to be used for synchronous restricted interaction. Additionally, achievement of this micro-credential demonstrates the ability to use different types of messaging tools to communicate synchronously to specific persons or audiences for reasons related to work or social life

## Questions

1. List some messaging tools.
2. What is synchronous restricted interaction?
3. How do you communicate with a business partner? Discuss which communication tool you will use and why.
4. How do you communicate with a close friend? Discuss which communication tool you will use and why.
5. How do you communicate through one instant messaging tool (of your choice)?

## Composing and Sending Emails using Basic Features (MC 2.1.A.4)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Composing and Sending Emails using Basic Features <b>Code: MC 2.1.A.4</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	2-4 Hours
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 2 LOs 2.11)

- Compose a single email using the basic components using different email communication tools

## Description

**“Composing and Sending Emails using Basic Features”** micro-credential demonstrates knowledge on the existence of different email tools such as Microsoft Outlook, Gmail, Yahoo and Mozilla as well as the ability of the learners to understand and use simple features when composing and sending an email, that includes adding the recipients email addresses, including a subject, adding recipients in the cc section and adding recipients in the bcc section.

## Questions

1. What are some well-known email communication tools?
2. Describe basic features in email composition. What are the minimum components in email composition.
3. Discuss the differences between cc and bcc.
4. Can I send an email, without adding a subject?
5. What are the main steps in composing and sending an email?

## Composing a Simple Social Media Post (MC 2.1.A.5)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Composing a Simple Social Media Post <b>Code: MC 2.1.A.5</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	2-4 Hours
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review



## Learning Outcomes

Learning Outcomes (ref. Level 2 LOs 2.12)

- Create a simple post on different social media (considering the differences between different social media) to be used as public or for a specific audience.

## Description

“Composing a Simple Social Media Post” micro-credential demonstrates the ability of the learners to compose a single post on different social media such as Facebook, X (former twitter), LinkedIn and/or Instagram (on laptop or smart device) to be used as a public post or a post for a specific audience. Additionally, this micro-credential demonstrates the ability of the learners to identify the differences in the posts between different social media, for example Facebook (varied content, including text posts, images, videos, links, and events), Instagram (visual content with images and short videos) Twitter (Short and concise text-based posts) Linked in (Professional content, including job updates, industry news, and articles.) Pinterest (Image-based content) Snapchat (short content, including photos and videos) You tube (video content) TikTok (short videos).

## Questions

1. What are the differences between posts in different social media?
2. What can be included in a post?
3. What is the difference between a public post and a post for a specific audience?
4. Describe the steps you will follow to develop a post in 2 different social media.

# INTERMEDIATE LEVEL (Level 3 and Level 4)



## Selection of appropriate digital communication tools (MC 2.1.B.1)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Selection of appropriate digital communication tools <b>Code: MC 2.1.B.1</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 5 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 3 LOs 3.14, 3.15, 3.16 and 3.17):

- Protect oneself from misinformation, cyberbullying, addiction and anxiety caused by social media through the use of specific strategies
- Explain why the selection of different communication tools depends on the specific circumstances, the audience, the context and purpose of communication
- Select the most appropriate communication tool for sharing ideas and communicating opinions
- Describe accessibility statements

## Description

**The achievement of the micro credential “Selection of appropriate communication tools”** demonstrates the sensitisation of the learner on issues such as misinformation, cyberbullying, addiction and anxiety caused by social media through the implementation of specific strategies such as as Critical Thinking and Fact-Checking, mindful social media use, privacy settings and security measures, diversity of information sources, digital detox, healthy online interactions, educating oneself on cybersecurity, setting boundaries, being aware on mental health, building positive and supporting online communities. Additionally it demonstrates the ability of the learners to select the most appropriate communication tools for sharing ideas and communicating opinions based on criteria such as audience characteristics (demographics and technological literacy), communication context (formal or non-formal and time sensitivity), purpose of communication (dissemination, briefing etc), security and privacy considerations (need for encrypted communication), technological infrastructure, cultural and organizational norms, feedback and iteration. Through this micro-credential learners demonstrate their understanding of accessibility statements.

## Questions

1. Explain how misinformation, cyberbullying, addiction and anxiety can be considered possible consequences of social media.
2. What strategies may one follow to protect himself or herself from misinformation, cyberbullying, addiction and anxiety?
3. What are accessibility statements? Which social media provide an accessibility statement?
4. What are the factors to be considered for selecting a specific communication tool?
5. How can one select the most appropriate digital communication tool to be used for a specific context of sharing ideas and communicating opinions?

## Composing and Sending Emails using Advanced Features (MC 2.1.B.2)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Composing and Sending Emails using Advanced Features <b>Code: MC 2.1.B.2</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	2-4 Hours
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 3 LOs 3.18, 3.19):

- List advanced features in email composition related to email recipients, delivery, attachments and read options
- Compose emails using advanced features related to email recipients, delivery, attachments and read options

## Description

**"Composing and Sending Emails using Advanced Features"** credential demonstrates the ability of the learners to understand and use advanced features when composing and sending an email that includes scheduled sending, setting priority levels, requesting delivery receipt and read receipt, adding signatures, recalling the email, enabling attachment preview, ensuring secure attachments.

## Questions

1. Describe advanced features in email composition.
2. How can you schedule the delivery of an email?
3. How can you make sure that your email has been delivered and read?
4. What does recalling an email mean? How can you recall an email?
5. How can you ensure secure attachments in an email?

## Scheduling meetings and events (MC 2.1.B.3)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Scheduling meetings and events <b>Code: MC 2.1.B.3</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	Minimum 4hrs – Maximum 6 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 3 LOs 3.20, 3.21 and 3.22 and Level 4 LOs 4.23, 4.24):

- Name variety of tools for meeting and event scheduling
- Describe advanced features in meeting and event scheduling
- Schedule events using basic and advanced tools through the use of communication tools
- Describe what integration with various calendars means and different levels of integration features
- Describe the level of integration different communication tools accommodate

## Description

**“Scheduling meetings and events micro-credential”** demonstrates the broad knowledge of the learners on different tools that can be used for scheduling, as well as the differences in the levels of integration (as far as the calendar platforms supported, one- or two-way sync, real time updates, availability and busy times, reminders and notifications, third party integration and customisation) and how different tools accommodate integration. Additionally, this micro-credential describes the broad knowledge of the learners on advanced features of scheduling such as automated appointment reminders, customizable booking pages, time Zone Conversion, group scheduling, calendar integrations, setup of custom availability rules, waitlists and their ability to schedule meetings and events using these advanced features.

## Questions

1. What tools could you use in order to schedule a meeting or event?
2. What do we mean by the term “integration between different calendar systems”?
3. What are the different levels of integration?
4. What are customizable booking pages and which communication tools providing this option?
5. What is the available functionality when you schedule a meeting or event as far as automated appointment reminders, custom availability and time zone conversion is concerned?
6. Describe the steps you would follow to schedule a group meeting.



## Using Videoconferencing (MC 2.1.B.4)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Using Videoconferencing <b>Code: MC 2.1.B.4</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 4 LOs 4.25, 4.26, 4.27 and 4.28):

- Name available video conferencing tools
- Describe important videoconferencing features and indicate which features are available in each videoconferencing tool
- Moderate a session using important videoconferencing features
- Consider ethical issues when recording video conferencing

## Description

**“Using videoconferencing”** micro-credential demonstrates the broad knowledge of the learners of different tools that can be used for videoconferencing such as Zoom, Microsoft teams, Google meet, Cisco Webex, Skype, GoToMeeting as well as their broad knowledge on the available functionality for videoconferencing (as Recording and Playback, Active Speaker View and switching between Speakers, data Encryption, Integration with Third-party Apps, screen Sharing, User Management, Mobile Support, Recording and Playback, Active Speaker View and switching Between Speakers) and their ability to use the above mentioned functionality when moderating a meeting. This micro credential also demonstrates learners’ sensitivity on ethical issues when recording such as formed consent, privacy concerns, data security, sensitive content, retention policies, access control, editing and manipulation, compliance with laws and regulations, cultural sensitivity and others.

## Questions

1. What tools can you use for video conferencing?
2. What functionality does each video conferencing tool support?
3. Describe the ethical issues when recording a videoconferencing session.
4. Describe what is screen sharing and how this is achieved in different video conferencing tools.
5. Describe how you would moderate a videoconferencing session.
6. Present different views available when video conferencing.

## Social Media Manipulative Behaviour (MC 2.1.B.5)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Social Media Manipulative Behaviour <b>Code: MC 2.1. B.5</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 4 LOs 4.29, 4.30, 4.31 and 4.32)

- Present ways in which social media manipulate behaviour
- Define nudging and present examples of nudging
- Define gamification and present examples of gamification.
- Discuss ways in which one can protect him/herself from manipulation

## Description

**“Social Media Manipulative Behaviour”** micro-credential demonstrates the sensitization of the learner on how social media may manipulate his/her behaviour in different ways such as algorithmic feeds notification systems, endless scroll and autoplay, personalised content recommendation, social validation, influencer marketing. This micro credential also proves the ability of the learner to understand nudging and to provide examples of nudging such as default settings, push notifications, like and share buttons, personalised recommendations, countdowns and urgency, autoplay videos etc. Additionally, this micro credential proves the ability of the learner to understand gamification and how it is being used in social media as well as to present examples of gamification such as badges and achievements, leaderboards, rewards for sharing, points and scoring systems, virtual gifts, quizzes and polls. Finally, this micro-credential proves the ability of the learner to protect himself/herself from manipulation through the use of several strategies such as be aware of Manipulative Tactics, apply Critical Thinking, Check Privacy Settings, Avoid Clickbait and Sensationalism, Fact-Check Information, Limit Personal Information, diversify news sources, Question Influencers and Advertisements, unfollow or block manipulative accounts, take breaks from social media, report manipulative content etc

## Questions

1. How social media manipulates behaviour?
2. What is nudging?
3. What is gamification? Provide examples.
4. Provide examples of digital nudging and gamification.
5. How can you protect yourself from these manipulative behaviours?

## Content Development (MC 2.1.B.6)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Content Development <b>Code: MC 2.1. B.6</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 5 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 4 LOs 4.33, 4.34, 4.35 and 4.36)

- Develop posts on different social media with the use of advanced tools and techniques.
- Develop high quality, creative and culturally relevant content tailored to specific social media platforms.
- Engage the audience through appropriate content
- Emphasize on the importance of content when dealing with social media

## Description

**"Content Development"** micro-credential demonstrates the ability of the learners to develop posts in different social media using advanced tools such as scheduled delivery, polls, restricted audience, content optimization techniques, including the use of keywords, hashtags, and multimedia elements, to enhance visibility and reach on social media. Additionally, this micro-credential demonstrates the achievement of the learners in developing creative and culturally relevant content using strategies such as maintaining consistent branding, adapt content length, use hashtags and keywords, be culturally sensitive, use storytelling, post content when your audience is more active. Learners will also prove their ability to develop engaging content using polls and questions. Finally, this micro-credential confirms learners' sensitisation on the importance of content.

## Questions

1. What are important tools that you can use when developing a post?
2. Which strategies will you use to develop high quality, creative and culturally relevant content?
3. Describe strategies for engaging your audience through your posts in social media.
4. Why should we use hashtags and keywords?
5. Why is content important in social media?

# ADVANCED LEVEL (Level 5 and Level 6)



## Asynchronous communication tools for file sharing, scheduling, project management, mind mapping and notes taking (MC 2.1.C.1)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Asynchronous communication tools for scheduling, project management, mind mapping and notes taking <b>Code: MC 2.1.C.1</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	ADVANCED
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review



## Learning Outcomes

Learning Outcomes (ref. Level 5 LOs 5.37, 5.38, 5.39, 5.40 and 5.41):

- Have a broad knowledge of different communication tools that are available in asynchronous mode
- Describe important functionality of tools dealing with file sharing
- Describe important functionality of tools dealing with scheduling
- Describe important functionality of tools dealing with online project management
- Classify different digital tools for asynchronous mode according to their purpose (file sharing, booking meetings, mind maps, notes)

## Description

“**Asynchronous communication tools for file sharing, scheduling, project management, mind mapping and notes taking**” proves the broad knowledge of different asynchronous tools for file sharing, scheduling, project management, mindmaps and notes as well as their ability to classify those tools into those that are used for file sharing, handling notes, booking meetings and events, creating mindmaps and handling notes. This micro-credential provides evidence on the ability of the learner to understand the functionality of tools that deal with **file sharing** (file upload and storage, file organisation, access control and permissions, link sharing, collaborative editing, sync across devices, version control, notification and activity tracking, integration with cloud storage, search and discovery, file previews, commenting and feedback), **scheduling** (calendar integration, appointment scheduling, meeting coordination, automated reminders, time zone support, customizable availability, group scheduling, calendar sharing, customisable event details, waitlist management, recurrence and repeating events, confirmation and cancellation options, privacy and security) and **online project management** (task management, Project Planning, Collaboration and Communication, File Sharing and Storage, ICalendar, Scheduling, Resource Allocation, Time Tracking, Budgeting and Expense Tracking, Reporting and Analytics, Customizable Dashboards, Risk Management, dependency Management, Integration with Third-Party Tools, , Accessibility, Security and Permissions ) while at the same time the ability to classify tools according to their purpose.

## Questions

1. Define asynchronous mode communication tools that are available in asynchronous mode for file sharing, scheduling and project management.
2. What is the functionality of tools dealing with file sharing?
3. What is the functionality of tools dealing with scheduling?
4. What is the functionality of tools dealing with online project management?

## Communication Tools: File Sharing (MC 2.1.C.2)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Communication tools: File Sharing <b>Code: MC 2.1.C.2</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	ADVANCED
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 5 LOs 5.42 and 5.45):

- Use different communication tools for file sharing
- Demonstrate to others the key features of file sharing tools

## Description

**"Communication Tools: File Sharing"** micro-credential demonstrates the ability of the learners to use effectively various available tools for file sharing such as One drive, Google drive and Dropbox and skills for collaboration on common documents through online file sharing. More specifically, this micro credential provides evidence on the ability of the learners for file upload, file organisation, access control and permissions, link sharing, collaborative editing, sync across devices, version control, notification and activity tracking, integration with cloud storage, search and discovery, file previews, commenting and feedback.

## Questions

1. List digital collaboration tools designed for file sharing.
2. Discuss the benefits of file sharing.
3. How can you upload a file?
4. How can you share a file?
5. Describe how you can collaborate online on the same file.
6. Explain the meaning of sharing a file across several devices.

## Communication Tools: Scheduling Meetings and Events (MC 2.1.C.3)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Communication tools: Scheduling Meetings and Events <b>Code: MC 2.1.C.3</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	ADVANCED
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 5 LOs 5.43 and 5.46):

- Use different communication tools for organizing meetings
- Demonstrate to others the key features of meeting organising tools

## Description

**"Communication Tools: Scheduling Meetings and Events"** micro-credential demonstrates the ability of the learners to use effectively various available tools for scheduling meetings such as Outlook, Doodle, Calendly, etc. More specifically, this micro-credential provides evidence on the ability of the learners to perform calendar integration, schedule appointments, consider time zone settings when scheduling appointments, share their calendar with others, create repeating events/meetings, create booking pages and set privacy and security settings. Finally, this micro-credential confirms learners' ability to identify the key features of meeting organising tools and to demonstrate those key features to others.

## Questions

1. List some of the key features of these meeting organising tools.
2. How can you schedule an appointment?
3. How can you schedule a repetitive event/meeting?
4. How can you share your calendar with others?
5. Explain the meaning of sharing your calendar with others.

## Communication Tools: Project Management (MC 2.1.C.4)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Communication tools: Project Management <b>Code: MC 2.1.C.4</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	ADVANCED
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 5 LOs 5.44 and 5.47):

- Use different communication tools for project management.
- Demonstrate to others the key features of project management tools.

## Description

**"Communication Tools: Project Management"** micro-credential demonstrates the ability of the learners to use effectively different available tools for project management such as Asana, Trello, Monday.com and Teamworks. More specifically, this micro-credential provides evidence on the ability of the learners to perform task management and project planning, collaborate and communicate online, implement file sharing, schedule tasks and achieve resource allocation. Finally, this micro-credential confirms learners' ability to identify the key features of digital project management tools and to demonstrate those key features to others.

## Questions

1. List some of the key features of these project management tools.
2. How can you schedule a task?
3. How can you assign a task?
4. How can you monitor the progress of various tasks?
5. Explain the meaning of performing task management and project planning.
6. Discuss the benefits of using project management tools.
7. Discuss the effectiveness of using project management tools.

## Digital Tools: Identifying key factors for comparison and evaluation of different digital tools (MC 2.1.C.5)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Digital Tools: Identifying key factors for comparison and evaluation of digital tools <b>Code: MC 2.1.C.5</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	ADVANCED
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review



## Learning Outcomes

Learning Outcomes (ref. Level 6 LOs 6.48 and 6.49):

- Name key factors for comparison of different digital tools
- Evaluate different digital tools according to own requirements and needs

## Description

**"Digital Tools: Identifying Key Factors for comparison and evaluation of different digital tools"** proves the broad knowledge of the learner to identify key factors for comparison and evaluation of different digital tools such as ease of use, collaboration features (for example real time editing, file sharing, task management, integration with other tools), communication capabilities (such as messaging, video conferencing, comment threads) scalability, security and privacy, customization and flexibility, cost, mobile accessibility, collaboration style (synchronous or asynchronous), support and training etc. Additionally, this micro-credential provides evidence on the ability of the learner to identify own requirements and compare different digital tools in accordance to these requirements.

## Questions

1. List some of the key factors for comparison and evaluation of different digital tools.
2. Explain the importance of identifying those key factors.
3. What do we mean by the terms "collaboration features" and "communication capabilities"
4. Can you provide an example of a comparative analysis you conducted between two or more digital tools?
5. Given a specific case please describe the user requirements and select the appropriate tools to meet these requirements.

# EXPERT LEVEL

(Level 7 and Level 8)



## Fundamental Concepts in Artificial Intelligence (MC 2.1.D.1)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Fundamental Concepts in Artificial Intelligence <b>Code: MC 2.1.D.1</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	EXPERT
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 7 LOs 7.50, 7.51 and 7.52):

- Define Artificial intelligence
- Discuss the fundamental concepts of artificial intelligence
- Explain the opportunities and threats caused by artificial intelligence

## Description

**“Fundamental Concepts in Artificial Intelligence”** micro-credential demonstrates the ability of the learner to define what Artificial Intelligence is. This micro-credential also proves the ability of the learner to understand the fundamental concepts and principles that underpin artificial intelligence, including machine learning, deep learning (neural networks) and natural language processing. Additionally, this micro-credential demonstrates the ability of the learner to understand and explain the possibilities provided by artificial intelligence such as automation and efficiency, improved decision making, enhanced productivity, innovative products and services, personalisation, healthcare advancements, education and training, environmental impact, humanitarian applications etc, as well as the ability to understand and explain the threats provided by artificial intelligence, such as job displacement, bias and fairness, security risks, lack of transparency, privacy issues, ethical dilemmas, overreliance on technology and more.

## Questions

1. Can you provide a definition of Artificial Intelligence?
2. How does AI differ from traditional computer programming?
3. Describe the key components of AI.
4. Discuss the possibilities provided by AI.
5. How does AI enable personalized experiences in digital platforms?
6. Explain the potential benefits and challenges associated with AI in education.
7. Discuss the threats provided by AI.
8. How does AI contribute to job displacement, and what industries are most affected?
9. How does AI pose challenges to individual privacy?

## Artificial Intelligence Tools (MC 2.1.D.2)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Artificial Intelligence Tools <b>Code: MC 2.1.D.2</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	EXPERT
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 7 LOs 7.53, 7.54 and 7.59):

- Identify different types of AI tools
- Demonstrate broad knowledge of AI tools that can be used to support solving of complex problems
- Select the most appropriate AI tool based on the specific case circumstances

## Description

“**Artificial Intelligence Tools**” micro-credential demonstrates the ability of the learner to identify different types of AI tools such as Virtual Assistants, chatbots, automated data analysis, automated machine learning platforms, predictive analytics tools, natural language processing tools, image recognition tools, speech recognition tools, automated content creation, automated email responses, document summarization, grammar and writing assistance, health and fitness apps and AI powered design tools. Additionally, this micro-credential demonstrates the ability of the learner to list different AI that can be used in daily life such as Siri and Google Assistant (**Virtual Assistant**), ChatGPT (**Chatbots**), Google analytics (**automated data analysis**), Grammarly, ProWritingAid, Hemingway Editor (**Grammar and Writing Assistance**), Summarly (**Document summarization**), Google Cloud Vision API (**Image recognition**), Google Cloud Speech-to-Text (**Speech recognition**) OpenAI's GPT-3 for content generation, Canva for design (**Content creation and design**), FaceID (Apple) (**Facial Recognition for security reasons**) and more. Finally, this micro-credential proves the ability of the learner to evaluate and select the most appropriate AI tools based on specific use cases, considering factors such as accuracy, efficiency and scalability, as well as the ability to identify the category of the AI tools needed by the learner and selecting the tool within a specific category.

## Questions

1. Identify and explain categories of AI tools based on their functionalities.
2. What AI tools do you know for each of the above-mentioned categories.
3. Can you provide examples of Virtual Assistant AI tools and their applications in daily life? Can you describe the main functionality?
4. What factors will you take into consideration when deciding which AI tool to use for a specific case?

## Communicating with an AI conversational Agent (MC 2.1.D.3)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Communicating with an AI conversational Agent <b>Code: MC 2.1.D.3</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	EXPERT
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 7 LOs 7.55 and Level 8 LOs 8.56):

- List the criteria based on which one can recognise the communication with an AI based conversational agent
- Identify and indicate whether one is communicating with a human or an AI based conversational agent

## Description

“Communicating with an AI conversational Agent” micro-credential demonstrates the ability of the learner to identify the factors that indicate communication with an AI based conversational agent (and not a human) such as quick responses, consistent writing style, predefined responses, inability to answer open ended responses, responding to errors or unexpected queries with generic messages or by redirecting the user to predefined actions, lack of emotional understanding, availability 24/7, limited problem solving skills (for complex problems beyond their programmed capabilities) etc., as well as the ability to recognise the nature of the conversational agent (AI or human) through the application of these criteria.

## Questions

1. Explain how would you determine whether you are communicating with an AI or a human?
2. List some of the factors that indicate that you are communicating with an AI conversational agent.
3. Why might AI conversational agents struggle with open-ended responses?
4. How do AI conversational agents typically respond to errors or unexpected queries?
5. Explain how the handling of unexpected queries differs between human and AI conversational agents.
6. Provide examples of writing styles that may indicate AI involvement.



## Interacting and providing feedback to AI (MC 2.1.D.4)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Interacting and providing feedback to AI <b>Code: MC 2.1.D.4</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	5-8 Hours
Level of the learning experience leading to the micro-credential	EXPERT
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 8 LOs 8.57 and 8.58):

- Be able to interact and give feedback to the AI system to influence what it next recommends.
- Be open to AI systems supporting humans to make informed decisions.

## Description

“Interacting and providing feedback to AI” micro-credential demonstrates the ability of the learner to interact with an AI and to be able to reflect on the interaction with AI in order to influence next actions and recommendations through the provision of feedback on the accuracy, relevance, or helpfulness of the AI-generated responses. This feedback can be explicit (through ratings or comments) or implicit (by choosing or ignoring suggestions). Additionally, this micro-credential demonstrates the ability of the learner to accept AI as a support tool to help humans to make informed decisions in accordance with their goals, to explain the concept of augmented intelligence that emphasizes the collaborative role of AI in enhancing human capabilities, decision making and problem solving, to comment on the complementary skills of AI and Humans where AI can handle processing of large datasets and humans have the critical thinking, to explain how AI can improve efficiency and productivity through automation of routine and time-consuming tasks and therefore through the provision of more time to human resources to focus on higher level decision making and tasks that require emotional intelligence. Finally, this micro-credential demonstrates the sensitization of the learner on the fact that AI systems can adapt and learn from new data, contributing to continuous improvement in decision support capabilities, as well as to take into consideration though ethical considerations and to be conscious about the need for continuous monitoring and evaluation.

## Questions

1. Explain the importance of providing feedback on AI-generated responses.
2. Differentiate between implicit and explicit feedback provided to AI.
3. How can implicit feedback influence the improvement of AI-generated responses?
4. In what situations do you find AI particularly helpful in supporting human decision-making?
5. Discuss the need for continuous monitoring and evaluation of AI systems.
6. How can organizations ensure that AI systems align with ethical standards over time?
7. What responsibilities do users have when interacting with AI systems, especially in terms of ethical considerations?

## Using Virtual Assistant Tools (MC 2.1.D.5)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Using Virtual Assistant Tools <b>Code: MC 2.1.D.5</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	EXPERT
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 7 LOs 7.60):

- Use different Virtual Assistant tools

## Description

**“Using Virtual Assistant Tools”** micro-credential demonstrates the ability of the learner to develop proficiency in using specific virtual assistant AI tool such as the Google Assistant. Additionally, this micro-credential proves the learner's ability to enable Google Assistant, as well as the ability to use basic commands in Google Assistant such as smart home integration, navigation, entertainment, translation, productivity (eg create shopping list) and setting up voice match.

## Questions

1. How do you enable Google Assistant on your device?
2. Provide examples of basic voice commands that can be used with Google Assistant.
3. What smart home devices can be controlled using Google Assistant commands?
4. How can Google Assistant be used for entertainment purposes?
5. Explain the importance of setting up Voice Match in Google Assistant.
6. Describe a specific scenario where you found Google Assistant to be particularly useful.

## Using Chat Bots (MC 2.1.D.6)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Using Chat Bots <b>Code: MC 2.1.D.6</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	3-5 Hours
Level of the learning experience leading to the micro-credential	EXPERT
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 7 LOs 7.61):

- Use different types of chat bots

## Description

**“Using Chat Bots”** micro-credential demonstrates the ability of the learner to develop proficiency in using specific Chat Bots AI tools such as Chat GPT, as well as the ability to access and interact with Chat GPT. Additionally, this micro-credential proves the learner's ability to use Chat CPT for getting information, creative writing prompts, or even engaging in casual conversation. Finally, this micro-credential demonstrates the ability of the learner to handle ambiguity through asking clarifying questions, as well as the ability to differentiate between system level and user level instructions).

## Questions

1. How do you access Chat GPT?
2. Describe the interface of ChatGPT.
3. Describe the initial steps you take to start a conversation with Chat GPT.
4. In what situations do you find it necessary to ask clarifying questions while interacting with Chat GPT?
5. Describe a real-world scenario where you found Chat GPT to be a valuable tool.

## Mindset for AI (MC 2.1.D.7)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Mindset for AI <b>Code: MC 2.1.D.7</b>
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: <b>101087628</b>
Date of issuing	Dec 2023
Notional workload needed to achieve the learning outcomes	1-3 Hours
Level of the learning experience leading to the micro-credential	EXPERT
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. Level 8 LOs 8.62):

- Develop a mindset of continuous learning in the field of AI through the use of different strategies and best practises.

## Description

“Mindset for AI” micro-credential demonstrates the ability of the learner to develop a mindset of continuous learning in the rapidly evolving field of AI using specific and defined strategies. This micro-credential demonstrates the ability of the learner to stay updated on new tools, techniques and best practises such as engaging in online courses and tutorials, follow AI blogs and websites, join AI communities, follow AI thought leaders, researchers, and organizations in social media, experiment with open-source AI projects, seek feedback and reflect on the learning journey.

## Questions

1. List strategies that you can implement to develop an AI mindset.
2. Discuss the importance of continuous learning in the field of AI.
3. Name a few AI blogs or websites you can follow to remain updated in the field of AI.
4. Discuss the importance of joining AI communities for staying connected with peers and professionals.
5. Discuss the importance of developing an AI mindset.



# APPENDIX I: LEARNING OUTCOMES FOR COMPETENCE AREA: INTERACTING THROUGH DIGITAL TECHNOLOGIES

COMPETENCE: COMMUNICATION AND COLLABORATION (2)		
COMPETENCE AREA 2.1: INTERACTING THROUGH DIGITAL TECHNOLOGIES		
To interact through a variety of digital technologies and to understand appropriate digital communications means for a given context		
1	At basic level and with guidance, I can:	<ul style="list-style-type: none"> <li>• select simple digital technologies to interact, and</li> <li>• identify appropriate simple communication means for a given context</li> </ul>
2	At basic level and with autonomy and appropriate guidance where needed, I can:	<ul style="list-style-type: none"> <li>• select simple digital technologies to interact, and</li> <li>• identify appropriate simple communication means for a given context</li> </ul>
3	On my own and solving straightforward problems, I can:	<ul style="list-style-type: none"> <li>• perform well-defined and routine interactions with digital technologies, and</li> <li>• select well-defined and routine appropriate digital communication means for a given context.</li> </ul>
4	Independently, according to my own needs, and solving well-defined and non-routine problems, I can:	<ul style="list-style-type: none"> <li>• select a variety of digital technologies to interact, and</li> <li>• select a variety of appropriate digital communication means for a given context.</li> </ul>
5	As well as guiding others, I can:	<ul style="list-style-type: none"> <li>• use a variety of digital technologies to interact, and</li> <li>• show others the most appropriate digital communication means for a given context.</li> </ul>
6	At advanced level, according to my own needs and those of others, and in complex contexts, I can:	<ul style="list-style-type: none"> <li>• adapt a variety of digital technologies for the most appropriate interaction, and</li> <li>• adapt the most appropriate communication means for a given context</li> </ul>
7	At highly specialised level, I can:	<ul style="list-style-type: none"> <li>• create solutions to complex problems with limited definition that are related to interacting through digital technologies and digital communication means</li> <li>• integrate my knowledge to contribute to professional practices and knowledge and guide others in the interaction through digital technologies</li> </ul>
8	At the most advanced and specialised level, I can:	<ul style="list-style-type: none"> <li>• create solutions to solve complex problems with many interacting factors that are related to interacting through digital technologies and digital communication means</li> <li>• propose new ideas and processes to the field.</li> </ul>

## INTRODUCTION:

Communication and collaboration refer to the skills and competences required to effectively communicate and collaborate in the digital environment.

It involves the ability to use communication and collaboration with specific audiences and in specific context or to express opinions in public.

Communication is achieved through the use of social media where one must be able to express opinion in public taking into consideration the ethical framework. It also involves creating and sharing content to specific audiences. Communication and collaboration involve also the use of tools for direct communication synchronously (through different types of messengers) or asynchronously through email. File sharing, scheduling and collaborative project management are other tasks that are involved in this area.

Last but not least communication and collaboration refers also to the use of AI conversational agents. Learners should be able to recognise them and differentiate them from human agent, understand their way of interaction and interact with them in such a way as to influence their next recommendation. This area is also about being open in the use of AI as a tool for supporting humans to make informed decisions.

## PREREQUISITES:

To develop communication and collaboration skills, several knowledge areas and skills serve as prerequisites. These include:

1. **Basic Computer Literacy:** Individuals should have a fundamental understanding of computer operations, file management, and software usage to navigate digital platforms effectively.
2. **Internet Literacy:** Proficiency in using internet browsers, search engines, and an understanding of online security principles is essential for safe and effective digital communication.
3. **Adaptability to New Technologies:** Readiness and willingness to learn and adapt to new digital tools and technologies as they emerge in the rapidly evolving digital landscape.

## FOUNDATION (LEVEL 1 and LEVEL 2)

### COMPETENCE AREA 2.1: COMMUNICATION AND COLLABORATION: INTERACTING THROUGH DIGITAL TECHNOLOGIES

COMPETENCE: TO INTERACT THROUGH A VARIETY OF DIGITAL TECHNOLOGIES AND TO UNDERSTAND APPROPRIATE DIGITAL COMMUNICATIONS MEANS FOR A GIVEN CONTEXT

#### LEVEL: 1 - FOUNDATION

At a basic level and with guidance I can:

- select simple digital technologies to interact, and
- identify appropriate simple communication means for a given context

#### LEVEL: 2 - FOUNDATION

At basic level and with autonomy and appropriate guidance where needed, I can:

- select simple digital technologies to interact, and
- identify appropriate simple communication means for a given context

Learning Outcome	Level	K – S - A	Description
1. Differentiate between synchronous and asynchronous communication tools.	L1	K	List synchronous and asynchronous communication tools.
2. Describe different social media that can be used as communication means.	L1	K	Recognise important social media (digital technologies) such as Facebook, LinkedIn, Instagram, Snapchat, Tik Tok, Viber, WhatsApp, Hangouts, Wechat, LinkedIn messaging ).

			Identify differences and similarities between social media including differences in their target groups.
3. List digital communication services to be used in social media environment.	L1	K	Recognize video conferencing, instant messaging, posting etc as digital communication services.
4. Describe instant messaging and list tools that may be used as instant messaging together with their key characteristics.	L1	K	Describe different instant messaging tools such as WhatsApp, Facebook Messenger, Instagram Direct, Snapchat, Twitter Direct Messages (DMs), Telegram, Signal, LinkedIn Messaging, WeChat, Skype, Discord, Slack, Viber, Hangouts (Google Chat), Line, Kik, Reddit Chat, TikTok Messaging.
5. Differentiate social media according to their nature (public or reserved content, instant messaging etc).	L1	K	Identify social media where one can post public content or content available for restricted audiences (e.g. Facebook and Instagram).
6. Explain the sources of funding of different social media.	L1	K	Recognise advertising as the main source of funding of social media.
7. Identify the reasons for which the social media are free of charge.	L1	K	List the reasons why social media such as Facebook, LinkedIn, Instagram, Snapchat, Tik Tok, X (former twitter), Viber and WhatsApp are free of charge such as marginal revenue per user is low, to attract more users, people would not be willing to pay for social media etc.
8. Explain the advantages of social media.	L1	K	Present social media as a way of building a strong network and connections around people as well as a way of discovering and discuss new topics, interests and motivations. Present social media as a tool for new inputs and opportunities.

9. Describe the disadvantages and challenges caused by social media.	L1	K	Present issues such as privacy concerns, cyberbullying, fake news and misinformation, addiction and mental health issues, reduced face to face interaction, security risks, impact on productivity, political polarization, content overload and information overload, impact on real world relationship, algorithm bias and filter bubbles.
10. Select simple communication tools to be used for synchronous restricted interaction.	L2	S	Select simple communication tools such as email, messenger, Viber, WhatsApp etc to be used for synchronous restricted interaction.
11. Compose a simple email using the basic components using different email communication tools.	L2	S	Name different email communication tools such as Microsoft Outlook, Gmail, Yahoo and Mozilla.  Compose a simple email including the email address, cc, bcc and Subject. Discuss the difference between CC and Bcc. Add a subject to your email and explain why it is a good practice.
12. Create a simple post on different social media (considering the differences between different social media) to be used as public or for a specific audience.	L2	S	Compose a simple post on different social media such as Facebook, Instagram, Twitter, LinkedIn, Pinterest, Snapchat, YouTube, TikTok, with public or customised audience (on laptop or smart device).  Consider the differences in the posts between different social media eg Facebook (varied content, including text posts, images, videos, links, and events), Instagram (visual content with images and short videos) Twitter (Short and concise text-based posts) Linked in (Professional content, including job updates, industry news, and articles.) Pinterest (Image-based content) Snapchat (short content, including photos and videos You tube (video content) TikTok (short videos).

13. Use different types of messaging tools to communicate a message to a specific person or audience.	L2	S	Use commonly used messaging tools (on laptop or smart device) such as messenger, Viber and WhatsApp, teams to communicate with a specific person or audience for reasons related to work or for social reasons.
---	----	---	---



## INTERMEDIATE (LEVEL 3 and LEVEL 4)

### COMPETENCE AREA 2.1: COMMUNICATION AND COLLABORATION: INTERACTING THROUGH DIGITAL TECHNOLOGIES

COMPETENCE: TO INTERACT THROUGH A VARIETY OF DIGITAL TECHNOLOGIES AND TO UNDERSTAND APPROPRIATE DIGITAL COMMUNICATIONS MEANS FOR A GIVEN CONTEXT

#### LEVEL: 3 – INTERMEDIATE

On my own and solving straightforward problems, I can:

- perform well-defined and routine interactions with digital technologies, and
- select well-defined and routine appropriate digital communication means for a given context.

#### LEVEL: 4 – INTERMEDIATE

Independently, according to my own needs, and solving well-defined and non-routine problems, I can:

- select a variety of digital technologies to interact, and
- select a variety of appropriate digital communication means for a given context.

Learning Outcome	Level	K – S – A	Description
14. Protect oneself from misinformation, cyberbullying, addiction and anxiety caused by social media through the use of specific strategies.	L3	K	Describe strategies one can use for protection from misinformation, cyberbullying, addiction, anxiety such as Critical Thinking and Fact-Checking, mindful social media use, privacy settings and security measures, diversity of information sources, digital detox, healthy online interactions, educating oneself on cybersecurity, setting boundaries, being aware on mental health, building positive and supporting online communities.
15. Explain why the selection of different communication tools depends on the specific	L3	K	List main factors for the selection of the communication tool and service such as audience characteristics (demographics and technological literacy), communication context (formal or non-formal and time sensitivity), purpose of

circumstances, the audience, the context and purpose of communication.			communication (dissemination, briefing etc), security and privacy considerations (need for encrypted communication), technological infrastructure, cultural and organizational norms, feedback and iteration.
16. Select the most appropriate communication tool for sharing ideas and communicating opinions.	L3	S	Select the appropriate communication tool (email, instant messaging, social media) depending on the context, the specific circumstances, the audience and the purpose of communication (for example for sharing ideas and supporting opinions).
17. Describe accessibility statements.	L3	K	Present examples of tools and services that also provide an accessibility statement.
18. List advanced features in email composition related to email recipients, delivery, attachments and read options.	L3	K	List advanced features in email composition such as scheduled sending, setting priority levels, requesting delivery receipt and read receipt, adding signatures, recalling the email, enabling attachment preview, ensuring secure attachments.
19. Compose emails using advanced features related to email recipients, delivery, attachments and read options.	L3	S	Compose an email using advanced features such as scheduled sending, setting priority levels, requesting delivery receipt and read receipt, adding signatures, recalling the email, enabling attachment preview, ensuring secure attachments.
20. Name variety of tools for meeting and event scheduling.	L3	K	List different tools for meeting and event scheduling such as Microsoft outlook calendar, google calendar, Microsoft teams, Calendly, Doodle, Acuity scheduling, Scheduler by HubSpot, Setmore, Booking.com Meetings Tool, When2meet, TimeTrade, Eventbrite, Skype for Business.

21. Describe advanced features in meeting and event scheduling.	L3	K	Name different available features in meeting and event scheduling such as automated appointment reminders, customizable booking pages, time zone conversion, group scheduling, calendar integrations, setup of custom availability rules, waitlists etc
22. Schedule events using basic and advanced tools through the use of communication tools.	L3	S	Schedule events and meetings using different communication tools ensuring that the invitation and any changes reaches the attendees and is appropriately shown in your calendar and theirs.  Use advanced features in scheduling such as automated appointment reminders, customizable booking pages, time zone conversion, group scheduling, calendar integrations, setup of custom availability rules, waitlists etc.
23. Describe what integration with various calendars means and different levels of integration features.	L4	K	Describe integration as the ability of a scheduling or meeting tool to connect and synchronize with different calendar platforms.  Describe the different levels of integration features such as the calendar platforms supported, one- or two-way sync, real time updates, availability and busy times, reminders and notifications, third party integration and customisation.
24. Describe the level of integration different communication tools accommodate.	L4	K	Describe how different tools are aligned to different integration levels such as the calendar platforms supported, one- or two-way sync, real time updates, availability and busy times, reminders and notifications, third party integration and customisation.
25. Name available video conferencing tools.	L4	K	Name available video conferencing tools such as Zoom, Microsoft teams, Google meet, Cisco Webex, skype, GoToMeeting
26. Describe important videoconferencing features	L4	K	Describe important videoconferencing features such as Recording and Playback, Active Speaker View and switching between Speakers, data

and indicate which features are available in each videoconferencing tool.			Encryption, Integration with Third-party Apps, screen Sharing, User Management, Mobile Support, Recording and Playback, Active Speaker View and switching Between Speakers.
27. Moderate a session using important videoconferencing features.	L4	S	Uses important videoconferencing features such as such as Recording and Playback, Active Speaker View and switching between Speakers, data Encryption, Integration with Third-party Apps screen Sharing, User Management, Mobile Support, Recording and Playback, Active Speaker View and switching Between Speakers.
28. Consider ethical issues when recording video conferencing.	L4	K	Learners take into consideration informed consent, privacy concerns, data security, sensitive content, retention policies, access control, editing and manipulation, compliance with laws and regulations, cultural sensitivity.
29. Present ways in which social media manipulate behaviour.	L4	K	Present Nudging, gamification and manipulation as ways of influencing behaviour in social media.  Present ways in which social media can manipulate the behaviour of users such as algorithmic feeds notification systems, endless scroll and autoplay, personalised content recommendation, social validation, influencer marketing.
30. Define nudging and present examples of nudging	L4	K	Define nudging as using subtle interventions to influence people's decisions or behaviours without restricting their freedom of choice.  Present examples of nudging such as default settings, push notifications, like and share buttons, personalised recommendations, countdowns and urgency, autoplay videos etc.
31. Define gamification and present examples of gamification.	L4	K	Define gamification as the incorporation of game-like elements and principles into non-game contexts to enhance user engagement and motivation.

			Present examples of gamification such as badges and achievements, leaderboards, rewards for sharing, points and scoring systems, virtual gifts, quizzes and polls.
32. Discuss ways in which one can protect him/herself from manipulation.	L5	K	Discuss ways in which one can protect himself from manipulation such as be aware of Manipulative Tactics (clickbait, emotional appeals, misinformation, and social engineering) apply Critical Thinking, Check Privacy Settings, Avoid Clickbait and Sensationalism, Fact-Check Information, Limit Personal Information, diversify news sources, Question Influencers and Advertisements, unfollow or block manipulative accounts, take breaks from social media, report manipulative content.
33. Develop posts on different social media with the use of advanced tools and techniques.	L4	S	Create advanced posts in different social media using tools such as scheduled delivery, polls, restricted audience, content optimization techniques, including the use of keywords, hashtags, and multimedia elements, to enhance visibility and reach on social media.
34. Develop high quality, creative and culturally relevant content tailored to specific social media platforms.	L4	S	Develop high-quality, creative, and culturally relevant content tailored to specific social media platforms using strategies such as maintain consistent branding, adapt content length, use hashtags and keywords, be culturally sensitive, use storytelling, post content when your audience is more active etc.
35. Engage the audience through appropriate content.	L4	S	employ strategies to foster meaningful interactions with the target audience, including responding to comments, messages, use tools for engagement and interaction such as polls, questions etc and fostering a sense of community.
36. Emphasize on the importance of content when dealing with social media.	L4	A	Sensitize on the importance of content when dealing with social media.

## ADVANCED (LEVEL 5 and LEVEL 6)

### COMPETENCE AREA 2.1: COMMUNICATION AND COLLABORATION: INTERACTING THROUGH DIGITAL TECHNOLOGIES

COMPETENCE: TO INTERACT THROUGH A VARIETY OF DIGITAL TECHNOLOGIES AND TO UNDERSTAND APPROPRIATE DIGITAL COMMUNICATIONS MEANS FOR A GIVEN CONTEXT

#### LEVEL: 5 – ADVANCED

As well as guiding others, I can:

- use a variety of digital technologies to interact, and
- show others the most appropriate digital communication means for a given context.

#### LEVEL: 6 – ADVANCED

At advanced level, according to my own needs and those of others, and in complex contexts, I can:

- adapt a variety of digital technologies for the most appropriate interaction, and
- adapt the most appropriate communication means for a given context

Learning Outcome	Level	K – S - A	Description
37. Have a broad knowledge of different communication tools that are available in asynchronous mode.	L5	K	<p>Name tools for file sharing such as One drive, Google drive, Dropbox, SharePoint.</p> <p>Name tools for scheduling such as Doodle, Calendly, Google calendar, Microsoft teams, Acuity Scheduling, Scheduler by HubSpot.</p> <p>Name tools for mind maps tools such as Git mind.</p> <p>Name tools for notes such as Evernote and Jamboard.</p>

			Name tools for project management such as ASANA, Teamworks, Monday.com, Trello etc.
38. Describe important functionality of tools dealing with file sharing.	L5	S	Describe important functionality of tools dealing with file sharing such as file upload and storage, file organisation, access control and permissions, link sharing, collaborative editing, sync across devices, version control, notification and activity tracking, integration with cloud storage, search and discovery, file previews, commenting and feedback.
39. Describe important functionality of tools dealing with scheduling.	L5	S	Describe important functionality of tools dealing with scheduling such as calendar integration, appointment scheduling, meeting coordination, automated reminders, time zone support, customizable availability, group scheduling, calendar sharing, customisable event details, waitlist management, recurrence and repeating events, confirmation and cancellation options, privacy and security.
40. Describe important functionality of tools dealing with online project management.	L5	S	Describe important functionality of tools dealing with online project management such as task management, Project Planning, Collaboration and Communication, File Sharing and Storage, ICalendar and Scheduling, Resource Allocation, Time Tracking, Budgeting and Expense Tracking, Reporting and Analytics, Customizable Dashboards, Risk Management, Issue Tracking, dependency Management, Integration with Third-Party Tools, Scalability, Accessibility, Client Collaboration, Security and Permissions.
41. Classify different digital tools for asynchronous mode according to their purpose (file sharing, booking meetings, mind maps, notes).	L5	K	Classify different communication tools according to their mode and purpose (file sharing, scheduling, project management, mind maps, notes).
42. Use different communication tools for file sharing.	L5	S	Use different communication tools for file sharing such as google drive, one drive, SharePoint, Dropbox etc.

			Be able to upload file, organise files, set access control and permissions, create a link for sharing the file, collaborate with others in editing the file synchronously, sync your files across different devices and review on a shared file (comments and feedback).
43. Use different communication tools for organizing meetings.	L5	S	Use different communication tools for scheduling meetings such as outlook, doodle, Calendly etc.  Be able to perform calendar integration, schedule appointment, consider time zone settings when scheduling appointments, share your calendar with others, create repeating events, create booking page and set privacy and security settings.
44. Use different communication tools for project management.	L5	S	Use different communication tools for project management such as asana, Trello, Monday.com and Teamworks  Be able to perform task management and project planning, collaborate and communicate online, implement file sharing, schedule task and achieve resource allocation.
45. Demonstrate to others the key features of file sharing tools.	L5	S	Identify and demonstrate to others the key features of file sharing tools.
46. Demonstrate to others the key features of meeting organising tools.	L5	S	Identify and demonstrate to others the key features of meeting organising tools.
47. Demonstrate to others the key features of project management tools.	L5	S	Identify and demonstrate to others the key features of digital project management tools.



48. Name key factors for comparison of different digital tools.	L6	S	Identify key factors for comparison of different digital tools such as ease of use, collaboration features (eg real time editing, file sharing, task management, integration with other tools) communication capabilities such as messaging, video conferencing, comment threads, scalability, security and privacy, customization and flexibility, cost, mobile accessibility, collaboration style (synchronous or asynchronous), support and training etc.
49. Evaluate different digital tools according to own requirements and needs.	L6	S	Being able to identify own requirements and needs and compare different digital tools in accordance to these requirements (eg real time editing, file sharing, task management, integration with other tools) communication capabilities such as messaging, video conferencing, comment threads, scalability, security and privacy, customization and flexibility, cost, mobile accessibility, collaboration style (synchronous or asynchronous), support and training etc.

## EXPERT (LEVEL 7 and LEVEL 8)

### COMPETENCE AREA 2.1: COMMUNICATION AND COLLABORATION: INTERACTING THROUGH DIGITAL TECHNOLOGIES

COMPETENCE: TO INTERACT THROUGH A VARIETY OF DIGITAL TECHNOLOGIES AND TO UNDERSTAND APPROPRIATE DIGITAL COMMUNICATIONS MEANS FOR A GIVEN CONTEXT

#### LEVEL: 7 – HIGHLY SPECIALISED

At highly specialised level, I can:

- create solutions to complex problems with limited definition that are related to interacting through digital technologies and digital communication means
- integrate my knowledge to contribute to professional practices and knowledge and guide others in the interaction through digital technologies

#### LEVEL: 8 – HIGHLY SPECIALISED

At the most advanced and specialised level, I can:

- create solutions to solve complex problems with many interacting factors that are related to interacting through digital technologies and digital communication means
- propose new ideas and processes to the field.

Learning Outcome	Level	K – S - A	Description
50. Define Artificial Intelligence	L7	K	Define artificial intelligence (as simulation of human intelligence in machines that are programmed to think and learn like humans).

51. Discuss the fundamental concepts of artificial intelligence.	L7	K	Demonstrate a comprehensive understanding of the fundamental concepts and principles that underpin artificial intelligence, including machine learning, deep learning (neural networks) and natural language processing.
52. Explain the opportunities and threats caused by artificial intelligence.	L7	K	<p>Explain the possibilities as well as the treats provided by artificial intelligence. Possibilities of AI include automation and efficiency, improved decision making, enhanced productivity, innovative products and services, personalisation, healthcare advancements, education and training, environmental impact, humanitarian applications etc</p> <p>Concerns about AI include job displacement, bias and fairness, security risks, lack of transparency, privacy issues, ethical dilemmas, overreliance on technology.</p>
53. Identify different types of AI tools.	L7	K	Identify different types of AI tools such as Virtual Assistants, chatbots, automated data analysis, automated machine learning platforms, predictive analytics tools, natural language processing tools, image recognition tools, speech recognition tools, automated content creation, automated email responses, document summarization, grammar and writing assistance, health and fitness apps, AI powered design tools.
54. Demonstrate broad knowledge of AI tools that can be used to support solving of complex problems.	L7	K	List different AI tools that can be used such as Siri and Google Assistant (Virtual Assistant), ChatGPT (Chatpots), Google analytics (automated data analysis): Grammarly, ProWritingAid, Hemingway Editor (Grammar and Writing Assistance), Summarly (Document summarization), Google Cloud Vision API (Image recognition), Google Cloud Speech-to-Text (Speech recognition) OpenAI's GPT-3 for content generation, Canva for design. (Content creation and design), FaceID (Apple) (Facial Recognition for security reasons).
55. List the criteria based on which one can recognise the	L7	K	List the factors that indicate communication with an AI based conversational agent such as quick responses, consistent writing style, predefined responses, inability to answer open ended responses, responding to errors or

communication with an AI based conversational agent.			unexpected queries with generic messages or by redirecting the user to predefined actions, lack of emotional understanding, availability 24/7, limited problem-solving skills (for complex problems beyond their programmed capabilities).
56. Identify and indicate whether one is communicating with a human or an AI based conversational agent.	L8	S	Recognise the nature of the conversational agent (AI or human) through the application of several criteria such as quick responses, consistent writing style, predefined responses, inability to answer open ended responses, responding to errors or unexpected queries with generic messages or by redirecting the user to predefined actions, lack of emotional understanding, availability 24/7, limited problem-solving skills (for complex problems beyond their programmed capabilities).
57. Be able to interact and give feedback to the AI system to influence what it next recommends.	L8	S	Reflect on the interaction with AI in order to influence next actions and recommendations through the provision of feedback on the accuracy, relevance, or helpfulness of the AI-generated responses. This feedback can be explicit (through ratings or comments) or implicit (by choosing or ignoring suggestions).
58. Be open to AI systems supporting humans to make informed decisions.	L8	A	<p>Accept AI as a supporting tool to help humans to make informed decisions in accordance with their goals.</p> <p>Explain the concept of augmented intelligence that emphasizes the collaborative role of AI in enhancing human capabilities, decision making and problem solving. Comment on the complementary skills of AI and Humans where AI can handle processing of large datasets and humans have the critical thinking.</p> <p>Explain how AI can improve efficiency and productivity through automation of routine and time-consuming tasks and therefore through the provision of more time to human resources to focus on higher level decision making and tasks that require emotional intelligence. Sensitize on the fact that AI systems</p>

			<p>can adapt and learn from new data, contributing to continuous improvement in decision support capabilities.</p> <p>Take into consideration though ethical considerations (AI systems can adapt and learn from new data, contributing to continuous improvement in decision support capabilities).</p> <p>Be conscious about the need for continuous monitoring and evaluation.</p>
59. Select the most appropriate AI tool based on the specific case circumstances.	L7	S	<p>Evaluate and select appropriate AI tools based on specific use cases, considering factors such as accuracy, efficiency, and scalability.</p> <p>Be able to identify the category of the application the learner needs and select the application within this category such as Siri and Google Assistant (Virtual Assistant), ChatGPT (Chatpots), Google analytics (automated data analysis): Grammarly, ProWritingAid, Hemingway Editor (Grammar and Writing Assistance), Summarly (Document summariation), Google Cloud Vision API (Image recognition), Google Cloud Speech-to-Text (Speech recognition) OpenAI's GPT-3 for content generation, Canva for design. (Content creation and design), FaceID (Apple) (Facial Recognition for security reasons).</p>
60. Use different Virtual Assistant tools.	L7	S	<p>Develop proficiency in using specific virtual assistant AI tool such as the Google Assistant.</p> <p>Be able to enable Google Assistant and use basic commands in Google Assistant such as, for smart home integration, for navigation, for entertainment, for translation, for productivity (e.g. create shopping list) and set up voice match.</p>
61. Use different types of Chat Bots.	L7	S	<p>Develop proficiency in using specific Chat Bots AI tools such as the Chat GPT.</p> <p>Be able to access Chat GPT.</p>

			<p>Describe the structure of interaction with Chat GPT. Experiment with different use cases such as getting information, creative writing prompts, or even engaging in casual conversation. Structure prompts effectively. Handle ambiguity through asking clarifying questions</p> <p>Differentiate between system level and user level instructions (System instructions guide the behavior of the assistant, while user instructions specify the desired response).</p>
62. Develop a mindset of continuous learning in the field of AI through the use of different strategies and best practices.	L8	A	<p>Foster a mindset of continuous learning in the rapidly evolving field of AI, staying updated on new tools, techniques, and best practices such as engaging in online courses and tutorials, follow AI blogs and websites, join AI communities, Follow AI thought leaders, researchers, and organizations in social media, experiment with experiment with open-source AI projects, seek feedback on our work and reflect on the learning journey.</p>

# Project Coordinator:



# Partners:



Co-funded by  
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.