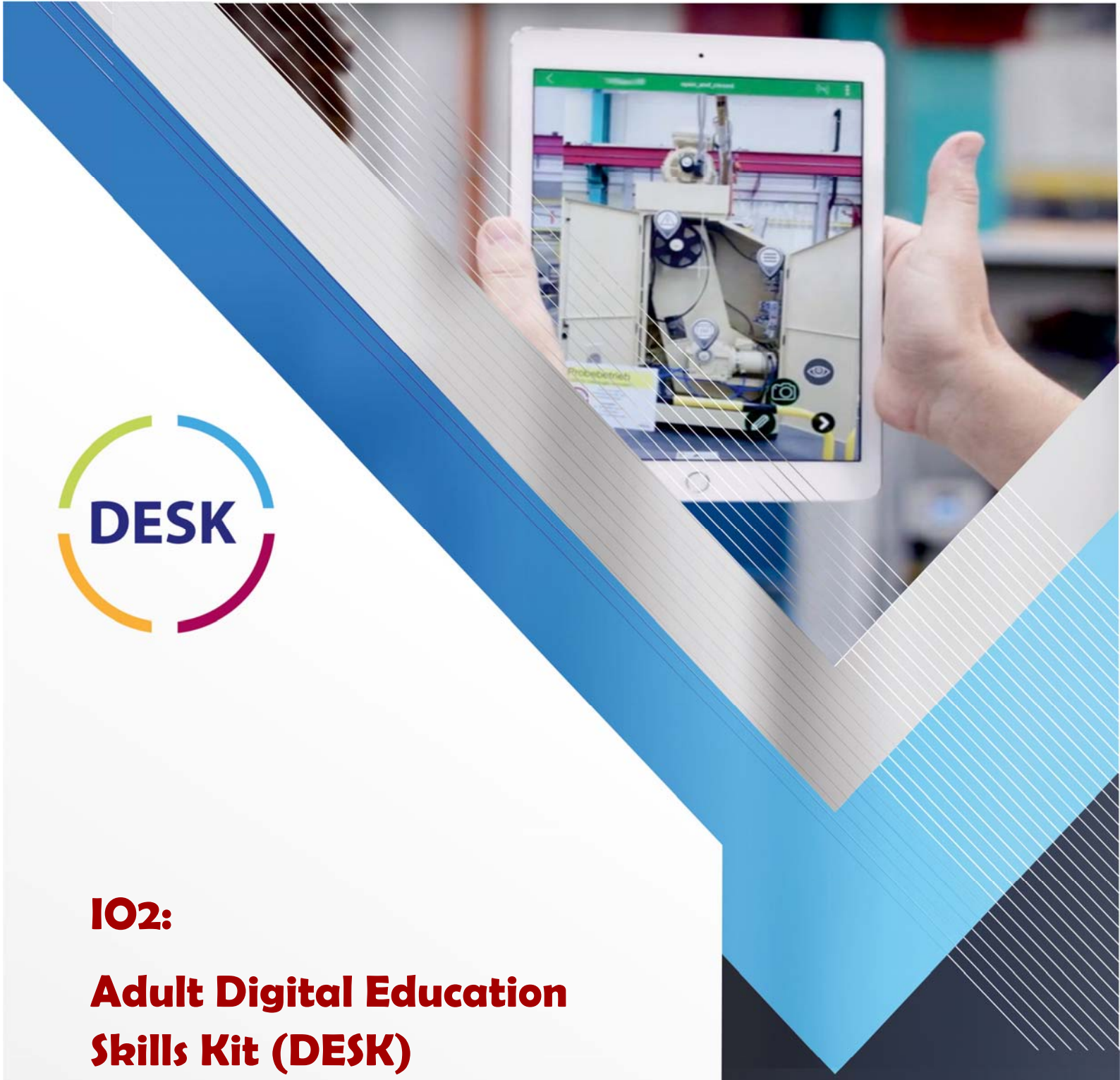


DESK

IO2:

Adult Digital Education Skills Kit (DESK) Curriculum

PROJECT:
An Adult Digital Education Skills Kit to Foster Employability (DESK)

2018-1-EL01-KA204-047819

Co-funded by the Erasmus+ Programme of the European Union

http://desk.e-sl.gr

Changelog

Revision	Date	Author/Organization	Description
v 1.0	1/11/2019	Catalin AMZA / UPB_CAMIS	Initial compilation
v 1.1	20/11/2019	Catalin AMZA / UPB_CAMIS	Final version

Content

1. DESK curriculum description

As digital technologies transform our life and workplaces, everyone needs to acquire a range of basic digital skills in order to become competitive, regardless of age or background. These skills include efficient use of digital communications, handling of digital devices, creation and management of digital content and in general building strong digital citizenship characteristics in order for adults to participate in the modern knowledge society. The aim of this curriculum is to support adults in acquiring exactly those specific skills. Moreover, it demonstrates the power of AR applications to enhance the above skills.

The DESK Curriculum is addressed both to adult trainers to help adult learners to acquire necessary digital skills and adult learners that need to catch up with the demand for digital skills.

The DESK curriculum is structured in seven different and independent modules which follow the input received by the research analysis phase. The total duration is 68 hours, 48 hours theory and 20 hours practice. Trainers can choose the training "path" based on the previous knowledge and experience of their trainees. The theory and the practical activities proposed are designed to help trainers to foster an exploratory approach to knowledge and encourage trainees to study, research and participate actively to achieve the expected learning outcomes. The last module particularly, requires more advanced knowledge and expertise. This module can equally address the adult trainers that lack the specific technical background.

The DESK curriculum is designed for beginners with no previous knowledge in the field. Having completed this course, learners should be able to advance their digital skills to "Proficient user" level in module 2, to "Independent User" level in modules 3-5, and to "Basic User" level in module 6 and 7, according to "EU-Digital Competencies"[1].

Detailed guidelines for trainers regarding the whole curriculum are provided within the IO5 report of the current project.

After the draft curriculum was generated, and as part of Activity 4 of the IO2, each partner organization approached a sample of Adult Teaching Experts in their area for feedback on the curriculum. Care was taken to consult adult training experts who were competent in the English language as the curriculum drafted was in English. These consultations took place within the partner organizations in each partner country. The Adult Teaching Experts applied their knowledge gained

[1] https://europass.cedefop.europa.eu/sites/default/files/dc-en.pdf (included in Annex I)

from their teaching experience in Adult Education. As a result of these consultations, some polishing up of the curriculum took place to refine it better. For example, in the module ""Digital communication" it was deemed necessary to include a topic which refers to the use of good manners in online communication (Netiquette). The relevant module was then amended and updated with the necessary change. Moreover, in the module "Digital information safety" a topic was added regarding the Copyright of digital information.

Following that, the curriculum took its final form.

Curriculum Module	*Module Description*	*Topics*	*Estimated Duration*	*Reference to IO1 & IO2 outputs*
1. Introduction	This section will serve as a mean to help adults understand what digital skills are and the setup of the course.	1. Definition of digital skills 2. Digital literacy in the workplaces 3. Information about the DESK course	2 hours theory	IO1 & IO2-A1/ general
2. Digital User Interfaces	This section provides a guide on the different digital user interfaces available on various electronic devices today.	1. Introduction to digital user interface 2. Types of user interfaces (for desktop computers, tablets, smartphones) 3. Main components of a user interface system 4. Examples of popular user interfaces 5. Guidelines for adults for using user interfaces	12 hours (8 hours theory and 4 hours practice)	Questionnaire/ Category 1
3. Information processing	The aim of this section is to assist learners in locating, retrieving digital data and evaluating its content. It is also included how to store, manage, and organize digital data.	1. How to use search engines to find information 2. How to assess the reliability of online information 3. How to classify information in a methodical way using files and folders	12 hours (8 hours theory and 4 hours practice)	Questionnaire/ Category 2
4. Digital communication	This section covers the different means of basic digital communication and collaboration.	1. Introduction to digital communication 2. Common digital communication tools 3. Rules of online communication (Netiquette)	12 hours (8 hours theory and 4 hours practice)	Questionnaire/ Category 3
5. Digital content creation	The aim of this section is to cover the different ways on how one can create and handle basic digital content.	1. Use basic packages to create content (e.g. text files, tables) 2. Using basic editing functions 3. Guidelines for content creation	12 hours (8 hours theory and 4 hours practice)	Questionnaire/ Category 4

6. Digital information safety	The aim of this section is to cover some of the threats in the digital world and also define what personal data are and how to protect them. Moreover, it is included issues regarding the copyright of digital information.	1. Threats in the digital world 2. Personal data 3. Copyright of digital information (Creative Commons licenses)	6 hours (6 hours theory)	Questionnaire/ Category 4 and 5
7. Introduction to Augmented Reality	This section will provide an introduction to AR: definition, concepts, hardware and software apps.	1. Fundamental concepts of AR 2. AR equipment / hardware 3. AR software / applications 4. How to develop AR applications	12 hours (8 hours theory and 4 hours practice)	IO1 / cumulative report

2. Detailed curriculum structure

2.1 Introduction

Title of Module	**Introduction**	
Estimated Duration	2 h, 20 x PowerPoint slides minimum	
Target group	Adult Trainees lacking digital skills	
Module Description	This section will present what digital skills are as well as the key role of digital skills in the workplaces. Moreover, it will serve as a mean to help adults understand the setup of the course.	
Module Objectives	To assist learners in: - identifying what digital skills are - describing the role of digital skills in the workplaces - describing the DESK course	
Training Method	Online course which includes lectures, presentations and videos from YouTube.	
Module Topics	Definition of digital skills	1 hour introducing to digital skills framework according to "EU-Digital Competencies"
	Digital literacy in the workplaces	1/2 hour introducing to the importance of digital skills in the modern society as well as the influence of digital skills in workplaces
	Information about the DESK course	1/2 hour introducing to the course
Methods of Evaluation	The course assessment is based on a multiple-choice quiz (5 questions) corresponding to the module objectives' achievement.	
Resources and materials	Web resources, e-Learning platform	

2.2 Digital User Interface

Title of Module	**Digital User Interface**	
Estimated Duration	12 h, 60 x PowerPoint slides minimum	
Target group	Adult Trainees	
Module Description	The aim of this module is to provide adult trainers with a set of topics they can use to allow adult learners to catch up with both hardware-based and software-based digital interfaces. During this module, learners will be exposed to a range of digital user interfaces such as tablets, mobile phones, other electronic devices used, for example, in airports, information desks, etc. In addition, a practical example of how AR-based training on digital user interfaces will be provided.	
Module Objectives	To assist learners in: - distinguishing the different types of digital interfaces - describing the main elements of user interfaces - using different digital interfaces - demonstrating frequently used interfaces - constructing a positive attitude in interacting with digital interfaces	
Training Method	Online course which includes lectures, presentations, videos from YouTube.	
Module Topics	Introduction to digital user interface	1 hour introducing the concepts of user interfaces and how these allow humans to interact with digital devices.
	Types of user interfaces (for desktop computers, tablets, smartphones)	2 hours introducing learners to the different interfaces used in different application fields. PowerPoint slides together with YouTube links will be made available, illustrating different user interfaces.

	Main components of a user interface system	3 hours introducing the main elements of user interfaces, the typical symbols used, check boxes, icons etc. together with an explanation of their purposes
	Examples of popular user interfaces	4 hours, introducing learners to frequently used interfaces at home, at place of work and for entertainment. PowerPoint slides will be supported by links to existing YouTube videos and/or external detailed notes explaining the different frequently used digital interfaces.
	Guidelines for adults for using user interfaces	2 hours of a set of practical guidelines to how adult learners can use interfaces of a digital device
Methods of Evaluation	The course assessment is based on a multiple-choice quiz (5 questions) corresponding to the module objectives' achievement.	
Resources and materials	Web resources, e-Learning platform	

2.3 Information processing

Title of Module	**Information processing**	
Estimated Duration	12 h, 60 x PowerPoint slides minimum	
Target group	Adult Trainees	
Module Description	This module covers the role of the Internet as a tool to search for information. It introduces learners on how they can navigate through the huge amounts of information found on the Internet. In addition, it facilitates the development of critical attitudes towards this information. In the third topic, it is presented how learners can organize and manage files in folders and subfolders in order for them to find in an easy way what they're looking for.	
Module Objectives	To assist learners in: - defining what a search engine is and how it works - using main functions of a search engine to search for information for a specific purpose - developing critical approach to information found on the internet - applying evaluation criteria concerning the quality and accuracy of information found on a website - describing how to manage files and folders on a computer - organizing files and folders in an efficient way	
Training Method	Online course which includes lectures, presentations, videos from YouTube	
Module Topics	How to use search engines to find information	4 hours introducing learners to search engines and the main functions of them in order for adults to be able to search the World Wide Web for particular information

	How to assess the reliability of online information	4 hours introducing adults to the development of critical approach of any information found on the Web and also to familiarize them with criteria used to evaluate Internet information resources
	How to classify information in a methodical way using files and folders	4 hours introducing adults to efficiently organize files, folders and documents on computer
Methods of Evaluation	The course assessment is based on a multiple-choice quiz (5 questions) corresponding to the module objectives' achievement.	
Resources and materials	Web resources, e-Learning platform, Browsers, File management system	

2.4 Digital communication

Title of Module	**Digital communication**	
Estimated Duration	12 h, 60 x PowerPoint slides minimum	
Target group	Adult Trainees	
Module Description	This module covers the different means of basic digital communications used today. It introduces learners to the most common communication tools. They will learn how they can effectively use email, chat, teleconference features, data sharing and social networks in their everyday working life. In addition, this module also includes a set of rules concerning the acceptable way of behaving on the Internet.	
Module Objectives	To assist learners in: - describing of the basic functions of online communication - developing their ability to use online communication tools efficiently - experimenting in interacting with several types of digital communication environments - developing the ability to participate and interact in digital society - creating a positive attitude in using online collaborative tools - describing the acceptable rules for online communication (Netiquette)	
Training Method	Online course which includes lectures, presentations, videos from YouTube, tutorial recording	
Module Topics	Introduction to digital communication	2 hours introducing adults to different means and techniques of digital communication
	Common digital communication tools	8 hours introducing adults to a wide range of communication tools (e-mail, chat, SMS, instant messaging, data sharing, social networks) for online communication

	Rules of online communication (Netiquette)	2 hours introducing a set of rules for proper interaction in digital communication environments
Methods of Evaluation	The course assessment is based on a multiple-choice quiz (5 questions) corresponding to the module objectives' achievement.	
Resources and materials	Web resources, e-Learning platform, communication software	

2.5 Digital content creation

Title of Module	**Digital content creation**	
Estimated Duration	12 h, 60 x PowerPoint slides minimum	
Target group	Adult Trainees	
Module Description	This module aims to provide a basis for adult learners to be able to create their own digital content. They will acquire competences and abilities that will allow them to create and edit content through different tools in different formats.	
Module Objectives	To assist learners in: - using different tools for content creation in different formats - developing digital content to adapt and re-create already existing material according to their aims - defining the content creation process - developing digital content adapted to their aims and target group - creating a positive attitude in developing digital content	
Training Method	Online course which includes lectures, videos, tutorial and practical examples about how to create digital content	
Module Topics	Use basic packages to create content (e.g. text files, tables)	5 hours introducing adults to different tools for content creation in different formats
	Using basic editing functions	4 hours of guidelines for using different functions for efficiently manage digital content in different formats (e.g. insert footnotes, charts, tables etc.)
	Guidelines for content creation	3 hours presenting the content creation process, guidelines, steps and techniques

Methods of Evaluation	At the end of the module, a final multiple-choice evaluation questionnaire with 5 questions to assess if the learning objectives have been reached.
Resources and materials	Web resources, e-Learning platform, Content Creation Software

2.6 Digital information safety

Title of Module	**Digital information safety**	
Estimated Duration	6 h, 30 x PowerPoint slides minimum	
Target group	Adult Trainees	
Module Description	This module covers some of the threats that adults faces in the digital world. In addition, it is describing the meaning of personal data and how to protect them. Moreover, it contains an introduction to Creative Commons (CC) licenses.	
Module Objectives	To assist learners in: - describing what a computer virus is - describing protection measures - describing what personal data are - describing how to protect personal data - describing Creative Commons licenses (CC)	
Training Method	Online course which includes lectures, presentations, videos from YouTube	
Module Topics	Threats in the digital world	2 hours introducing adults to some of the threats in the digital world and their protection measures
	Personal data	2 hours introducing adults to the meaning of personal data and how to protect them.
	Copyright of digital information (Creative Commons licenses)	2 hours introducing adults to Creative Commons licenses
Methods of Evaluation	The course assessment is based on a quiz (about 5 questions) corresponding to the module objectives' achievement.	
Resources and materials	Web resources, e-Learning platform, Antivirus Software	

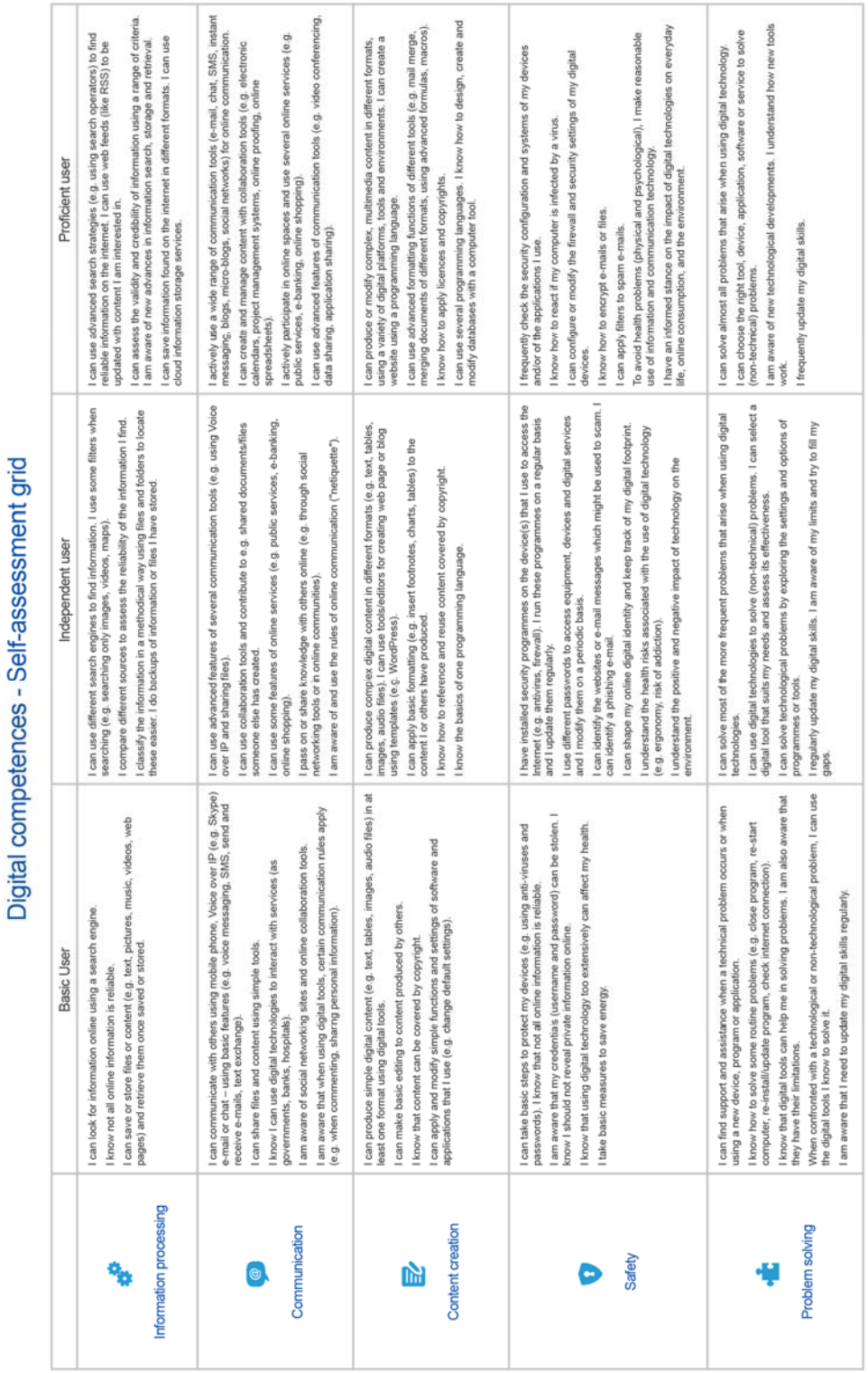
2.7 Introduction to Augmented Reality

Title of Module	**Introduction to Augmented Reality**
Estimated Duration	12 h, 60 x PowerPoint slides minimum
Target group	Adult trainers and trainees
Module Description	The module provides basic information about Augmented Reality (AR) and how this technology can be easily implemented in current real-world applications. It introduces learners to AR definition, concepts, hardware and software. The content of the module is designed to increase learners' motivation and encourage them to apply AR concepts and integrate this technology into their future professional applications.
Module Objectives	To assist learners in: - interpreting of the Augmented Reality concepts and terminology type of AR; - describing the main characteristics of the AR; - defining the difference between Augmented Reality and Virtual Reality; - identifying the general hardware components: displays, sensors and others input and output devices of the augmented reality systems; - demonstrating knowledge of techniques required to develop augmented reality applications; - identifying existing tools and frameworks to build mobile Augmented Reality apps; - interpreting technical aspects of Platform for AR mobile applications; - demonstrating knowledges of technical and operational requirements for the AR application with the 3D model, text, graphics.
Training Method	Online course which includes lectures, presentations, videos for demonstrations and URLs for learning through exploration and discovery.

Module Topics	Fundamental concepts of AR	2 hours introducing adults to Key concepts, vocabulary, types of AR, components of an AR architecture, main characteristics of AR, and Augmented Reality Vs. Virtual Reality
	AR equipment / hardware	4 hours introducing adults to general hardware components, displays: handheld AR displays, AR eyeglasses, HMDs (Head-Mounted Displays), Contact lenses, EyeTap, Spatial AR; Sensors; Input devices
	AR software / applications	4 hours introducing adults to existing tools and frameworks, the tools to build mobile AR apps, platform for AR mobile applications, the tools to build mobile Augmented Reality apps, AR apps supporting devices
	How to develop AR applications	2 hours introducing adults to AR application with a 3D model
Methods of Evaluation	The course assessment is based on a quiz (about 5 questions) corresponding to the module objectives' achievement.	
Resources and materials	Internet connection, e-Learning platform, PPT files, web resources, the tools to build mobile Augmented Reality apps and AR application with a 3D model, AR possible in the smartphone	

ANNEX I

Digital skills as they are defined by European Union, 2015 | http://europass.cedefop.europa.eu



Digital competences - Self-assessment grid

	Basic User	Independent user	Proficient user
Information processing	I can look for information online using a search engine. I know not all online information is reliable. I can save or store files or content (e.g. text, pictures, music, videos, web pages) and retrieve them once saved or stored.	I can use different search engines to find information. I use some filters when searching (e.g. searching only images, videos, maps). I compare different sources to assess the reliability of the information I find. I classify the information in a methodical way using files and folders to locate these easier. I do backups of information or files I have stored.	I can use advanced search strategies (e.g. using search operators) to find reliable information on the internet. I can use web feeds (like RSS) to be updated with content I am interested in. I can assess the validity and credibility of information using a range of criteria. I am aware of new advances in information search, storage and retrieval. I can save information found on the internet in different formats. I can use cloud information storage services.
Communication	I can communicate with others using mobile phone, Voice over IP (e.g. Skype) e-mail or chat - using basic features (e.g. voice messaging, SMS, send and receive e-mails, text exchange). I can share files and content using simple tools. I know I can use digital technologies to interact with services (as governments, banks, hospitals). I am aware of social networking sites and online collaboration tools. I am aware that when using digital tools, certain communication rules apply (e.g. when commenting, sharing personal information).	I can use advanced features of several communication tools (e.g. using Voice over IP and sharing files). I can use collaboration tools and contribute to e.g. shared documents/files someone else has created. I can use some features of online services (e.g. public services, e-banking, online shopping). I pass on or share knowledge with others online (e.g. through social networking tools or in online communities). I am aware of and use the rules of online communication ("netiquette").	I actively use a wide range of communication tools (e-mail, chat, SMS, instant messaging, blogs, micro-blogs, social networks) for online communication. I can create and manage content with collaboration tools (e.g. electronic calendars, project management systems, online proofing, online spreadsheets). I actively participate in online spaces and use several online services (e.g. public services, e-banking, online shopping). I can use advanced features of communication tools (e.g. video conferencing, data sharing, application sharing).
Content creation	I can produce simple digital content (e.g. text, tables, images, audio files) in at least one format using digital tools. I can make basic editing to content produced by others. I know that content can be covered by copyright. I can apply and modify simple functions and settings of software and applications that I use (e.g. change default settings).	I can produce complex digital content in different formats (e.g. text, tables, images, audio files). I can use tools/editors for creating web page or blog using templates (e.g. WordPress). I can apply basic formatting (e.g. insert footnotes, charts, tables) to the content I or others have produced. I know how to reference and reuse content covered by copyright. I know the basics of one programming language.	I can produce or modify complex, multimedia content in different formats, using a variety of digital platforms, tools and environments. I can create a website using a programming language. I can use advanced formatting functions of different tools (e.g. mail merge, merging documents of different formats, using advanced formulas, macros). I know how to apply licences and copyrights. I can use several programming languages. I know how to design, create and modify databases with a computer tool.
Safety	I can take basic steps to protect my devices (e.g. using anti-viruses and passwords). I know that not all online information is reliable. I am aware that my credentials (username and password) can be stolen. I know I should not reveal private information online. I know that using digital technology too extensively can affect my health. I take basic measures to save energy.	I have installed security programmes on the device(s) that I use to access the Internet (e.g. antivirus, firewall). I run these programmes on a regular basis and I update them regularly. I use different passwords to access equipment, devices and digital services and I modify them on a periodic basis. I can identify the websites or e-mail messages which might be used to scam. I can identify a phishing e-mail. I can shape my online digital identity and keep track of my digital footprint. I understand the health risks associated with the use of digital technology (e.g. ergonomy, risk of addiction). I understand the positive and negative impact of technology on the environment.	I frequently check the security configuration and systems of my devices and/or of the applications I use. I know how to react if my computer is infected by a virus. I can configure or modify the firewall and security settings of my digital devices. I know how to encrypt e-mails or files. I can apply filters to spam e-mails. To avoid health problems (physical and psychological), I make reasonable use of information and communication technology. I have an informed stance on the impact of digital technologies on everyday life, online consumption, and the environment.
Problem solving	I can find support and assistance when a technical problem occurs or when using a new device, program or application. I know how to solve some routine problems (e.g. close program, re-start computer, re-install/update program, check internet connection). I know that digital tools can help me in solving problems. I am also aware that they have their limitations. When confronted with a technological or non-technological problem, I can use the digital tools I know to solve it. I am aware that I need to update my digital skills regularly.	I can solve most of the more frequent problems that arise when using digital technologies. I can use digital technologies to solve (non-technical) problems. I can select a digital tool that suits my needs and assess its effectiveness. I can solve technological problems by exploring the settings and options of programmes or tools. I regularly update my digital skills. I am aware of my limits and try to fill my gaps.	I can solve almost all problems that arise when using digital technology. I can choose the right tool, device, application, software or service to solve (non-technical) problems. I am aware of new technological developments. I understand how new tools work. I frequently update my digital skills.

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An Adult Digital Education Skills Kit to Foster Employability

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ΙΔΡΥΜΑ
ΚΡΑΤΙΚΩΝ
ΥΠΟΤΡΟΦΙΩΝ
ΙΚΥ