



LAB-ADA

LAB for Adults non-formal Digital Awareness

**Mapping frame for
improvements of low
skilled adults learning**

2023

Facts sheet

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Main objective: to create results that can help to create better opportunities for adults with low skills.

Target groups: low skilled adults; adult educators.

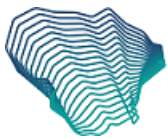
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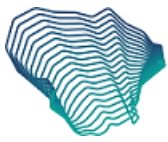


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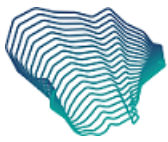
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SUMMARY



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There is some evidence that adults with low-skills are less willing to participate in time-intensive training than high-skilled workers, not least due to different preferences and personality traits of both groups (Fouarge, et al, 2013). At the same time, technological change will make those with high skills, such as managers, teachers or health professionals, more productive and hence more sought after by employers (Nedelkoska and Quintini, 2018). Adults and quasi-senior over 55 with low skills have low-level positions with limited opportunities for development, frequently step in and out of unemployed and can often expect limited returns to training, such as higher wages or access to better jobs (OECD, 2017a; Burdett and Smith, 2002).

Low-skilled adults don't have the motivation and the knowledge to easily develop their non-formal competencies. One way to make adult learning more flexible is distance learning, for example in the form of online self-learning. According to OECD PIAAC data, 16% of low-skilled learners complete at least part of their training as distance learning. Close to every second learner with low skills takes part in distance learning in Lithuania. From an employer point of view, a skilled workforce makes it easier to develop and introduce new technologies and work organisation practices, thereby boosting productivity and growth in the new economy as whole thinking that after this Covid- 19 quarantine the labour market will not be anymore the same. Based on the needs analysis and preliminary research carried out by partners, LAB-ADA project sets the overall goal to develop an innovative web learning approach for advancing and sustaining low skilled adults possibilities to gain enough knowledge, also to foster their wellbeing and mental health through the acquisition of needed skills that would help them make changes effectively, master their life and enter the desirable job market.

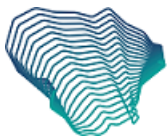
The Mapping frame for improvements of low skilled adults learning (further Mapping frame) is a methodological document guiding the development of the Toolkit for remote co-design activities. It represents a pillar frame mapping the factors that affect low skilled adults learning interlined with the skills that need to be developed in order to improve they capabilities to pursue what they value in life. The conceptual model of the Frame steps on the environmental and individual approaches to skills, considering low skilled adults learning as the result of interactions among four distinct, but closely related domains: psychological, social, cognitive and physical. Each dimension can be considered both as an outcome and as an enabling condition with respect to the other dimensions, and ultimately with adults overall quality of life (OECD report). For the purposes of the project, a broad spectrum of factors (individual and contextual) associated with the five dimensions (pillars) of gaining new skills have been explored and explicated in the Frame.

As a result, the Mapping frame will facilitate a richer, shared understanding of the digital skills that have been developed in order to advance low skilled adults. Mapping frame development is a prerequisite for successful delivery of the Toolkit for remote co-design activities. This document is available on the project's website in all partner languages.

The document includes the following four chapters/deliverables:

- 1. Desk Research into LSAs' needs.**
- 2. Online Survey among Low Skill Adults.**
- 3. Focus Group Interviews with Experts.**
- 4. Mapping Frame Development.**

The full documents of the above four chapters/deliverables are available separately on the project's website: <https://lab-ada.csciformazione.eu/>.



Introduction

Most low-skilled adults take part in learning to advance their career (see below). However, learning opportunities do not always equip them with the skills needed for the labour market. Only two in three adults think that participation in training helped them achieve positive employment outcomes, such as performing better in their current job, being promoted, getting a (new) job or a higher salary. We will work in innovation to make adult learning more interesting and relevant for adults with low skills. In this kind of environment adults with low skills need support in identifying their training needs and in understanding which type of training is most appropriate for them. Additionally, they need advice on how to tackle any barrier to participation, including limited finances, lack of time due to family commitments and distance to the training location. Such comprehensive advice and guidance services specifically targeted at adults with low skills are rare. So the idea is to tailor some advice using different media like books or interactive resources or videos and a help desk.

According to the OECD, the “adults with low basic skills are individuals aged 25-64 with low proficiency in literacy, numeracy or both (*Erwachsene mit geringen Grundkompetenzen*). Low proficiency is defined as Level 1 scoring on the literacy and/or numeracy dimensions of the Survey of Adult Skills (PIAAC). These are adults who at most understand brief texts on familiar topics, and/or are able to do simple mathematical processing such as one-step calculations”. Also, “adults with low qualification levels are individuals aged 25-64 whose highest educational attainment level is at most lower secondary education (ISCED 0-2) (*Geringqualifizierte*). In the German context, these adults have left education after compulsory comprehensive school or earlier (Primär- und Sekundarbereich I) and at most hold a secondary school certificate (Realschulabschluss/ Mittlere Reife). They have not completed a full vocational qualification.” (Source: OECD, 2019, [Getting Skills Right: Engaging low-skilled adults in learning](#))

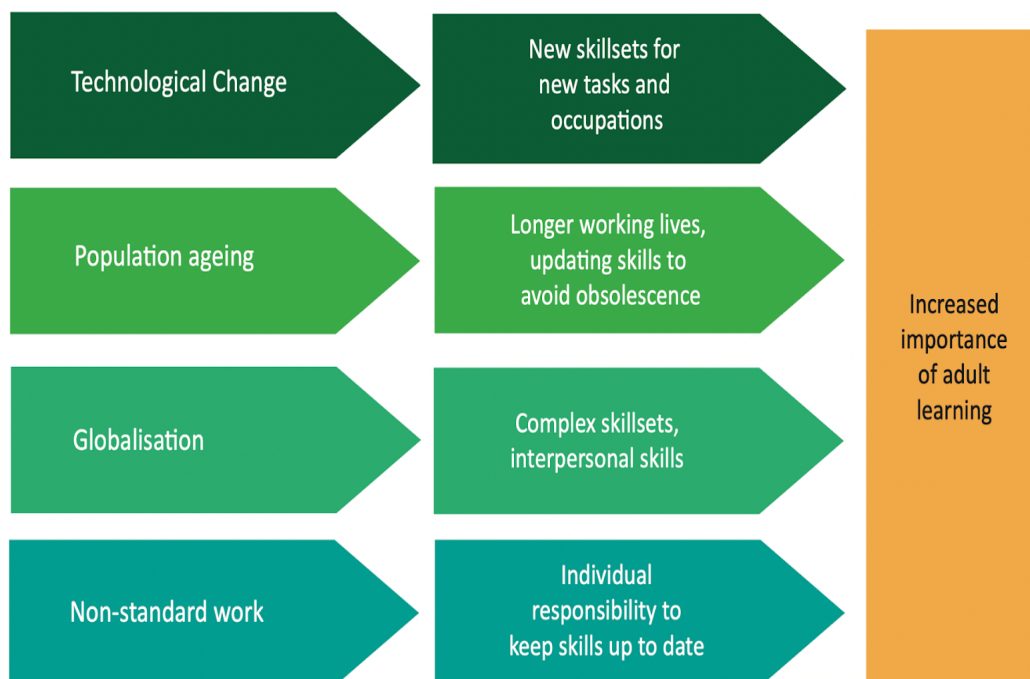
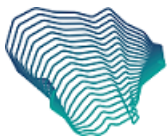


Fig. 1: Megatrends affect the world of work (Source [OECD 2019](#))



Low digital skills are considered an obstacle to adults’ societal and economic participation and constitute an additional dimension of low skills. According to OECD (2019[5]), “more than one in five adults in the OECD has low skills. 22% of adults across OECD countries have low educational levels and even more adults have low cognitive skills. On average 26.3% of adults are at most able to complete some very basic reading and/or mathematical tasks in those countries for which data are available. Enabling them to up-skill for a changing world of work is a sizable challenge.” It is important to note that many adults with low skills are anything but ‘low skilled’: they may have low literacy and numeracy levels, but at the same time possess a range of other valuable skills such as the ability to drive different vehicles or care for customers. Equally, adults may have low qualification levels, but may have gained skills through years of work-experience that are equivalent to those associated with formal qualifications.

Participation in adult education and training helps people find, keep and further develop in their job. However, adults with low skills are less than half as likely to participate in adult learning as those with higher skills. According to PIAAC data, only 20% of adults with low skills participate in job-related adult learning. Participation of adults with medium and high skills is much higher (37% and 58% respectively). One of the key reasons for this participation gap is that adults with low skill levels find it more difficult to recognise their learning needs and hence are less likely to seek out training opportunities (Windisch, 2015). According to data from the 2016 Adult Education Survey (AES), 11.6% of adults with low skills looked for learning opportunities compared to 35.5% of adults with high skill levels.

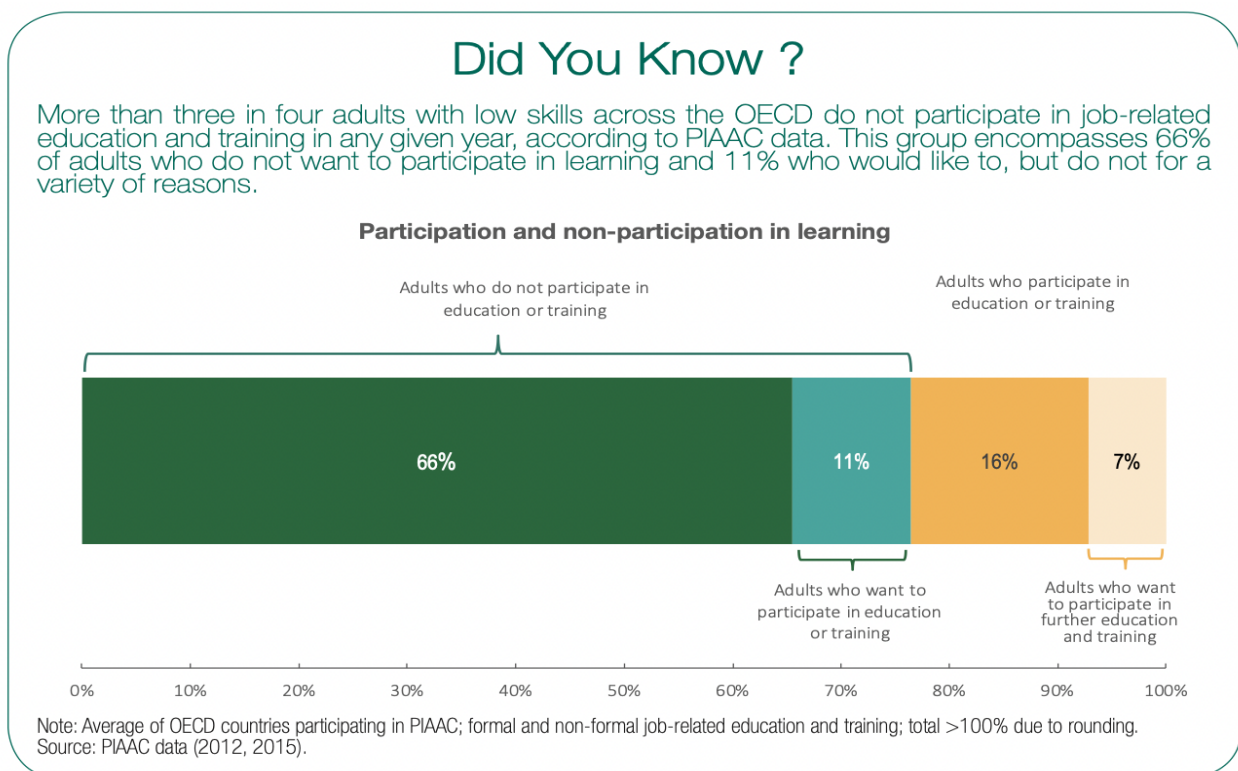
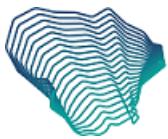


Fig. 2: Participation and non-participation in learning (Source [OECD 2019](#))

“Adults with low skills can find themselves in a ‘low-skill trap’. Many have low-level positions with limited opportunities for development, frequently step in and out of unemployment and can often expect limited returns to training, such as higher wages or access to better jobs” (OECD, 2017a; Burdett and Smith, 2002).

In most OECD countries, adults have the choice between many different learning opportunities. These can range from programmes to acquire formal basic and general education, through certified short-courses to gain specific skills, to non-formal learning opportunities in the workplace. There are many different providers and



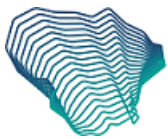
approaches to teaching and learning. It is a challenge for any adult to navigate this jungle of offers, especially those with low skills.

Adults with low skills need support in identifying their training needs and in understanding which type of training is most appropriate for them. Additionally, they need advice on how to tackle any barrier to participation, including limited finances, lack of time due to family commitments and distance to the training location. However, such comprehensive advice and guidance services specifically targeted at adults with low skills are rare.

EUROPE and LSA

The following table, shows selected European programs compared to the criteria that they meet:

Country	Title	General criteria				Specific criteria			
		GC1	GC2	GC3	GC4	SC1	SC2	SC3	SC4
Good practices									
Austria	Initiative for adult education (<i>Erwachsenenbildung</i>)	X	X	X	X	X	X	X	
France	Personal training account (<i>Compte personnel de formation, CPF</i>)	X	X	X	X	X		X	X
Germany	On the job training programme (<i>Weiterbildung Geringqualifizierter und beschäftigter älterer Arbeitnehmer in Unternehmen - WeGebAU</i>)	X	X	X	X	X		X	X
Italy (Lombardia)	Unique labour endowment ⁽⁸⁾ (<i>Dote Unica Lavoro, DUL</i>)	X	X	X	X	X		X	X
Ireland	<i>Skillnet</i>	X	X	X	X	X		X	X
Netherlands	Language at work (<i>Taal op de werkvloer</i>)	X	X	X	X	X	X	X	
Norway	<i>SkillsPlus</i>	X	X	X	X	X	X	X	X
Portugal	New opportunities initiative (<i>Iniciativa Novas Oportunidades - NOI</i>)	X	X	X		X	X	X	X
Portugal	<i>Qualifica</i> programme	X	X	X		X		X	X
UK	<i>Union Learning Fund (ULF)</i>	X	X	X	X	X	X	X	
UK	Mid-life career review	X	X	X		X	X	X	



Promising practices								
Austria	Labour foundations (Arbeitsstiftungen)	X	X	X	X	X		X
Spain	Vives Emplea: team empowerment for labour integration	X	X	X		X		X

NB: See Annex 1 for a description of each practice and sources.

Legend:

GC1: Effectiveness

GC2: Clarity

GC3: Consistency

GC4: Sustainability

SC1: A GP has established successful coordination, cooperation, support and improved communication between all organisations involved

SC2: A GP adopts sound and appropriate methodological and didactic approaches to stimulate and involve adults also through a supportive guidance system

SC3: A GP has a flexible structure able to be adapted to different needs of the target group

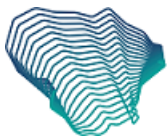
SC4: A GP ensures recognition of prior learning and validation of learning outcomes, whether from formal education or non-formal or informal learning

Fig. 3: Adult learning: empowering adults through upskilling and reskilling
(Source: [Cedefop, 2020](#) and https://www.cedefop.europa.eu/files/3082_en.pdf)

The French Personal Training Account, for example, introduces an individualized scheme for financing training that is open to all economically active persons, and is fully transferable throughout the individual’s working life, from the time they enter the labour market until they retire. The CPF is currently the only example at international level of an individual learning account where individuals build up training entitlements over time.” (Source: [OECD Social, Employment and Migration Working Papers](#)).

“A survey conducted by Centrum Taal en Onderwijs (CT&O) among 400 *teachers* of Dutch L2 shows the teachers’ assumption that students strongly value the use of ICT, although the use of ICT in F2F Dutch classes is still not common practice in Flanders: 20.5% of the teachers often or always use ICT in the classroom; 30.8% never use ICT, due to a lack of accommodation (60%) and time (61.8%). Furthermore, 57.7% of the teachers feel somewhere between inadequately and reasonably competent in the use of ICT. These numbers are in sharp contrast with the teachers’ estimations that about 80% of the students strongly value the use of ICT. (Berben, Drijkoningen, Frijns, Houben, & Van Den Branden, 2012). Another survey, conducted by Vrije Universiteit Brussel (VUB) (DePryck, Zhu, Van Laer, Kupriyanova-Ashina, & Cools, 2013), focuses on the experience of Dutch L2 *learners* in adult education. Results show that 41.9% of the respondents in (CVO; focusing on learners with a higher learning proficiency) in high proficiency levels have experience with blended or distance learning and the same share has a preference for blended learning. In the levels A1, A2 and B1, more than 90% of the respondents express a preference for F2F learning. Slightly more than one in four students are not interested in blended learning; 40% would find it interesting, provided that they could study on site in an OLC (open learning centre) with guidance and 31% are interested in studying online at home. Centres for Basic Education (CBE; focusing on low-literate learners) make no distinction between learning Dutch and other subjects. 62.3% of the respondents are interested in taking part of the course online in an OLC and about 16% are interested in studying online at home or in their prison cell.” (De Paepe et al. 2018).

“[...] Fracking (*a recent technological breakthrough in the oil and gas industry*) has significantly increased relative demand for less-educated male labor and increased high school dropout rates of male teens, both overall and relative to females. Estimates imply that, absent fracking, the teen male dropout rate would have been 1 percentage point lower over the period 2011–15 in the average labor market with shale



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reserves, implying an elasticity of school enrolment with respect to earnings below historical estimates.” (Cascio & Narayan, 2022).

“Older people’s abilities to understand and create media content, especially as citizens, received less attention despite media-literacy researchers’ emphasis on individuals’ participation in society (Hobbs, 2010; Livingstone et al., 2012) and creative and playful media-content production (e.g., Cannon et al., 2018). When interpreted in light of recent research highlighting older people’s lack of health and digital news literacy (Eronen et al., 2019; Guess et al., 2019), this finding clearly indicates a gap in the research on media-literacy interventions.” (Rasi, 2021).

“Many adult perspectives about learning, while called theories, are largely lacking in evidence leading to them becoming theories. Thus, there remains a need for empirical evidence of these theories and their roles in online instruction. Comparisons of the application of these theories for adult learners in online instruction would also be useful in establishing the effectiveness of the various learning theories in different adult learning situations.” (Brieger et al., 2020).

“Adults are pressured to become lifelong learners equipped with technology skills and fluency with information and communication technologies (ICT; World Bank, 2003). Under these circumstances, greater numbers of adults are returning to engage in learning activities, and this also means that there is greater diversity in this population of students (Hannah, 2017; Kasworm, 2003; Willans & Seary, 2011).” (Rogers-Shaw et al., 2018).

“Saar (2017) theoretically distinguished seven adult-learning country types, which correspond to the typology of countries based on varieties of capitalism, welfare state regimes and their extensions.” (Boyadjieva et al. 2018)

“The conceptualisation and measurement of adult education as a common good provide a new perspective for understanding and assessing how adult education develops in different countries and in different institutional, socio-economic and cultural contexts.” (Boyadjieva et al., 2018).

Frameworks of Digital Competences and LSA

According to the “[Digital competence frameworks for teachers, learners and citizens](#)” of UNESCO, related to the digital knowledge, skills and attributes viewed as inherent to being digital “competent”, there are a variety of digital competence frameworks and digital strategies developed at continental, national and regional level. The LAB-ADA Expert Working Group (EWG) studied many of these 20+ Digital Frameworks, and focused this research on the following 7 frameworks.

1. OECD - [Future of Education and Skills 2030](#)
2. World Economic Forum - [Education, Skills and Learning](#)
3. Digital Intelligence (DQ): [Global Standard on Digital Literacy, Digital Skills, and Digital Readiness](#)

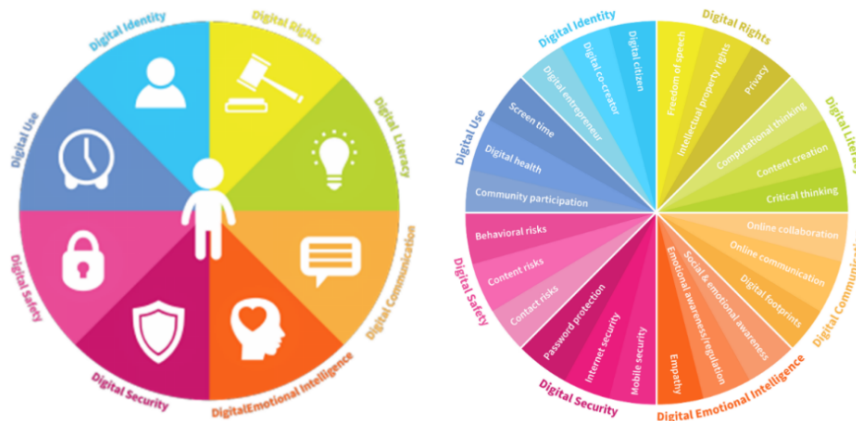
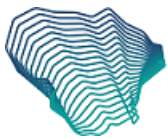


Fig. 4: The DQ model focusing on a set of social, emotional and cognitive abilities that enable individuals to face the challenges and adapt to the demands of digital life

The [European Digital Decade \(2030\)](#) is a comprehensive framework that will guide all actions related to digital. The aim of the Digital Decade is to ensure all aspects of technology and innovation work for people. The main approach of “[Building digital competence holistically](#)” is currently expressed by the European Digital Competence Framework (DigComp) that has been implemented as a reference tool for educators, as well as for self-guided learning. Teacher development is supported by the European Framework for the Digital Competence of Educators (DigCompEdu). The European Commission launched new frameworks supporting the entrepreneurship key competence (EntreComp), and more recently, the competence framework for personal, social and learning to learn key competence (LifeComp), as well as GreenComp - a reference framework for sustainability competences, due to the demand for the competence frameworks and tools.

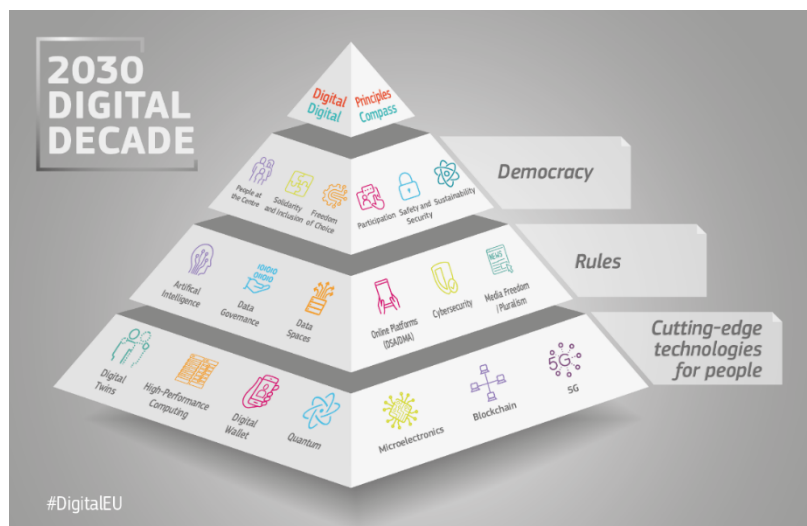


Fig. 5: The EU a human-centric, sustainable vision for digital society

The following are examples from the EU family of Digital Competence Frameworks, that the LAB-ADA EWG can relate to SLAs:

4. DigComp: joint-research-centre.ec.europa.eu/digcomp_en
5. DigCompEdu: ec.europa.eu/jrc/en/digcompedu joint-research-centre.ec.europa.eu/digcomp_en
6. EntreComp: ec.europa.eu/social/main.jsp?catId=1317
7. LifeComp: joint-research-centre.ec.europa.eu/lifecomp_enpublications.jrc.ec.europa.eu/repository/handle/JRC120911

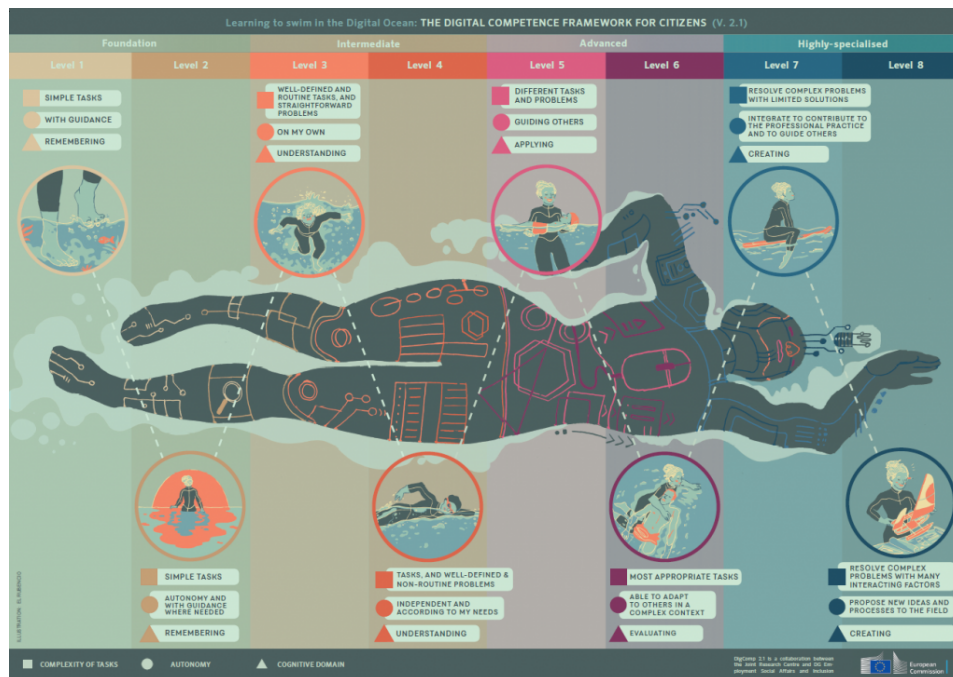
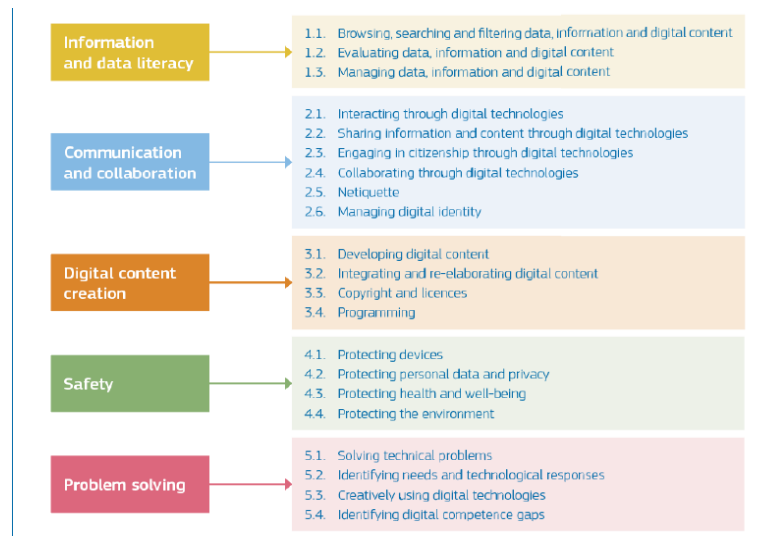
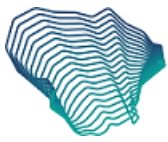


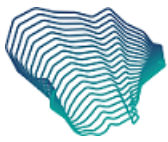
Fig 6: DigComp Conceptual Reference Model and DigComp Framework 2.2 (Source: DigComp 2010-2022)

Partners' Countries and LSA

Lithuania

According to Unesco¹ the “Lithuanian Centre for Adult Education and Information” is the state institution working under the Ministry of Education and Science of the Republic of Lithuania. The centre was established by the Ministry as one of the main institutions assisting in coordination and implementation of the means of national Lifelong Learning strategy. The mission is “to ensure that society should have more possibilities to participate in continuing learning by rendering assistance for adults in education”. The major policy issues are to “provide adults assistance in the sphere of education related to continuous learning,

¹ <https://uil.unesco.org/partner/lifelong-learning/lithuanian-centre-adult-education-and-information-lcae>



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accumulate data and constantly update data bases on the opportunities for continuing education, on institutions and programs providing these services, as well as disseminate the relevant information on these matters to the society at large, investigate and analyze the status of continuing education and needs in the country, elaborate and implement projects related to the development of adult education opportunities, participate in arrangement of standard legislation projects which are connected with Lifelong Learning system, compile methodological, training and learning material, as well as arrange its publishing activities. Implementation of national strategies”.

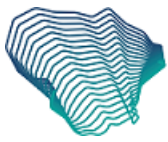
In Lithuania, a national campaign of Informal Educations, entitled "Senior Days on the Internet" was organized, where Internet seminars, experts in various fields and well-known Lithuanian personalities share knowledge and experience about the benefits of the Internet and technology in various fields. After the broadcasts, participants are able to put their knowledge into practice through various tasks. The aim of this initiative is to interest and encourage Lithuanian seniors to use modern smart technologies, e. services, critically evaluate information, and improve their digital skills.

Italy

In Italy, adult education is promoted by the CPIAs (Provincial Centres for Adult Education) established by Presidential Decree 263 of 29 October 2012. The provincial adult education centres (CPIA) are a founding element of the Italian education system. Education that lasts a lifetime, lifelong learning, cannot and must not be defined as an accessory, but must be the necessary complement to the ability to live and work. Schooling does not end at the age of eighteen, but continues throughout our lives. The last two years (2020-2022) have taught us the importance of technology, its power and its fundamental role in community building. Addressing adults directly, CPIAs will be called upon to play the role of a central pivot in digital competence development in the coming years. On a daily basis, CPIAs demonstrate that they are guardians of democracy, ensuring that people have the skills they need to participate in civic life also through the ability to acquire new knowledge.

CPIAs constitute a type of autonomous educational institution with its own staff and a specific teaching and organisational set-up. CPIAs are divided into 'territorial service networks' structured on three levels: Level A: Administrative Unit; Level B: Teaching Unit; Level C: Training Unit. From an administrative point of view, the CPIA is divided into a central location and first-level delivery points (associated locations) where first-level, literacy and Italian language learning pathways are implemented. These first-level delivery points are identified by the Regions. The CPIA, from an organisational-didactic point of view, refers to the second-level school institutions that deliver second-level adult education courses. These second-level delivery points are 'hinged' in the secondary school institutions of the second level (operating sites) identified by the regions. The CPIA can extend the training offer by entering into agreements with local authorities and other public and private entities, in particular to training facilities accredited by the Regions. These are initiatives to enhance citizenship skills and thus the employability of the population. CPIAs in Italy are 130. Nr of students: 2017-18: 178.000; 2018-19: 176.000; 2019-20: 154.000.

Before the 2012 reorganization, primary and secondary education for adults was carried out at Permanent Territorial Centers (CTPs) and secondary education was provided by evening courses activated at secondary schools level. The reorganization was aimed at giving organicity and unity to the adult education system and overcoming some critical issues including the rigidity of the system and organization of the courses, which had facilities that were too similar to those of morning courses; the lack of administrative, educational and organizational autonomy of the facilities; the absence of an integrated distance learning system; and the lack of an organic system of credits and certifications. The key elements for the reorganization were: the raising of the educational levels of weak users, with priority given to pathways aimed at the attainment of qualifications, including the fulfillment of compulsory education, and to the knowledge of the Italian language by foreigners, the strengthening of the identity of the educational offer, its sustainability through shorter than ordinary paths



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and bringing people closer together, through networks and the creation of an organic system for the enhancement of skills and learning already possessed by people.

The National Qualifications Framework (NQF) was established by interministerial decree (Ministry of Labor and Ministry of Education) of 8 January 2018 as a tool for the description and classification of the qualifications issued within the National Competence Certification System. The NQF represents the national device for referencing Italian qualifications to the European Qualifications Framework, with the function of linking the Italian qualifications system with the systems of other European countries. The NQF also has the objective of coordinating and strengthening the various systems that contribute to the public offer of lifelong learning and services for identifying and validating and certifying skills (obtained through formal, informal and non-formal activities). Moreover, the NQF reinforces the Individual Training Agreement, a key element of adult education (an instrument that intends promoting national policies of lifelong learning enhancing starting from the reconstruction of individual history of the student and adapting that educational pathway to that). To the Training Agreement it is attached the Certificate of recognition of credits for the personalized course.

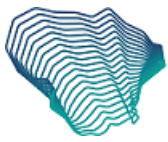
The Republic of North Macedonia

The Government of the Republic of North Macedonia established the Adult Education Center, a national public institution. The mission of the Center is to promote a functional, modern and EU-compatible system for adult education in the context of the lifelong learning that provides high quality learning and qualification opportunities to meet the needs of the whole population, enhance employability and entrepreneurship, meet labour market needs and contribute to economic, social and personal development. The key objectives of this institution are to contribute in the realization of the social-economic need of North Macedonia, to respond to the needs of the labor market and to assist the individuals in their personal development.

The institution's main responsibilities are the harmonization and integration to the public interests and the interests of the social partners in the education of adults in the Republic of North Macedonia and the coordination of the cooperation with the international institutions and organizations in the area of education of adults and lifelong learning. The institution also provides a quality system for education of adults in accordance with the European standards and practices, through standards and criteria that will provide quality education for adults, both formal and non-formal, production of quality and competitive labor force on the labor market by supporting the social partnership.

The Adult Education Centre is responsible for the verification of special programs for adult education (programs for non-formal adult education) aiming to increase the quality of the non-formal adult education. Since 2010, the Adult Education Centre has been implementing governmental programs for secondary vocational education for adults who completed only primary education at a national level. Also, the Adult Education Centre conducts different activities for the promotion of adult education. One of the most important manifestations is Lifelong Learning Days that the Center organizes annually in cooperation with the DVV International Office in North Macedonia.

Sustainability advisors is a VET programme developed by Eco Logic, verified by the Adult Education Center, initially started as a part of the Inclusive Labour Markets for Sustainable Community Development EU project. The programme covers 12 modules that provide the trainee with competencies and skills needed to provide consulting and advisory services to business, households and individuals. This program covers theoretical and practical parts within 245 hours from which 72 are for theory, 140 for realization of practical parts (working on a case study) in a public institution, small, medium or large enterprise or household, and 33 for evaluation including control tests, discussions and final presentation of the case study. The verified course is modular and consists of 12 modules (Introduction to Sustainable development, Global economic trends, Strategies for Sustainable Development on micro and macro level, Ecology policies, Eco innovations for Sustainable



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Development, Indicators for monitoring and measurement of sustainable development, Resource efficient and cleaner production, Eco design, Methodologies for Sustainable Development, Tools for organization and realization of the Sustainable Development, Sustainability at home and Case study – sustainability analysis on a particular entity).

Greece

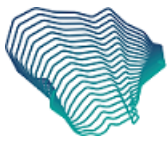
According to an OECD survey (2015), the share of adults in Greece who score at the highest levels of proficiency in literacy and numeracy is considerably smaller than the OECD average, while the proportion of adults with poor skills in literacy and numeracy is much larger than average. The OECD survey highlighted that the large expansion of education has not translated into an improvement in literacy over the generations and that the foreign-born, native-language adults score slightly higher in literacy than native-born, native-language adults. Greece holds a larger-than-average proportion of adults in Greece has poor literacy and numeracy skills, and low proficiency is particularly prevalent among 55-65 year-olds. Also, a higher percentage of adults in Greece (compared to the OECD average) reported no prior experience with computers. Finally in Greece, “it is educational attainment, rather than proficiency, that has the strongest impact on the likelihood of being employed and on earning higher wages.”

Specifically, “only about one in 20 adults in Greece attain the highest levels of proficiency (Level 4 or 5) in literacy, compared to around one in 10 adults (10.6%) on average across the OECD countries that participated in the survey” and it is highlighted that around one in four adults (26.0%) attains Level 3 in literacy, a percentage that is below the OECD average of 35.4%. Also, “only the 2.5% of adults in Greece attain Level 3, the highest proficiency level, in problem solving in technology-rich environments.” This is the fourth lowest percentage among all the OECD participating countries and significantly lower than the OECD average of 5.4%. “In contrast to what is observed in other countries, 25-34 year-olds in Greece perform as well in literacy as 55-65 year-olds” and “Greece is one of the few countries where women outperform men in literacy”. It is important to mention that “workers in Greece use their numeracy and problem-solving skills at work as frequently as the average across OECD countries; but their proficiency in these skills is not as highly rewarded, with higher wages, as in other OECD countries”.

In Greece, the National Academy of Digital Skills, an initiative of the Ministry of Digital Governance, aiming to develop and compile educational content offers, created an online platform, which is available from May 2021. The program includes courses for teachers, entrepreneurs and business executives, communication Networks and Cyber Security Courses, state-of-the-art technology courses, software design and development courses for farmers and Agricultural Enterprises. The courses are also offered by organizations with recognized academic and educational prestige, such as Greek academic institutions, well-known international companies, banking institutions, telecommunications providers and digital education organizations.

The National Academy of Digital Skills aspires to play an active role in the field of digital literacy, constantly enriching its educational content to citizens. It has more than 290 basic and advanced level courses that correspond to over 1,800 hours of training. The courses are divided into the following six thematic categories:

- Communication and collaboration: Courses in the areas of communication applications, work from home, mobile devices and social networks are available in this category.
- Internet: The content of the courses in this category falls, among others, in the areas of personal data protection and secure internet browsing.
- Everyday tools: The educational content in this category is related to the fields of computer use and office applications.
- Digital Entrepreneurship: The courses in this category are aimed at those who are interested in further enriching their knowledge on digital marketing and the modern business context.

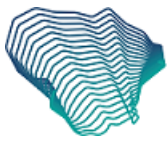


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- Computer science: The visitor of this category can attend courses on databases, programming languages, cybersecurity, ICT and education, communication networks etc.
- Cutting-edge technologies: The educational content of this category is related to the fields of artificial intelligence, cloud computing, etc.

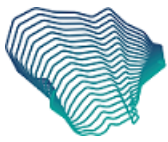
Finally, the user's navigation on the platform is simple and friendly. The educational material is freely available to everyone, without complicated registration procedures and each user can choose the course that suits his interests and level of knowledge, attend it and complete it whenever he wishes.



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FOCUS GROUPS



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Introduction

This Focus Group is conducted as part of the Erasmus+ Programme “**LAB-ADA**”. This Guide for the Focus Group is addressed to LSA experts and practitioners and aims to collect information about related competence frameworks, best practices, opportunities, initiatives and challenges in LSA education.

Focus groups will be further conducted to gather qualitative data related to: validating the survey findings (triggers, supports, skill set), gaining deeper insights into the problem; brainstorming suggestions for LSA interest in relevant learning opportunities and better possibilities to be involved in non-formal learning.

The guide includes indicative semi-structured questions at the following **five parts**:

- Experts Profile;
- Motivation and engagement on personal development of a LSA;
- Comments about LAB-ADA COMPETENCE FRAMEWORK;
- Educational Resources;
- Initiatives, Practices, Researches, Challenges.

Each of the five partners interviewed five experts, **25 experts** in total, the duration of each Focus Group was about 1.5 - 2 hours and it was conducted between September to November 2022.

Experts Profiles

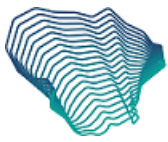
Each country interviewed experts in adult education, with different profiles and backgrounds.

Most of the experts agree that one of the main tasks of an educator is to disseminate his or her philosophy of education and teaching. Educators base their philosophy on theories learned in their formal education, but most agree that they start with this type of teaching philosophy and adjust it over time. These adjustments to one's teaching philosophy are largely based on personal experience and the best practices that may emerge in their specific teaching area. Each educator must consider all aspects when choosing and using a teaching strategy based on self-directed learning. Not all adult learners are autonomous, so an instructional philosophy should be based on different educational philosophies so that learners can be considered regardless of their level of self-direction. In addition, it is important to communicate the teaching philosophy to learners to avoid misunderstandings and uncomfortable situations.

Particularly, the experts who took part in the focus group are:

- Professors/directors of CPIAs (Provincial Centres for Adult Education);
- Collaborators of associations engaged in adult education activities;
- Professors of Mathematics, Informatics, Italian Language, Music;
- Authors of EU projects;
- Researchers and educators.

Some of the experts have not received proper and specific training to teach adults, so their ideas and methodologies have risen from the on-field job and the experience acquired during their experience and



research. On one hand, the educators are already used to “build” and “create” a non-conventional educational path based on the concrete necessity of the situation; on the other hand, it leads to a methodological and didactical fragmentation (in an educational system that does not encourage the interdisciplinary and the proactive collaboration among the educators, at least in the public institutions).

An interesting aspect of the adult educators' profile is that they all believe that adult education and lifelong learning is an important aspect of every person's life. Upgrading your know-how and skills doesn't only help you in acquiring new knowledge and information, but also in raising your quality of life, socially and culturally. The continuous educational development of any person, especially today in the 21st century, is something they consider to be a vital activity for any individual, both old and young.

Motivation and engagement on personal development of a LSA

Most educators agree that one of the main issues posed as a problem for the LSA is the low level of their motivation to get engaged in specific programs which will not only bring them new personal qualities through experience, but also new professional qualities. Motivation sometimes rises from external factors, such as some recognition or a possibility for getting a job abroad, more points in their professional CV etc. Maybe some of LSA's issues is that they've lost the habit of constant education during their years of professional engagement. Some even mention that there should be a unified strategy by the public bodies that can outline clear goals and criteria for adult education.

For LSA's to be more motivated there are few possibilities that can be marked. Some believe that the micro-factors, such as education should be more personal and the student should be able to see the benefit from taking part in it, but also macro-factors like the economy, the labour market and other things. Our social environment isn't inductive, it doesn't give many opportunities to use those skills, so motivation is low and outcomes are limited. We should have in mind that in the countries that are not well developed, the labour market also plays an important role as an incentive, and the economy in general.

Can you suggest situations that bring into the surface basic ideas, and methodologies? Can you give us some ideas?

- All materials for LSA should be prepared in an easy-to-understand and user-friendly manner;
- Curiosity to realise activities useful for the daily life;
- Emotional involvement.

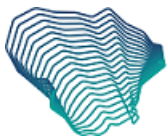
What do you perceive as the main issues affecting the effective development of the competences of a LSA?

- Lack of LSA's motivation;
- LSA's negative attitude towards the subjects;
- The lack of forward planning;
- A lack of funding for resources and equipment;
- A lack of well-equipped spaces, lack of science lab assistants make it more difficult.

What are the LSAs' greatest barriers to participate in educational programs for adults?

Elements that affect negatively the actual participation and development of LSA are:

- Personal issues (family, work, lack of motivation, health);
- Organizational issues (lack of time, class schedule, composition of the classes, goals of the education);



- Low educational level / Lack of communication skills / Low self-confidence or interest / Lack of ability to learn;
- Lack of funding for resources and equipment / Insufficient technical infrastructure (unstable internet connection, old equipment, etc.) / lack of well-equipped spaces, lack of science lab assistants;
- Culture, different lifestyle for older people;
- The use of digital tools is "forced", in a static / behavioral way;
- Overuse / persistence of modern tools and practices, instead of training in simple skills that can be used in everyday life (health / communication etc.);
- Lack of forward planning / well conceived programs with clear goals with good teams of educators;
- Fear to fail, fear to be not up, feel incapable, fear to damage utilities;
- It is not supported by employers.

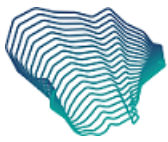
What strategies have you implemented/ are you going to implement that serve to overcome issues/barriers? Considering the "persona issues", it is fundamental to develop different strategies of recognition, engagement and motivation of the adult students. The building of a network of associations connected to the adults might be useful to achieve this goal. Moreover, even the "goals" of the lessons are considered a problem. They need to understand and be convinced that what they are doing is concretely useful for achieving their work and personal goals. The programs that the teachers must follow are too rigid and based on a classic, formal and face-to-face methodology. Adult students need a more practical, useful and problem-solving approach to participate actively in the courses. An example of a teaching method is the inductive methodology, from the particular case to the general rule (a well-constructed mind is better than a mind full of concepts).

To increase the participation of the adults to this kind of education, indicative difficulties and challenges are:

- Scheduling courses or classes properly and constantly, especially considering the working and family duties of adults;
- Availability of buildings in the late hours;
- Proper assessment of students' competences before the start of the educational period;
- Creation of a personalized course or path to achieve each student's specific goals and forces;
- Interactions in groups that face the same problems and has the same goals;
- Creation of heterogeneous classes that follow a standardized syllabus;
- Build homogeneous classes in terms of level and objectives;
- Working in groups increasing the positive elements of the educational path;
- Sustain effort and the creation of new perspectives for each student;
- Soft skills training that may enable students to continue improving their competences, even after the end of the specific course.

To achieve all of this, it is necessary to act on two different levels:

- *Pedagogical level:* the educational institutions/organizations must increase their level of flexibility, in terms of scheduling possibilities, internal organization, offering educational activities that are very different compared to the younger ones, based on attractive and interactive methodologies and content.
- *Professional level:* the educational program they follow should be as personalized as possible and constructed in such a way to maximize their working and professional goals and possibilities, without the feeling of "waste" time.



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Moreover, the training should also allow the trainer to increase his level of adaptability to the different adult students' situations and requests, improve his ability to be able to work together and in coordination with other trainers, and create something not standardized but adequate to the goals and needs of the adult learners.

The last element to consider is the creation of a network with realities/associations connected to the world of adults. This may foster the connection and the engagement of adults, thus creating the necessary premises for a successful educational path. Moreover, these realities may give useful input to improve the educational offer to the monitoring of the performance of the educational process.

Other proposed strategies for overcome issues/barriers are the following:

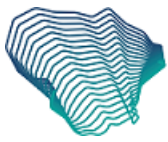
- Encouraging information and invitations;
- Personal calls or contact via social media;
- Offering guaranteed employment once finished;
- Offering paid travel expenses and meals during the trainings, as well as consistent supervising support during the trainings;
- Unified strategy by the relevant government bodies (like the Center for adult education in Macedonia, that outline clear goals and criteria);
- Technological and communication barriers;
- To be always close to the learners and their needs;
- Something useful in the daily life in order to make it easier;
- To have a tutor or a coach close to them.

Do trainers of SLAs make use of activities and techniques to ensure that all learners are engaged in an educational program?

- It depends a lot on the activity and the group or learners, but at least the Experts are trying;
- Teachers try to get involved in the learning procedure;
- Educators offer more time to learners with specific difficulties.

What support does an SLA have/need to develop their competences?

- Technological and communicative skills;
- Competent people who can support those in need in a simple and constant manner;
- Patience and availability;
- To know they can ask to an expert without feeling themselves un-useful;
- To have constant supervising support during training and after, once the candidates have started working. It helps facilitate their newly acquired competences;
- To be available to all persons over 18 years of age. Informal adult education may be provided by anyone through an education provider recognised under each country's law;
- In Lithuania, non-formal adult education is usually understood as learning, training, and study tailored to the interests of the individual and society, for the completion of which no state-recognised document is issued.



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What factors can contribute to motivate LSAs participation in education programs?

A strong negative stigma still involves the idea of adult education, especially if not highly qualified. Indeed, nowadays the “adult education” world is viewed as connected to the one of immigrants (to learn the Italian language) or as an “easy” way to get some certification by those who have prematurely left the educational path (such as the NEETs).

Other than that, many other elements affect positively the actual participation and development of an LSA. These are:

- Advancement / professional development is an important motivation for participation in educational / training programs;
- A recognized certificate, a new career opportunity (that will offer a promotion or higher pay);
- Direct / visible benefit (e.g. the tablet makes reading easier);
- Communication Facilitation (social media);
- Curiosity to realise activities useful for the daily life;
- Emotional involvement & more personal education;
- Tracking what the labor market needs in regards to professions and competencies (programs which answer those needs in a clear way);
- Free of charge educational programs;
- To be supported by the employers (a more positive attitude of employers).

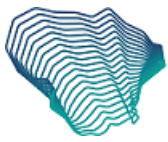
Material, Tools, Resources and Practices

In the training of an LSA it is fundamental to be very practical and concrete, and less theoretical, and the use of every day and specific materials might be very useful. The material has to have some kind of link with the external/work environment and the professor should be able to guide the students in a process of understanding how the practical exercises carried out might be useful outside of the class. The material that can be used can be very different:

- Audio/image/video materials;
- Storytelling, mind mapping, language application;
- Personalised learning resources;
- Workshops;
- Objects of everyday use;
- Online/offline collaborative tools.

Every adult educator uses a different style in their programme and that involves usage of different materials, but the general materials are used almost all. The non-formal learning offers development of different skills for the LSA and while some pinpoint their technical skills others pinpoint the intellectual. However, they both involve practical as well as theoretical assignments and knowledge. It was mentioned that “collaboration is a key concept to all these elements”.

When it comes to the approaches, techniques, materials, etc. used to promote learner’s critical thinking, creativity, and problem-solving skills, adult educators differentiate more in their programmes. As



mentioned before, some use gamification such as self-evaluation tools (quizzes) which upgrades their critical thinking. Some other more complex activities also take part in their programme such as case studies, that need more creativity and hands on approach, as well as critical and analytical thinking. They need more time and effort to be developed but on the other hand they offer a direct, practical approach.

The online tools cannot be used on all the occasions. Indeed, adult learners, who are the target group of this specific training, are not digital natives, thus a proper training should be provided for students, in order to be as productive as possible and give them a conscious use of the didactical instrument.

The way the teaching is provided must not be a traditional face-to-face approach but should be based on a more participatory and problem solving oriented one. Students should be guided into the creation of their own knowledge just providing them with the tools useful to do that. An example would be to use an object, an event, a resource that all the students face in their daily life as a starting point, and from there build a path for students to increase their skills. Another useful teaching tool could be the creation of interactive stories (something ancestral in every individual's mind) that involve and encourage students in the teaching path by keeping their attention.

An interaction with the European platforms (such as EPAL) might be crucial to increase the dissemination of courses, but also to get important feedback from professionals from all over Europe.

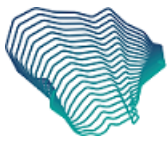
Which attractive and important resources and materials can you suggest for training SLAs?

- Clear and easy information;
- Human resources and handbooks very easy;
- Laptops / notebooks, easy software and wide screens;
- Humane resources and labs;
- Opportunity for online participation;
- Various inclusive activities, such as quizzes, brainstorming, problem solving and other activities;
- Discussions (Useful when you want to think about something in depth and for issues that affect attitudes and awareness, and debates are very useful to find out the understanding of alternative points of view).

Can you give us example(s) of learning opportunities and better possibilities to be involved in non-formal learning?

- Learning by imitating, observation;
- Imitating or trying to imitate friends who are practicing something that adults like and that can catch their attention;
- Learning the use of internet to buy at the lowest price, and software as a help for the daily activities as for the family budget, and so on;
- Relaxed and funny environment, focus groups involving users producing tools that can be shared;
- It can be adapted to everyone's level of development or learning;
- It is always relevant and can be adapted to the needs of each person;
- It is participatory in the sense that those involved are actively learning by working as a team;
- It is a learning style that promotes inclusion and diversity.

Can you share with us any approaches, techniques, materials, etc. used to promote learner's critical thinking,



creativity, and problem-solving skills?

- Easy conversation on real problems close to the interests of them, movies, readings, guided conversations, manipulation of real materials, use of different materials for the realisation of crafts;
- Sharing with friends, colleagues and consequently the reflection;
- Conversations in groups;
- Coding, problem solving, relaxed environment allowing sharing and debating, cooperative learning, working with peers – groups;
- LSAs may have little or no knowledge of English.

Additional Initiatives, Practices, Researches and Challenges are the following:

Important national and governmental strategies initiatives/existing research studies / policy recommendations / EU projects promoting LSA:

- The initiatives of the Chamber of Commerce of Macedonia;
- The programs in Macedonia, at Humanost are based on the principle of giving individuals with a low educational level opportunities, the notion of adaptability in programs for different target groups, and basing the credits and skills system on real needs of the labor market. All these programs are standardized and certified, recognized both nationally and internationally.

Projects supporting the national policy and/or national initiative, promoting inclusive education and/or focus on the empowerment of LSAs with opportunities:

- There are some projects run by some of the municipalities, as well as the Employment Agency of North Macedonia;
- Humanost from Macedonia, InterAktion from Austria, SerGED from Turkey, USB from Greece.

Learners engagement in educational programs:

- A participative approach and opportunities for the participant to be at the center of attention and encouraged to think and express themselves freely.

Training programs, projects and/or other national initiatives focusing on building the capacity of LSAs:

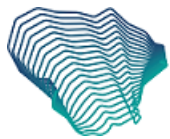
- The most successful types of training for adults have been the programs for starting your own social enterprise model, as well as the programs for reskilling and upskilling within a specific workplace.

Important data from academic studies, national statistics, or other statistical sources:

- The EPALE platform I mentioned is the primary and only good source on this topic that we use.

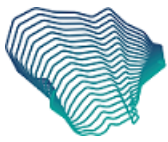
LAB-ADA Mapping Frame

The new integrated [DigComp 2.2 Framework](#) “focuses on examples of the knowledge, skills and attitudes applicable to each digital competence”. The LAB-ADA Project adopted the DigComp Framework, for which it asked the opinion of the experts. The Framework is presented in detail at the last Chapter of this document, Chapter: Mapping Frame Development. The following table presents the 5 Pillars of the Framework, related with their skill sets, according to the average level of agreement of the 25 experts (5 per each partner):



Pillar 1: Information and Data Literacy	CSCI	PROMETEO	ECOKTIMA	ECO LOGIC	LIBA
1.1 Browsing, searching and filtering	5	4	5	4	4
1.2 Evaluating info and content	5	4	5	4	5
1.3 Managing info and content	5	3	3	5	5
<i>1.4 Data analysis and information engagement</i>			3		
Pillar 2: Communication and Collaboration					
2.1 Interacting	5	4	5	4	4
2.2 Sharing	5	4	5	4	4
2.3 Engaging in citizenship	3	3	3	3	5
2.4 Collaborating	3	4	5	5	4
2.5 Netiquette	3	4	4	4	5
<i>2.6 Managing Digital Identity</i>	2	3	1	3	3
Pillar 3: Digital Content Creation					
3.1 Developing content	5	3	5	5	4
3.2 Integrating and re-elaborating	3	3	4	5	5
3.3 Copyright and licenses	3	2	4	4	5
<i>3.4 Programming</i>	1	1	1	1	1
Pillar 4: Safety and Ethics					
4.1 Protecting devices	5	2	2	4	5
4.2 Protecting personal data and privacy	5	3	4	5	5
4.3 Protecting health and well-being	2	4	3	4	5
4.4 Protecting the environment	2	4	4	4	5
Pillar 5: Problem Solving					
5.1 Solving technical problems	2	2	2	4	5
5.2 Identifying needs and responses	2	2	2	5	5
5.3 Creatively using digital technologies	2	3	3	4	4
<i>5.4 Identifying digital competence gaps</i>	2	2	1	2	3

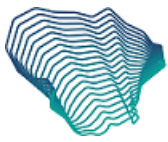
Rubric: Experts' average level of agreement from lowest 1 to highest 5



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SURVEYS



Introduction

Following Desk Research results, a questionnaire was developed for survey among LSA based on the self-report method used in psychology. The questionnaire was on LSA interest in relevant learning opportunities and better possibilities to be involved in non-formal learning. The questions were divided into the following 3 thematic sections:

- Profile;
- Skills;
- Needs - Motivation – Opportunities.

The “Profile” section includes information on the age, education and employment status of the participants. The “Skills” section is dedicated to the participants' skills, how they were acquired, and the familiarity of the participants with the technology. Finally, the “Needs - Motivation - Opportunities” section includes questions about the participants’ past or future enrollments in educational programs, as well as the greatest barriers or participation incentives.

Upon approval by all partners, it was translated into national languages. The questionnaires were uploaded online to facilitate the survey conduction and data analysis. In total, they collected **101 responses** from 101 participants of the 4 countries, which were recorded in spreadsheets, and presented in the form of charts, included in detail in the Annex. The results of this survey were used for selecting up to most needed skills that can boost LSA skills.

As a result, the following are skills that the participants of all countries would like to improve:

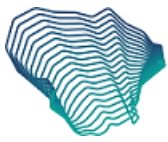
- The ability to navigate effectively;
- The ability to collaborate through the sharing of multimedia and digital content between users;
- Development of digital content;
- Problem solving (creatively using digital technologies).

Profile

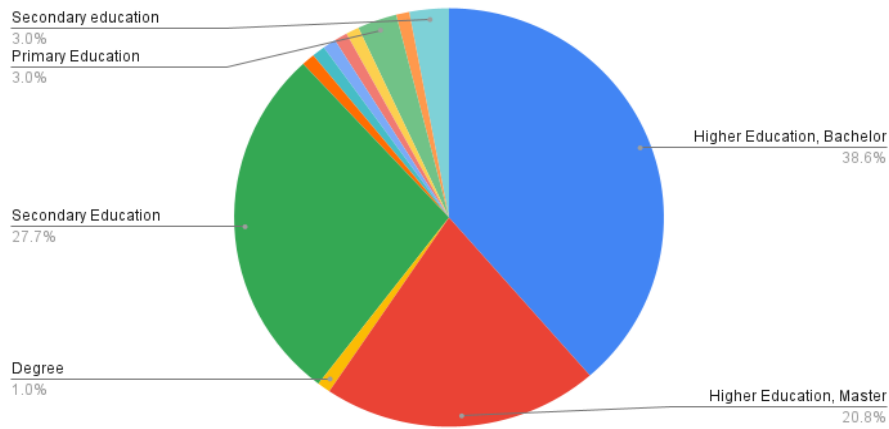
Regarding the age of the participants, we notice that the North Macedonia survey focused on young people aged 25-34 years (42,3%) in contrast to the rest of the countries (Italy, Lithuania and Greece) that focused on an audience of over 45 years in a percentage greater than 60%. In addition, all countries targeted audiences residing within the country. Regarding the education of the research participants, the main body of the audience (larger than 58%) attended higher levels of education (Bachelor/Master). More than 85% of the 101 participants attended:

- Secondary Education;
- Higher Education, Bachelor;
- Higher Education, Master.

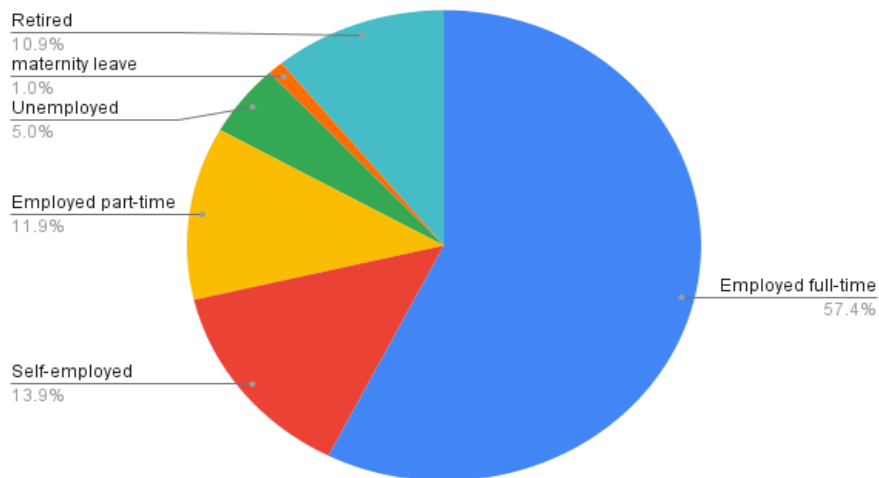
Especially in Greece, 88% of the participants were university graduates.



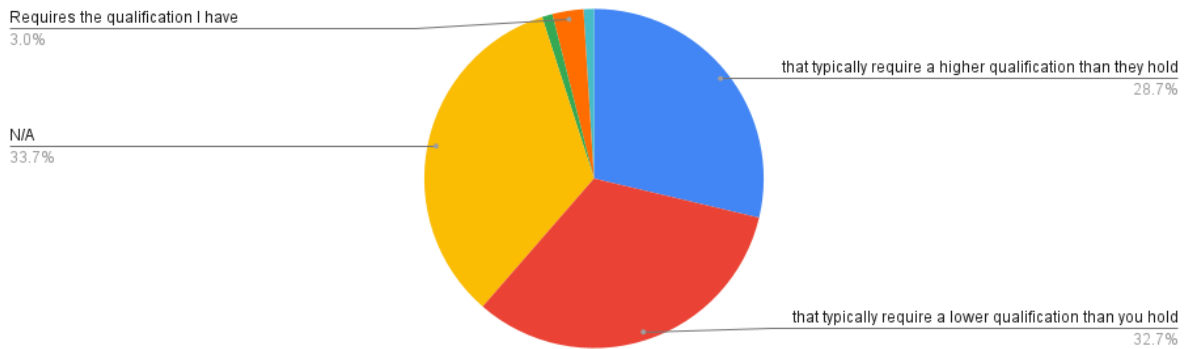
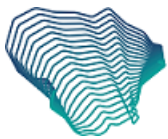
The following chart shows the 101 participants' highest degree of education.



Also, over 57% of the participants were full-time workers, over 10% part-time employed, over 10% self-employed and over 10% retired, as the following chart shows.



The 28.7% of participants believe that their job requires a higher qualification and the 32.7% require a lower qualification than they hold. The following chart shows the results about the 101 participants' working status.



Skills

In the “Skills” section, more than 30% of the participants state that their familiarity with computer use is intermediate (while more than 15% declare their familiarity to be basic), and over 48% consider that they acquired their digital skills informally.

According to the results of this research, for the residents of Italy and Lithuania, the five skills in order of preference that they think they would like to improve are:

1. Problem Solving: Creatively using digital technologies;
2. Digital Content Creation: Developing content (at least documents, pictures, images, worksheets);
3. Problem Solving: Solving technical problems (at least related to the use of an application)*;
4. Communication and Collaboration: Sharing (at least documents, pictures, images, worksheets, not only texts)*;
5. Information and Data Literacy: Browsing, searching and filtering.

** The 3rd and 4th skills were of equal preference.*

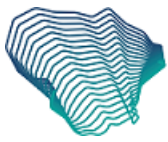
The skills that the residents of Greece would like to improve were:

1. Communication and Collaboration: Sharing (at least documents, pictures, images, worksheets, not only texts);
2. Information and Data Literacy: Managing info and content;
3. Digital Content Creation: Developing content (at least documents, pictures, images, worksheets);
4. Problem Solving: Creatively using digital technologies;
5. Problem Solving: Solving technical problems (at least related to the use of an application)*;
6. Safety and Ethics: Protecting devices (at least one of: desktop / laptop / tablet / mobile phone)*.

** The 5th and 6th skills were of equal preference.*

For the residents of Lithuania, the skills that they would like to improve were:

1. Safety and Ethics: Protecting personal data and privacy;
2. Digital Content Creation: Developing content (at least documents, pictures, images, worksheets);
3. Communication and Collaboration: Interacting (at least using an online application);



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4. Communication and Collaboration: Sharing (at least documents, pictures, images, worksheets, not only texts);
5. Communication and Collaboration: Collaborating*;
6. Information and Data Literacy: Browsing, searching and filtering*.

** The 5th and 6th skills were of equal preference.*

Summarizing the most important skills for LSA according to this survey are:

- Information and Data Literacy: Browsing, searching and filtering
- Communication and Collaboration: Sharing (at least documents, pictures, images, worksheets, not only texts);
- Digital Content Creation: Developing content (at least documents, pictures, images, worksheets);
- Problem Solving: Creatively using digital technologies.

Needs - Motivation - Opportunities

More than half of the participants have participated in an education program, course or training during their professional life in the last 2 years, even online, and more than 30% of the participants have participated in “on the job training” programs. In addition, more than half of the participants report that they would participate in an educational program for reasons related to either their existing job or to improve it.

For the residents of Italy and Lithuania the greatest barriers to participate in education and training for adults are the following (in order of choice):

1. Financial Resources (52%);
2. Work-related (46%);
3. Place and time of training (42%).

For the residents of North Macedonia:

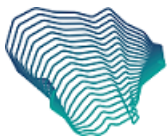
1. Work-related (46.9%);
2. Financial Resources (21.9%);
3. No-barriers (12.5%).

For the residents of Greece:

1. Place and time of training (76%);
2. Financial Resources (56%);
3. Family-related (56%).

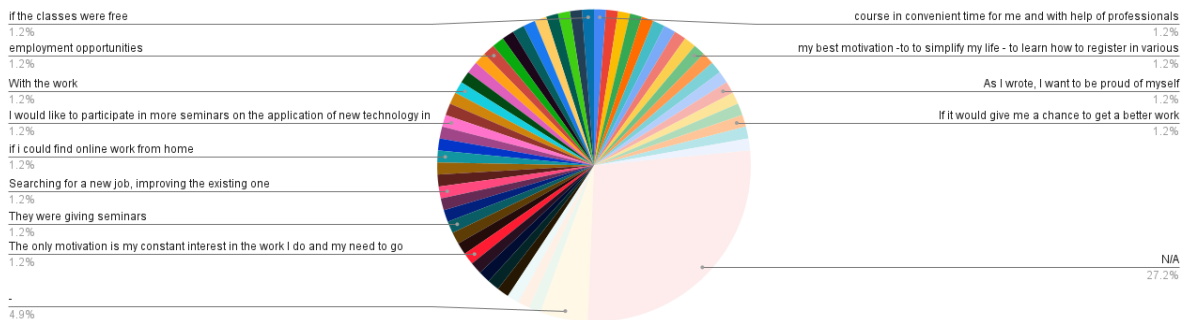
Regarding the motivations that would lead to improve their skills, in summary, the following were mentioned:

- Free classes;
- Upskilling / useful and practical skill trainings;
- If the classes are certified and the certifications usable, internationally recognized classes;
- Relevant skills to improve the career / better salary / guarantee that it will help to get a better job / employment opportunities;



- Free schedule / remote or online classes;
- Subsidies for courses;
- Funding;
- Keep up with digital innovations;
- Help others.

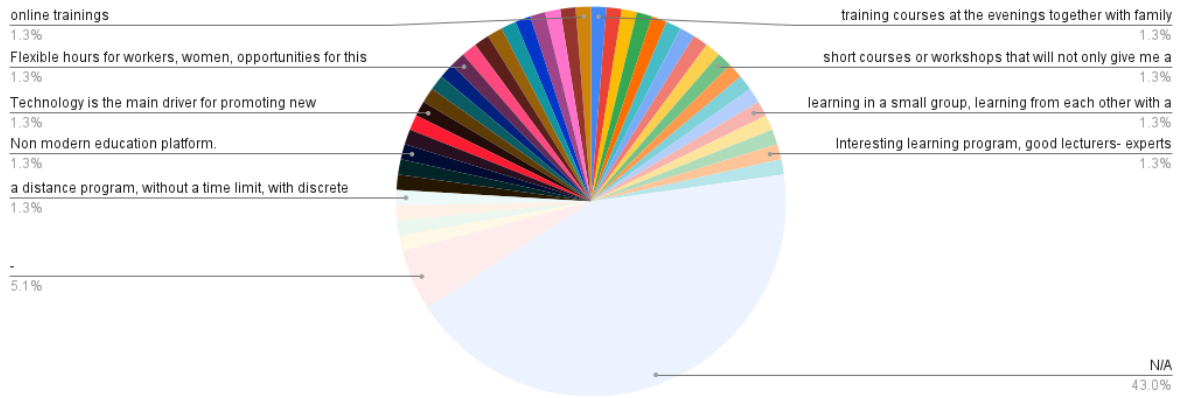
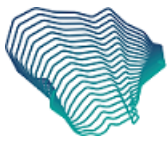
In the following chart you can see the answers of the 101 participants about the motivations that would lead to improve their skills.

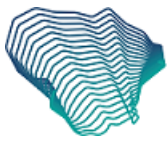


Some examples of learning opportunities and better possibilities to be involved in non-formal learning, were the following:

- Small groups;
- Good lecturers;
- Online video tutorials;
- Interesting learning program;
- More opportunities;
- Conversion in career;
- On the job training;
- Flexible schedule / online / remote training;
- Collaboration / preparing material with friends / training courses at the evening with the family;
- Digital skills training.

In the following chart you can see the answers of the 101 participants about examples of learning opportunities and better possibilities to be involved in non-formal learning.

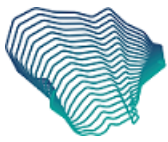




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MAPPING FRAME



Introduction

The Mapping Frame Development concerns the adults' expertise and capacity to elaborate the content, the identification of factors that support low skill adults' interest in relevant learning opportunities and better possibilities to be involved in non-formal learning, and a description of various digital skills, defined as a well-documented skillset, interlined with the identified factors that can support LSA. The results were combined in this document with a uniformed and consistent format.

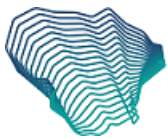
Following the Desk Research and the [Europe's Digital Decade](#), the decision of the LAB-ADA Expert Working Group (EGW) was the selection of the general EU framework of [DigComp](#), focusing on the last version (2022) of DigComp 2.2:

- DigComp 2.0, joint-research-centre.ec.europa.eu/digcomp/digital-competence-framework-20_en;
- DigComp 2.1, publications.jrc.ec.europa.eu/repository/handle/JRC106281;
- DigComp 2.2, publications.jrc.ec.europa.eu/repository/handle/JRC128415 (pdf).

The new integrated **DigComp 2.2 Framework** (22 March 2022) “focuses on examples of the knowledge, skills and attitudes applicable to each competence (dimension 4). For each of the 21 competences, 10-15 statements are given to illustrate timely and updated examples that highlight contemporary themes. As such, the update does not alter descriptors of the conceptual reference model and it does not change how proficiency levels are outlined (Dimension 3). Also, use cases and learning scenarios presented in Dimension 5 remain the same”.

For the purposes of the **LAB-ADA Mapping Framework**, a broad spectrum of factors (individual and contextual) associated with the **5 main competence areas** was explored and explicated. As a 1st dimension, named **Pillars**, there's the gaining of **18 skills for the LSAs**, while the 2nd dimension named **Skillset** starts from the initial 21 competences of the DigComp Framework, according to the needs analysis of the Survey Report.

PILLAR <i>(dimension 1: Competence Areas)</i>	SKILLSET <i>(dimension 2: Competences focusing on Skills)</i>
Pillar 1: Information and Data Literacy	1.1 Browsing, searching and filtering 1.2 Evaluating info and content 1.3 Managing info and content
Pillar 2: Communication and Collaboration	2.1 Interacting 2.2 Sharing 2.3 Engaging in citizenship 2.4 Collaborating 2.5 Netiquette
Pillar 3: Digital Content Creation	3.1 Developing content 3.2 Integrating and re-elaborating



Pillar 4: Safety and Ethics	3.3 Copyright and licenses 4.1 Protecting devices 4.2 Protecting personal data and privacy 4.3 Protecting health and well-being 4.4 Protecting the environment
Pillar 5: Problem Solving	5.1 Solving technical problems 5.2 Identifying needs and responses 5.3 Creatively using digital technologies

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DIMENSION 1 - COMPETENCE AREA
1. INFORMATION AND DATA LITERACY

DIMENSION 2 - COMPETENCE
1.3 MANAGING DATA, INFORMATION AND DIGITAL CONTENT

To organise, store and retrieve data, information, and content in digital environments. To organise and process them in a structured environment.

DIMENSION 3 - PROFICIENCY LEVEL	
FOUNDATION	1. At basic level and with guidance, I can: <ul style="list-style-type: none"> Identify how to organise, store and retrieve data, information and content in a simple way in digital environments. recognise where to organise them in a simple way in a structured environment.
	2. At basic level and with autonomy and appropriate guidance where needed, I can: <ul style="list-style-type: none"> Identify how to organise, store and retrieve data, information and content in a simple way in digital environments. recognise where to organise them in a simple way in a structured environment.
INTERMEDIATE	3. On my own and solving straightforward problems, I can: <ul style="list-style-type: none"> select data, information and content in order to organise, store and retrieve them in a routine way in digital environments. organise them in a routine way in a structured environment.
	4. Independently, according to my own needs, and solving well-defined and non-routine problems, I can: <ul style="list-style-type: none"> organise information, data and content to be easily stored and retrieved. organise information, data and content in a structured environment.
ADVANCED	5. As well as guiding others, I can: <ul style="list-style-type: none"> manipulate information, data and content for their easier organisation, storage and retrieval. carry out their organisation and processing in a structured environment.
	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"> adapt the management of information, data and content for the most appropriate easy retrieval and storage. adapt them to be organised and processed in the most appropriate structured environment.
HIGHLY SPECIALIZED	7. At highly specialised level, I can: <ul style="list-style-type: none"> create solutions to complex problems with limited definition that are related to managing data, information, and content for their organisation, storage and retrieval in a structured digital environment. integrate my knowledge to contribute to professional practices and knowledge and to guide others in managing data, information and digital content in a structured digital environment.
	8. At the most advanced and specialised level, I can: <ul style="list-style-type: none"> create solutions to solve complex problems with many interacting factors that are related to managing data, information, and content for their organisation, storage and retrieval in a structured digital environment. propose new ideas and processes to the field.

DIMENSION 4 - EXAMPLES OF KNOWLEDGE, SKILLS AND ATTITUDES	
KNOWLEDGE	31. Aware that many applications on the internet and mobile phones collect and process data (personal data, behavioural data and context data) that the user can access or retrieve, for example, to monitor their activities online (e.g. clicks in social media, searches on Google) and offline (e.g. daily steps, bus rides on public transport).
	32. Aware that data (e.g. numbers, text, images, sounds) to be processed by a program, they have to be first properly digitised (i.e. digitally encoded).
	33. Knows that data collected and processed, for example by online systems, can be used to recognise patterns (e.g. repetitive) in new data (i.e. other images, sounds, mouse clicks, online behaviours) to further optimise and personalise online services (e.g. advertisements).
	34. Aware that sensors used in many digital technologies and applications (e.g. facial tracking cameras, virtual assistants, wearable technologies, mobile phones, smart devices) generate large amounts of data, including personal data, that can be used to train AI systems. (AI)
SKILLS	35. Knows that open data repositories exist where anyone can get data to support some problem solving activities (e.g. citizens can use open data to generate thematic maps or other digital content).
	36. Knows how to collect digital data using basic tools (such as online forms, and present them in an accessible way (e.g. using headers in tables)).
	37. Can apply basic statistical procedures to data in a structured environment (e.g. spreadsheet) to produce graphs and other visualisations (e.g. histograms, bar charts, pie charts).
	38. Knows how to interact with dynamic data visualisation and can manipulate dynamic graphs of interest (e.g. as provided by Eurostat, government websites).
ATTITUDES	39. Can differentiate between different types of storage locations (local devices, local network, cloud) that are the most appropriate to use (e.g. data on the cloud is available anytime and from anywhere, but has implications for access time).
	40. Can use data tools (e.g. databases, data mining, analysis software) designed to manage and organise complex information to support decision-making and solving problems.
	41. Considers transparency when manipulating and presenting data to ensure reliability, and spots data that are processed with underlying motives (e.g. unethical, profit manipulation) or in misleading ways.
	42. Watchful of accuracy when evaluating sophisticated representations of data (e.g. tables or visualisations) as they could be used to mislead one's judgement by trying to give a false sense of objectivity.

DIMENSION 5 - USE CASES	
FOUNDATION	2
	EMPLOYMENT SCENARIO: job seeking process At home with my sister who I ask whenever I need: <ul style="list-style-type: none"> I can identify how and where to organise and keep track of job ads in a job app (e.g. www.indeed.com) of my smartphone in order to retrieve them when I need them along my job seeking.
LEARNING SCENARIO:	prepare group work with my classmates In the classroom with my teacher who I can consult whenever I need: <ul style="list-style-type: none"> I can identify an app in my tablet to organise and store links to those websites, blogs and digital databases related with a specific topic of literature and use it to retrieve them when needed for my report.

Fig. 1: The structure of the DigCom2.2. Framework (Source: [DigComp 2.2, 2022](#))

The **DigComp 2.2** framework uses the following structure (see Fig 1).

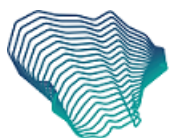
- Dimension 1: Competence Area
- Dimension 2: Competence
- Dimension 3: Professional Level
- Dimension 4/5: Examples and Learning Scenarios

The LAB-ADA Mapping Frame focuses at the dimension 3 and 4 trying to match these elements to the needs of LSAs. This means that this framework chooses only the foundation and intermediate level and selects appropriate or new examples from the 4th and 5th dimensions.

A small **red dot** is used to introduce the new Dimension 4. It helps the reader quickly spot the new updated part.

Artificial intelligence, Remote Working and Digital Accessibility examples are highlighted with **(AI)**, **(RW)**, **(DA)**.

DIMENSION 4 - EXAMPLES OF KNOWLEDGE, SKILLS AND ATTITUDES	
KNOWLEDGE	1. Knows that some online content in search result may not be open access or freely available and may require a fee or signing up for a service in order to access it.
	2. Aware that online content that is available to users at no monetary cost is often paid for by advertising or by selling the user's data.
	3. Aware that search results, social media activity streams and content recommendations on the internet are influenced by a range of factors. These factors include the search terms used, the context (e.g. geographical location), the device (e.g. laptop or mobile phone), local regulations (which sometimes dictate what can or cannot be shown), the behaviour of other users (e.g. trending hashtags or recommender algorithms), and the user's past on the behaviour across the internet.
	4. Aware that search engines, social media and content platforms often use AI algorithms to generate responses that are adapted to the individual user. Users continue to see similar results or content. This is often referred to as "personalisation". (AI)
	5. Aware that AI algorithms work in ways that are usually not visible or easily understood by users. This is often referred to as "black-box" decision-making as it may be impossible to trace back how and why an algorithm makes specific suggestions or predictions. (AI)



There is also something new that could be very useful for the LAB-ADA Project. The new integration of DigComp

introduces the idea of “HIGHLIGHTED EXAMPLES” at the 4 dimensions (page 8, see Fig. 2). At the 4th Dimension, we can introduce our examples that could be highlighted as “(LSA)”.

Each of the **5 Pillars** of the LAB-ADA Mapping Framework is constructed based on the following **7 related fields**:

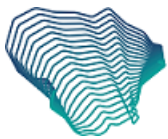
1. Title of the **Pillar** (dimension 1: Competence Areas)
2. **Skillsets** of the Pillar (dimension 2: Competences focusing on skills)
3. Skillsets **Short Description** (from DigComp Framework)
4. **Foundation & Intermediate Level** (dimension 3: Professional Level, *with guidance at foundation level and with autonomy and appropriate guidance where needed at intermediate level*)
5. **Examples** (dimension 4 & 5: Examples and Learning Scenarios)
6. **Examples for related story implementation** (at least 5 examples, from which 4 of them is used for the development of the R2 stories)
7. **Quotes, References and other sources** (of the Pillar)

Pillar 1: Information and Data Literacy

Pillar 1 <i>(dimension 1)</i>	Skillsets <i>(dimension 2)</i>	Skillsets Short Description <i>(DigComp Framework)</i>
Information and Data Literacy	1.1 Browsing, searching and filtering 1.2 Evaluating info and content 1.3 Managing info and content	1.1 To articulate information needs, to locate and retrieve digital data, information and content. 1.2 To judge the relevance of the source and its content. 1.3 To store, manage, and organize digital data, information and content

Examples for related story implementation

1. *Creation of any kind of article while collecting data from the web and relevant documents*
2. *Exploring different search engines and providing data while evidencing differences*
3. *Searching for a relevant job positions in the field on the web*
4. *Creation of a calendar of events to attend for the following year, searched on the web and social media*
5. *Collecting information from different online articles and guidelines about how to write a good CV and present own skills*

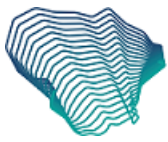


Pillar 2: Communication and collaboration

Pillar 2 (dimension 1)	Skillsets (dimension 2)	Skillsets Short Description (DigComp Framework)
Communication and collaboration:	2.1 Interacting 2.2 Sharing 2.3 Engaging in citizenship 2.4 Collaborating 2.5 Netiquette	<p>2.1 To interact through a variety of digital technologies and to understand appropriate digital communication means for a given context.</p> <p>2.2 To share data, information and digital content with others through appropriate digital technologies. To act as an intermediary, to know about referencing and attribution practices.</p> <p>2.3 To participate in society through the use of public and private digital services and participatory citizenship. To seek opportunities for self-empowerment and for participatory citizenship through appropriate digital technologies.</p> <p>2.4 To use digital tools and technologies for collaborative processes, and for co-construction and co-creation of data, resources and knowledge. To interact, communicate and collaborate through digital technologies while being aware of cultural and generational diversity.</p> <p>2.5 To be aware of behavioral norms and know-how while using digital technologies and interacting in digital environments. To adapt communication strategies to the specific audience and to be aware of cultural and generational diversity in digital environments.</p>

Examples for related story implementation

1. *Communication around the world and set an appointment;*
2. *Synchronous Communication in any language using mobile devices;*
3. *Searching and giving feedbacks to a destination on the planet;*
4. *Searching for Mass Media in order to move from a place to another;*
5. *Use the proper language to communicate online with the other;*
6. *Sharing ideas and files with others;*
7. *Communicate effectively using non-direct digital tools;*
8. *Organize "social" groups/use tools to engage the citizenships.*



Pillar 3: Digital content creation

Pillar 3 (dimension 1)	Skillsets (dimension 2)	Skillsets Short Description (DigComp Framework)
Digital content creation	3.1 Developing content 3.2 Integrating and re-elaborating 3.3 Copyright and licenses	3.1 To create and edit digital content in different formats, to express oneself through digital means. 3.2 To modify, refine and integrate new information and content into an existing body of knowledge and resources to create new, original and relevant content and knowledge. 3.3 To understand how copyright and license apply to digital information and content.

Examples for related story implementation

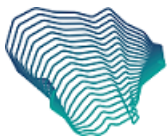
1. *Creation of a complete social media profile;*
2. *Creation of a Playlist using AI tools (songs, videos etc.);*
3. *Creation and curation of elegant-complete documents, posts with links;*
4. *Scanning and organize non-digital archives (image processing);*
5. *Create and organize records of data (worksheet processing);*
6. *Creation of a video with my profile and my competences.*

Pillar 4: Safety and Ethics

Pillar 4 (dimension 1)	Skillsets (dimension 2)	Skillsets Short Description (DigComp Framework)
Safety and Ethics	4.1 Protecting devices 4.2 Protecting personal data and privacy 4.3 Protecting health and well-being 4.4 Protecting the environment	To protect devices, content, personal data and privacy in digital environments. To protect physical and psychological health, and to be aware of digital technologies for social well-being and social inclusion. To be aware of the environmental impact of digital technologies and their use.

Examples for related story implementation

1. *Creating a video telling a story about the “Trojan Horse”, on the risk of receiving posts and messages from followers with false profiles and consequences;*



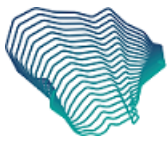
2. *Creating a video telling a Story about “Watch and trick”, on the risks associated with phishing attempts;*
3. *Create a video that tells a story about the “Bad wolf” and know how to detect risks and threats while using social media;*
4. *Creating a video telling a Story about the “Making strong password” and the risk connected with not using passwords in a proper way;*
5. *About the Appropriate and inappropriate digital content to share on digital platforms (see the topic covered on video No. 3).*

Pillar 5: Problem solving

Pillar 5 (dimension 1)	Skill Sets (dimension 2)	Skill sets Short Description (DigComp Framework)
Problem solving	5.1 Solving technical problems 5.2 Identifying needs and responses 5.3 Creatively using digital technologies 5.4 Identifying digital competence gaps	<p>5.1. To identify technical problems when operating devices and using digital environments, and to solve them (from trouble-shooting to solving more complex problems).</p> <p>5.2. To assess needs and to identify, evaluate, select and use digital tools and possible technological responses and to solve them. To adjust and customize digital environments to personal needs (e.g. accessibility). To resolve conceptual problems and problem situations in digital environments.</p> <p>5.3. To use digital tools and technologies to create knowledge and to innovate processes and products. To engage individually and collectively in cognitive processing to understand and resolve conceptual problems and problem situations in digital environments.</p> <p>5.4. To understand where one’s own digital competence needs to be improved or updated. To be able to support others with their digital competence development. To seek opportunities for self-development and to keep up-to-date with the digital evolution.</p>

Examples for related story implementation

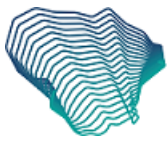
1. *Opening an email attachment that does not open on the first try;*
2. *The computer cannot find a printer;*
3. *Internet connection keeps dropping out;*
4. *Using speech-to-text and text-to-speech software as needed;*
5. *Creating short video greetings;*



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6. *Creating colorful invitations to mark the anniversary;*
7. *Finding useful keyboard shortcuts on the Internet;*
8. *Defining fake news and finding alternative sources on the same topic;*
9. *Searching for the best tools for self-assessment of personal aptitude, digital skills testing and certification on the Internet.*



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References

Alexiou, A., & Schippers, M. C. (2018). Digital game elements, user experience and learning: A conceptual framework. *Education and Information Technologies*, 23(6), 2545-2567.
<https://link.springer.com/article/10.1007/s10639-018-9730-6>

Andreas Schleicher (2022). A fresh start in education <https://www.youtube.com/watch?v=xIQ9kJbUrNs&t=8s>

Boyadjieva, P., & Ilieva-Trichkova, P. (2018). Adult education as a common good: conceptualisation and measurement. *International Journal of Lifelong Education*, 37(3), 345-358.
<https://www.tandfonline.com/doi/full/10.1080/02601370.2018.1478458>

Brieger, E., Arghode, V., & McLean, G. (2020). Connecting theory and practice: reviewing six learning theories to inform online instruction. *European Journal of Training and Development*.
https://www.emerald.com/insight/content/doi/10.1108/EJTD-07-2019-0116/full/html?casa_token=qdHGuzUwomMAAAAA:5P7WBx-NNMUZzC3cSe2FoAujVa1UZrAxY0VJbZl0ezW_9hfWGoM8H5dfgQ4vJ_DkwpoWbw8Eva3R1jSR4Rr69QxFVbm2ufh55S-Ix1z12NcVuWiNohQ

Cascio, E. U., & Narayan, A. (2022). Who needs a fracking education? The educational response to low-skill-biased technological change. *ILR Review*, 75(1), 56-89.
<https://journals.sagepub.com/doi/abs/10.1177/0019793920947422>

De Paepe, L., Zhu, C., & Depryck, K. (2018). Online Dutch L2 learning in adult education: educators' and providers' viewpoints on needs, advantages and disadvantages. *Open Learning: The Journal of Open, Distance and e-Learning*, 33(1), 18-33. <https://www.tandfonline.com/doi/full/10.1080/02680513.2017.1414586>

DigComp https://joint-research-centre.ec.europa.eu/digcomp_en

DigComp 2.0, 2.1, 2.2

https://joint-research-centre.ec.europa.eu/digcomp/digital-competence-framework-20_en,

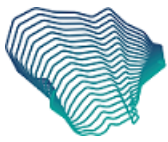
<https://publications.jrc.ec.europa.eu/repository/handle/JRC106281>,

<https://publications.jrc.ec.europa.eu/repository/handle/JRC128415>

DigCompEdu https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-framework_en

Farashahi, M., & Tajeddin, M. (2018). Effectiveness of teaching methods in business education: A comparison study on the learning outcomes of lectures, case studies and simulations. *The international journal of Management Education*, 16(1), 131-142.

https://www.sciencedirect.com/science/article/abs/pii/S1472811717303294?casa_token=f7zo3EZy01wAAAAA:z3rS4dxCeWonyy9ZLZAajWP3VvSIZX3ramCYWtjF4rDziDsbVe0WICK4cKkESMTmiOp2ErH_8m8



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Graesser, A. C., Fiore, S. M., Greiff, S., Andrews-Todd, J., Foltz, P. W., & Hesse, F. W. (2018). Advancing the science of collaborative problem solving. *Psychological Science in the Public Interest*, 19(2), 59-92. <https://journals.sagepub.com/doi/abs/10.1177/1529100618808244>

Greenhow, C., & Galvin, S. (2020). Teaching with social media: Evidence-based strategies for making remote higher education less remote. *Information and Learning Sciences*. <https://www.emerald.com/insight/content/doi/10.1108/ILS-04-2020-0138/full/pdf?title=teaching-with-social-media-evidence-based-strategies-for-making-remote-higher-education-less-remote>

Foley, G. (Ed.). (2020). *Understanding adult education and training*. Routledge. https://books.google.gr/books?hl=en&lr=&id=NshyDwAAQBAJ&oi=fnd&pg=PT5&dq=adult+education+framework&ots=Zglrq-kULH&sig=WdemP3AF36ipweTR679R8BhM08U&redir_esc=y#v=onepage&q=adult%20education%20framework&f=false

López-Meneses, E., Sirignano, F. M., Vázquez-Cano, E., & Ramírez-Hurtado, J. M. (2020). University students' digital competence in three areas of the DigCom 2.1 model: A comparative study at three European universities. *Australasian Journal of Educational Technology*, 36(3), 69-88. <https://ajet.org.au/index.php/AJET/article/view/5583/1650>

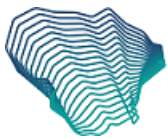
Nedungadi, P. P., Menon, R., Gutjahr, G., Erickson, L., & Raman, R. (2018). Towards an inclusive digital literacy framework for digital India. *Education+ Training*. <https://www.emerald.com/insight/content/doi/10.1108/ET-03-2018-0061/full/html>

OECD 2019, *Getting Skills Right Engaging low-skilled adults in learning*. <https://www.oecd.org/employment/emp/engaging-low-skilled-adults-2019.pdf>

Rasi, P., Vuojärvi, H., & Rivinen, S. (2021). Promoting media literacy among older people: A systematic review. *Adult Education Quarterly*, 71(1), 37-54. <https://journals.sagepub.com/doi/full/10.1177/0741713620923755>

Rogers-Shaw, C., Carr-Chellman, D. J., & Choi, J. (2018). Universal design for learning: Guidelines for accessible online instruction. *Adult learning*, 29(1), 20-31. <https://journals.sagepub.com/doi/abs/10.1177/1045159517735530>

World Economic Forum. (2016). *New Vision for Education, Fostering Social and Emotional Learning Through Technology*. World Economic Forum Publications. http://www3.weforum.org/docs/WEF_New_Vision_for_Education.pdf



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