



Increase
Digital
Competences
to Promote Inclusion

InDiCo - Increase Digital Competences to Promote Inclusion

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Assessment and validation of digital competences at levels 1 and 2 for persons with learning difficulties

**Country Report
Greece**



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1 Introduction

The European Commission's (2023) targets for the digital decade envisage that at least 80% of those aged 16-74 shall have at least basic digital skills by 2030. DigComp 2.2, the digital competence framework for citizens (Vuorikari et al., 2022), which allows the categorisation and comparability of digital skills on eight levels, plays a key role in the European Commission's digital strategy.

Although the DigComp framework includes basic digital competences at levels 1 and 2, and the digital strategy aims for 'digital skills for all', persons with learning difficulties are at risk of exclusion. In the InDiCo project we agreed on using the term 'persons with learning difficulties' instead of 'persons with intellectual disabilities' to describe persons who experience challenges in all areas of life due to intellectual difficulties.

'Learning difficulties' encompass a range of challenges with regard to learning arising from various factors which can be genetic, neurobiological, cognitive, motivational, affective, or socioeconomic factors. It includes both general learning deficits and specific disorders like reading, spelling, or arithmetic difficulties. Diagnosis and intervention must be tailored to the individual, with some factors being more modifiable than others. Terminology and policies surrounding learning difficulties vary widely across regions and educational systems. Contemporary definitions are largely descriptive, focusing on addressing the specific needs of individuals to facilitate their learning progress in all areas of life (Lenhard & Lenhard, 2013).

Often training programmes are inaccessible to them, or the adult learning and education staff who support and accompany persons with learning difficulties have low digital competences themselves. Against this backdrop, the InDiCo project aims for a clearer understanding of the competences required by persons with learning difficulties in their digital interactions, a competence-based approach for adult learning and education staff in the assessment and training of digital competences, and improved validation of digital competences in connection with the DigComp framework.

As an introduction to this report, DigComp is briefly explained and the central concepts of assessment and validation are introduced, followed by an explanation of the methodology.

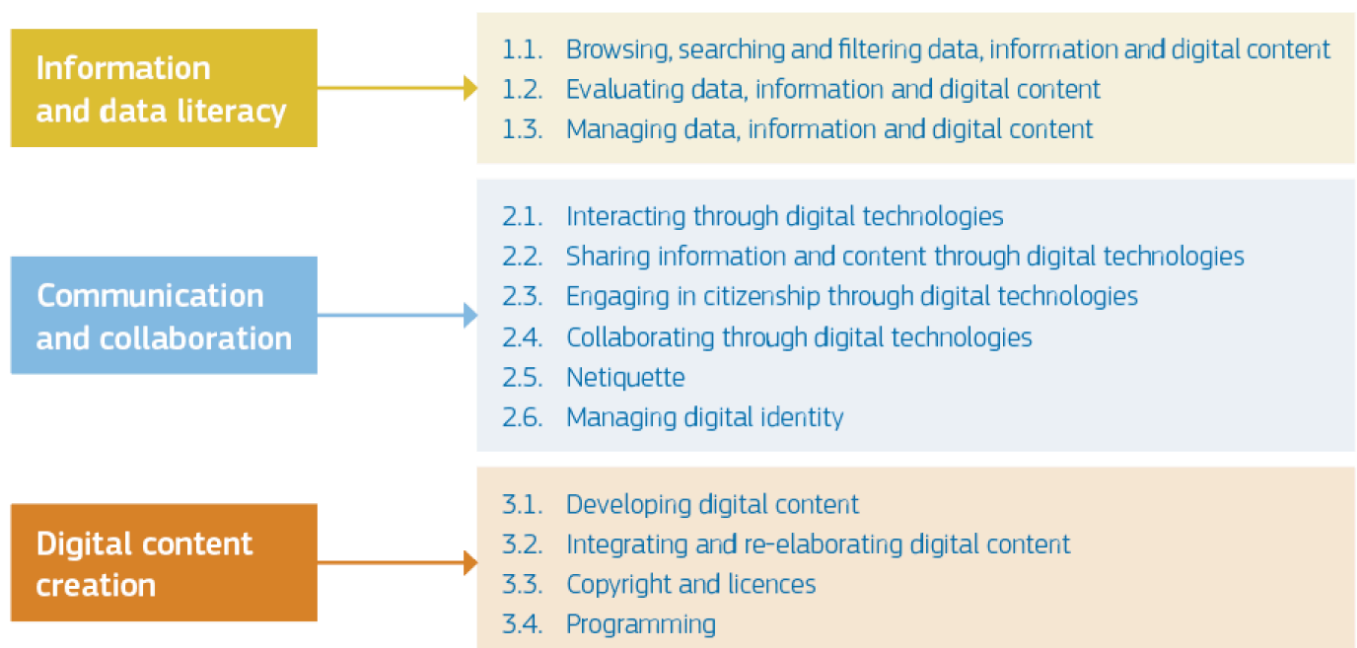
DigComp 2.2: The Digital Competence Framework for Citizens

DIGCOMP, a framework for developing and understanding digital competence in Europe, was first published in 2013 (Ferrari, 2013). Digital competence has been acknowledged as one of the eight key competences for Lifelong Learning by the European Union. Digital competence can be broadly defined as the confident, critical and creative use of information and communication technology to achieve goals related to work, employability, learning, leisure, inclusion and/or participation in society (p. 2). The DIGCOMP framework aims to support the development of digital competence of individuals in Europe and represents an attempt to allow

for self-assessment based on five areas of digital competence and three proficiency levels (p. 14) and presents a detailed framework with an in-depth description of the different aspects of 21 digital competences (pp. 15–36).

The latest version to date is DigComp 2.2, the digital competence framework for citizens (Vuorikari et al., 2022). It is an EU-wide tool to improve citizens' digital competence, help policy-makers formulate policies that support digital competence building, and plan education and training initiatives to improve the digital competence of specific target groups (p. 2). The DigComp framework provides a common language to identify and describe the key areas of digital competences – information and data literacy; communication and collaboration; digital content creation; safety; and problem solving – in terms of knowledge, skills, and attitudes (p. 3). The use of agreed vocabulary allows to consistently apply the competence-based approach to instructional planning, assessment and monitoring (p. 4) “Ultimately, it is up to the users, institutions, intermediaries or initiative developers to adapt the reference framework to their needs when tailoring interventions (e.g. curriculum development) to fit the specific needs of target groups” (p. 4).

The DigComp 2.2 encompasses five competence areas with a total of 21 competences and eight proficiency levels (p. 4):





As mentioned above, the InDiCo project puts proficiency levels 1 and 2 to the fore as these are the basic levels (“foundation”). Proficiency level 1 and level 2 are distinguished by the degree of guidance needed. The following example derives from competence area 2, which is “Communication and collaboration” and is given for competence 2.4 “Collaborating through digital technologies” (p. 21):

FOUNDATION	1	At basic level and with guidance, I can:	<ul style="list-style-type: none"> • choose simple digital tools and technologies for collaborative processes.
	2	At basic level and with autonomy and appropriate guidance where needed, I can:	<ul style="list-style-type: none"> • choose simple digital tools and technologies for collaborative processes.

In the framework, selected examples of learning outcomes in the form of knowledge, skills and attitudes are given, and selected examples of “use cases”, either from an employment scenario or a learning scenario, are presented (e.g., pp. 12–13).

Assessment and validation of learning outcomes

Validation of non-formal and informal learning (VNFIL) can be conceptualised as a powerful tool to support disadvantaged and vulnerable adults, highlighting the importance of introducing and advocating for alternative pedagogical approaches where the assessment and validation of (prior and in situ) learning is seen “as a learning process” (Andersson, 2017), rather than a policy-driven summative assessment and certification for capacity building purposes. VNFIL prioritises and places the individual at the centre (Villalba-García, 2021, p. 357).

With this in mind, and in view of the project's objectives, two key concepts need to be highlighted:

- Validation means a process of confirmation by an authorised body that an individual has acquired learning outcomes measured against a relevant standard and consists of the following four distinct phases: identification, documentation, assessment, and certification (Cedefop, 2023, p. 9).
- Assessment is normally referred to as the stage in which an individual's learning outcomes are compared against specific reference points and/or standards. It needs to be designed to capture and assess the learning specific to each individual, so various tools need to be considered. In some cases, written tests will be sufficient; in other cases, demonstrations, practical tests and evaluation of other forms of evidence will be required (p. 16).

The InDiCo project considers the DigComp framework as a relevant standard for the assessment and validation of learning outcomes. However, we also intend to include competencies required by persons with learning difficulties in their digital interactions, thus prioritising the learner's voice and putting the individual at the centre. We also recognise the value of other relevant frameworks, such as the UNESCO (2021) framework for media and information literacy.

Methodology

Drawing on qualitative social research (Given, 2008) and addressing the digital inclusion of persons with learning difficulties as a social issue (Bloor, 2011), the following research questions guided the data collection and analysis process to gain an understanding of the current state of digital inclusion of persons with learning difficulties in relation to the EU DigComp framework, specifically in relation to proficiency levels 1 and 2. The findings are presented in six reports (for Austria, Germany, Greece, Portugal, Spain, and at a pan-European level).

- What is the status quo of the assessment and validation of digital competences at levels 1 and 2 of the DigComp framework for persons with learning difficulties?
- What are the challenges and gaps regarding the assessment and validation of digital competences at levels 1 and 2 of the DigComp framework for persons with learning difficulties?
- To what extent are digital competences currently assessed and validated with persons with learning difficulties?

We conducted web searches for information on relevant bottom-up initiatives for persons with learning difficulties (project websites, evaluation reports and the like) based on relevant keywords, screened the content with regard to the promotion, assessment and validation of basic digital competences, and documented these materials (Prior, 2011, p. 95).

We identified key informants (Fetterman, 2008) as possible respondents with first-hand knowledge of the assessment and validation of basic digital competences for persons with learning difficulties and asked them to share their knowledge, experiences and thoughts on digital inclusion of persons with learning difficulties (or other vulnerable or marginalised groups). Data was collected via an online questionnaire using Google Forms and the survey data was processed anonymously.

As the data was collected mainly through narrative responses to open-ended questions, the online survey is considered a qualitative method (Julien, 2008a, p. 846).

- The first questions collected information about the respondents' professional background.
- The next questions collected information about their professional expertise: How they promote the digital competences of persons with learning difficulties (or other vulnerable or marginalised groups) to contribute to digital inclusion; what elements of their project, initiative or work are key to promoting the digital inclusion of persons with support needs; what challenges they have encountered in their project, initiative or work related to the assessment and/or validation of basic digital competences and how they have dealt with them; and finally, what further challenges do they see for the assessment and validation of basic digital skills for persons with learning difficulties (or other support needs).
- The following set of questions explored whether a standard or reference framework is being used to assess and/or validate basic digital competences in their project, initiative or work. And if so, which standard or reference framework is being used. This was followed by a question on whether they were familiar with DigComp, the European digital competence framework, and if so, what is the relevance of DigComp in their project, initiative or work. This was followed by a question on whether they use a national standard or reference framework for digital competences and if so, they were asked to provide the name of this national standard or reference framework and its relevance to their project, initiative or work.
- The last two questions explored respondents' expertise by asking what they thought was the potential of assessing and validating basic digital competences for persons with learning difficulties (or other support needs). And what they think could be helpful to further promote the assessment and validation of basic digital skills for persons with learning difficulties (or other support needs).

In order to provide answers to the research questions, we analysed the responses using the qualitative method of content analysis (Julien, 2008b). The respondents' knowledge, experiences and thoughts are presented in this report to shed light on the status quo of the

assessment and validation processes of basic digital competences with regard to persons with learning difficulties.

2 Background of the respondents

For the online survey we contacted 4 key informants with first-hand knowledge of the training and/or assessment and validation of basic digital competences, and four key informants answered the questionnaire.

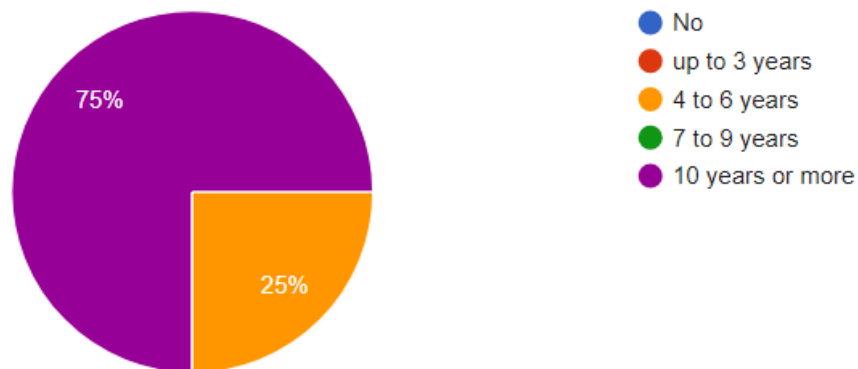
In this section, we present the respondents' professional experience and expertise.

Years of professional experience of the respondents in the field of education, training, qualification, skills development (adult education/non-formal learning)

Three respondents have ten years or more of professional experience in the field of education, training, qualification, skills development (adult education/non-formal learning). One respondent indicated that he or she has four to six years of professional experience in this field.

How many years of professional experience do you have in education, training, retraining, skills development (adult education/non-formal learning)?

4 responses

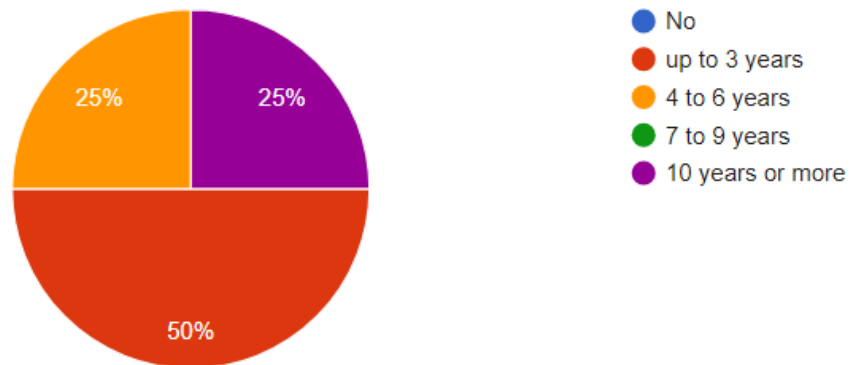


Years of professional experience of the respondents in assessing and/or validating basic digital competences

All four respondents have professional experience in assessing and/or validating digital competences. Two respondents have up to three years of professional experience, one respondent has four to six years of professional experience, and another respondent has 10 years or more of professional experience in assessing and/or validating digital competences.

How many years of professional experience do you have in assessing and/or validating key digital competences?


4 responses



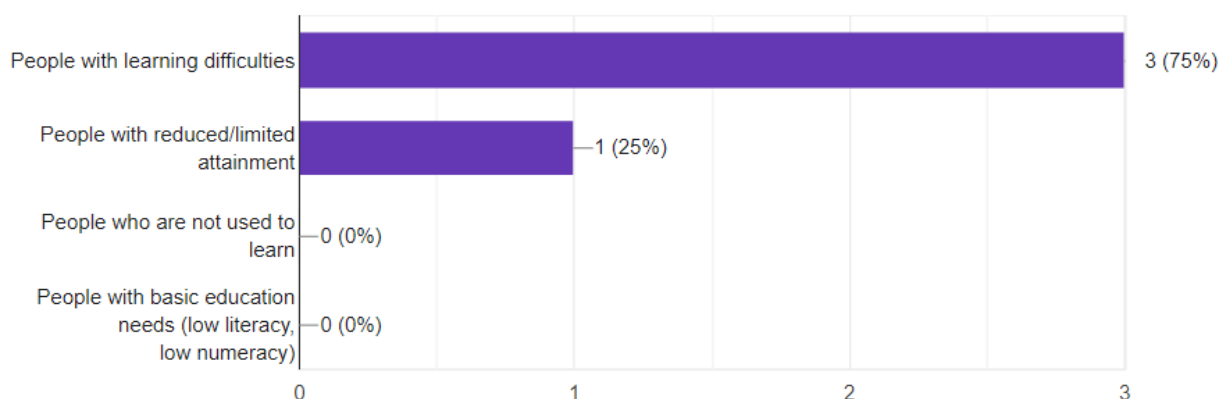
Target group(s) that the respondents mainly work with (multiple answers were possible)

Three respondents work with persons with learning difficulties. One response indicated that its respondent works with people with reduced/limited attainment.

Which target group(s) are you mainly working for? (Multiple answers may be given)

 [Transcription](#)

4 responses



3 Status quo of the assessment and validation of digital competences at levels 1 and 2 with regard to persons with learning difficulties

Combining insights from the online questionnaire and the comprehensive report, it's evident that Greece has made efforts in promoting digital inclusion, notably through initiatives like the Digital Transformation Strategy and the National Coalition for Digital Skills and Jobs. These efforts show the country's commitment to fostering digital literacy across all parts of society, including Persons with Learning Difficulties.

National efforts to make the population digitally literate:

- The Digital Transformation Strategy focuses on integrating digital technologies into various sectors, enhancing accessibility to digital tools and competencies for all citizens. This framework is crucial for ensuring that vulnerable groups, including persons with learning difficulties, receive the support they need to thrive in a rapidly evolving digital landscape (Hellenic Republic Government, 2020).
- The National Coalition for Digital Skills and Jobs aims to foster collaboration among stakeholders, including government bodies, educational institutions, and civil society organisations, to improve digital skills across the workforce. This coalition is essential in addressing the skills gap and promoting inclusive training programs tailored to the specific requirements of individuals with learning difficulties (Hellenic Republic Government - Ministry of Digital Governance, 2024).
- The National Academy for Digital Skills in Greece is an initiative launched by the Ministry of Digital Government. Its primary goal is to provide free access to high-quality digital education services for all Greek citizens. The educational material is free to any citizen interested in improving their digital competences. The educational content is provided by Greek academic institutions, international companies, banks, telecommunications providers and digital education organisations. Moreover, it encompasses a self-assessment tool, which enables citizens to assess their general digital skills and identify their level. The implementation approach is based on the European Digital Competences Framework DigComp v2.1. (Greek Government, 2022a).
- In addition, Greece has developed and delivered digital literacy programmes for seniors. The Ministry of Digital Governance launched the '3rd e-age initiative' ("3η e-λικία") which aimed to digitally empower people aged 60+ (Greek Government, 2022b).

Moreover, these initiatives are aligned with the European Digital Competence Framework (DigComp), which provides a structured approach to assessing and developing digital skills.

This alignment demonstrates Greece's dedication to adhering to international standards in digital skills development.

However, challenges persist in assessing and validating digital competences for persons with learning difficulties.

Results of the survey

In the online questionnaire, 75% of respondents reported not using a standard or reference framework, while only 25% indicated the use of the International Computer Driving Licence (ICDL). The International Computer Driving License (ICDL) is a globally recognized certification that promotes digital literacy through structured training and assessment in essential computer skills. Its modular approach allows learners to acquire skills at their own pace, covering areas such as word processing, spreadsheets, and internet usage. By achieving ICDL certification, individuals can enhance their employability and demonstrate their competence in a digitally driven job market (ICDL Foundation, 2024).

This finding highlights the absence of a National Standard or Reference Framework tailored specifically to persons with learning difficulties. Despite awareness of existing frameworks, respondents emphasised the need for specialised assessment tools and customised training modules to effectively evaluate and address the unique needs of persons with learning difficulties.

The results of the online survey show that all respondents are familiar with DigComp, the European Digital Competence Framework, which outlines the essential digital competences needed in today's society. However, the expertise and experience shared by respondents suggest that there is considerable potential for assessing and validating basic digital competences for persons with learning difficulties. They recommend targeted interventions, the development of special manuals and training modules, and exploration of tools like Microsoft Office Specialist Certification.

The responses from the questionnaire align with information in the comprehensive report, highlighting the necessity for targeted interventions and the development of specialised resources for persons with learning difficulties in the digital realm.

4 Challenges and gaps regarding the assessment and validation of digital competences at levels 1 and 2 with regard to persons with learning difficulties

As already mentioned in the introduction, this report is based on the results of an online survey and of a screening to explore the promotion, assessment and validation of basic digital competences at levels 1 and 2 with regard to persons with learning difficulties.

The analysis of the current landscape reveals significant challenges and gaps in the assessment and validation of digital competences for persons with learning difficulties. While there have been advancements in digital inclusion initiatives, several barriers hinder the effective assessment and validation of digital skills.

Lack of a coordinated national strategy

A significant gap identified is the absence of a coordinated national strategy dedicated specifically to persons with learning difficulties. Although Greece has made strides towards digital inclusion through various initiatives, there remains a need for centralised efforts focusing on addressing the digital competences of persons with learning difficulties. This decentralisation complicates comprehensive support and coordination across different sectors and organisations, leading to fragmented services and inconsistent outcomes for individuals.

Need for collaboration among stakeholders

The responses from key informants emphasise the importance of collaboration among stakeholders in promoting digital inclusion for persons with learning difficulties. Establishing a working group, as recommended by participants in the study, could facilitate efforts towards the digital inclusion of persons with learning difficulties. Such a platform could serve to align priorities, share resources, and develop standardised approaches for assessing and validating digital competences specific to persons with learning difficulties. A collaborative environment can also foster knowledge sharing, encouraging innovative practices and strategies to address common challenges.

Results of the survey

Respondents to our online survey highlighted several further challenges regarding current assessment practices:

1. Absence of tailored assessment frameworks: There is no specific reference framework for assessing and validating basic digital skills in persons with learning difficulties, making it challenging to generalise the skills required.

2. Student cooperation: Achieving cooperation from learners is often difficult, especially when they encounter frustration during assessments. Many respondents noted that learners are easily discouraged when they struggle to perform certain tasks.
3. Lack of concerted efforts: The efforts made by professionals often lack necessary attention and coordination, leading to a reliance on individual initiative rather than a structured approach. This results in inconsistent practices and outcomes across different settings.
4. Accessibility of assessment content: Ensuring that assessment content is accessible to individuals with varied needs and skills is critical yet challenging. The diversity of persons with learning difficulties requires customised approaches to meet their unique learning profiles.

To elaborate, when answering the question, “What challenges have you encountered in your project, initiative, or work related to the assessment and/or validation of basic digital competences and how have you dealt with them?” the respondents shared insights such as:

- There is no assessment tool for this population; the assessment was in very basic skills.
- The lack of a specific reference framework for assessing and validating basic digital skills in persons with learning disabilities is the main challenge. The second challenge is student cooperation.
- Usually, learners are easily frustrated when they fail to perform certain instructions and/or activities. Also, as far as evaluation is concerned, there is no single framework for this population. So it's up to the professional experience of each individual.
- Unfortunately, there is no reference framework for assessing digital skills and validating them. This makes it difficult to generalise the skills required and create a single goal manual for the digital skills of this vulnerable group.

When respondents were asked about further challenges regarding the assessment and validation of basic digital skills for persons with learning difficulties (or other support needs), they highlighted several issues:

- There are no specialised assessment tools, nor customised training courses.
- Ensuring the accessibility of assessment content is crucial. Each person has different needs and skills. The difficulty of detecting and adapting the assessment according to the needs of each individual is a challenge.
- There are challenges in that there are many scattered documents and tools on digital skills at the international level, none of which are adapted to a population with learning difficulties. A structured team of professionals is needed that, through research, will come up with a guide for skills assessment and validation to find/create the corresponding educational material that will need to be covered.

- Lack of concerted efforts. Special education in general has not been treated with the necessary attention by the state. There are attempts, but they are like fireworks. All of this is a big challenge for the digital learning of the people served. There is no guidance provided.

To promote the assessment and validation of basic digital skills for persons with learning difficulties, respondents provided several recommendations:

- **Develop Specialized Assessment Tools:** Tailored assessment tools and training modules should be created to meet the unique needs of persons with learning difficulties.
- **Educator Training and Resource Dissemination:** Educational interventions need to be widely disseminated, and educators should be trained to effectively implement these initiatives.
- **Create a Central Repository of Materials:** Establishing a central repository of materials currently used by professionals can facilitate the sharing and evaluation of resources. This repository could serve as a valuable reference point for best practices and effective teaching strategies.

To elaborate, when asked, “What could be helpful to further promote the assessment and validation of basic digital skills for persons with learning difficulties (or other support needs)?” the respondents provided the following recommendations:

- An assessment framework that meets the needs of the specific population and special training modules.
- Creation of tailor-made tools for this population. These tools should be easy to use and tailored to the needs of persons with learning disabilities. At the same time, teachers will need to be trained in the administration of these educational interventions and to make them widely known.
- Interviews with people working with individuals facing learning and digital skills difficulties will be critical for gathering information and data.
- It would help to record the material currently used by professionals teaching digital skills to persons with learning difficulties. This should involve a centralised collection of material from all institutions, followed by sorting, evaluating, and creating new universal educational material that is accessible to all professionals and non-professionals.

By addressing these challenges and implementing the suggested improvements, Greece can enhance its efforts to validate and assess digital competences for persons with learning difficulties.

5 Extent of the assessment and validation of digital competences at levels 1 and 2 with regard to persons with learning difficulties

Based on the information provided by the respondents, the extent of the assessment and validation of digital competences at levels 1 and 2 with regard to persons with learning difficulties should involve personalised educational approaches tailored to individual needs and levels. These approaches should focus on repetitive training, simplification of instructions, and adaptation of educational materials to ensure accessibility and effectiveness.

However, it is worth mentioning that a digital skills self-assessment evaluation system has been developed by Europass and is freely available for all citizens to use. This test can be used to find out where the user stands and how they can further develop their digital skills. It tests skills in the following areas: Information and data literacy, communication and collaboration, digital content creation, safety and problem solving (European Union - Directorate-General for Communication, n.d.).

It is available in Greek but it is not tailored to the needs of persons with learning difficulties.

Results of the survey

Respondents identified the following key elements to promoting the digital inclusion of persons with support needs in their projects, initiatives, or work:

- Training in specific programs and applications: Emphasis was placed on training individuals in the use of specific programs and applications, such as copywriting, presentations, web browsing, and email communication. This training is vital for enabling persons with learning difficulties to navigate digital environments effectively.
- Personalisation of educational approaches: The personalisation of educational approaches is critical to cater to the unique needs and levels of each individual with learning difficulties. Tailored strategies help ensure that learning is relevant and engaging for each student.
- Adaptation of training materials: There is a strong focus on adapting training materials to make procedures more user-friendly for individuals with special educational needs. This adaptation is essential for fostering an inclusive learning environment.
- Repetitive training and simplification of instructions: Repetitive training, simplification of instructions, and a focus on essential points are considered crucial for promoting digital inclusion. These practices help reinforce learning and enhance retention.
- Emphasis on personalised approaches: A consistent emphasis on personalised approaches was noted as the cornerstone of promoting digital inclusion among vulnerable populations. Such strategies enable individuals to become independent in basic digital tasks, including using tools, searching the internet, sending emails, and manipulating documents or images.

6 Conclusions

In conclusion, while Greece has made significant progress towards digital inclusion, particularly through bottom-up initiatives and alignment with European frameworks, there remains room for vast improvement, especially concerning persons with learning difficulties. The absence of a centralised and comprehensive national strategy dedicated to persons with learning difficulties' digital competences highlights the need for greater coordination, awareness, and advocacy. By embracing a collaborative, inclusive, and holistic approach, Greece can work towards a digitally inclusive society where every individual, including those with learning disabilities, can thrive and participate fully in the digital age. Through commitment and collective action, the vision of digital inclusion for all can be realised, ensuring no one is left behind in the digital age.

While efforts are underway to assess and validate digital competences for persons with learning difficulties, significant challenges remain. These include the absence of specialised assessment tools and customised training courses, as well as the lack of concerted efforts and a specific reference framework. However, personalised approaches and collaboration among professionals offer promising avenues for promoting digital inclusion among persons with learning difficulties. Moving forward, concerted efforts are needed to address these challenges and ensure equitable access to digital resources and opportunities for all individuals, regardless of ability.

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