Increase
Digital
Competences
to Promote Inclusion

InDiCo - Increase Digital Competences to Promote Inclusion

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Status quo of the EU DigComp framework implementation

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Portugal

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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.

One step to reach these aims is to examine the current state of digital inclusion of persons with learning difficulties in relation to the DigComp framework, specifically in relation to proficiency levels 1 and 2. In six reports (for Austria, Germany, Greece, Portugal, and Spain, and the pan-European level) the extent to which 'digital skills for all' with regard to persons with learning difficulties has already been achieved is explored.

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.

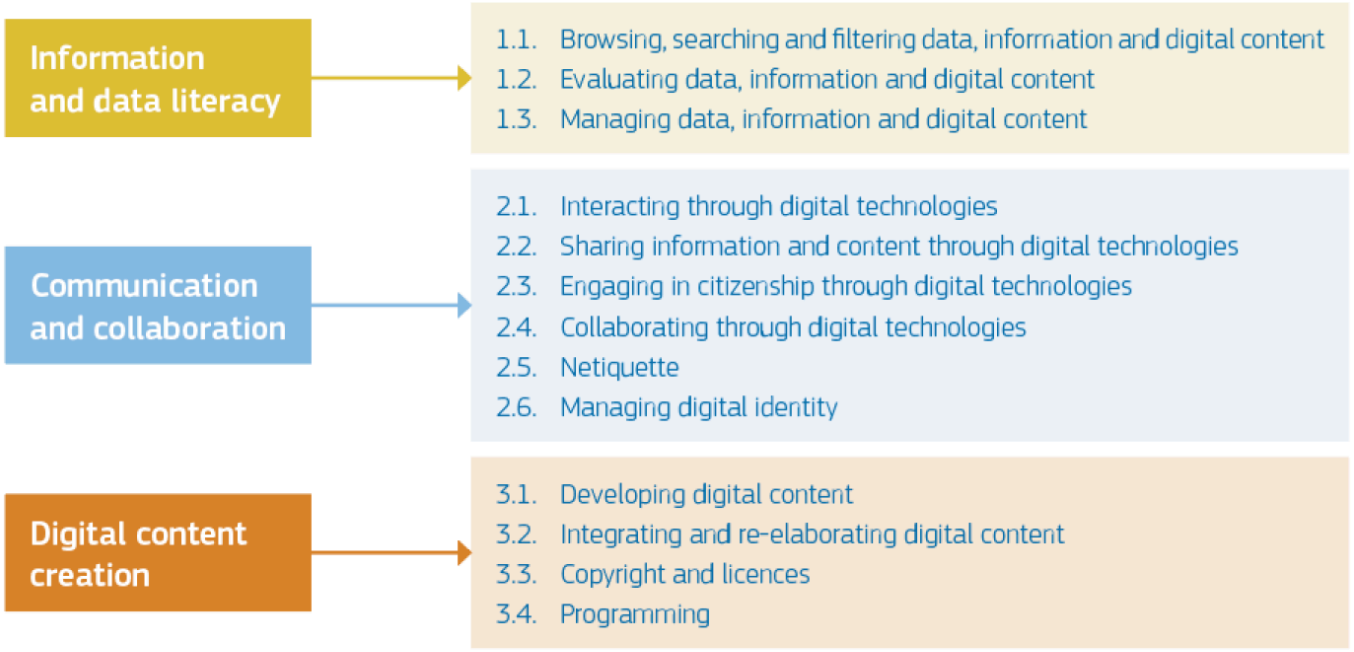
DigComp 2.2: The Digital Competence Framework for Citizens

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:	• **choose simple** digital tools and technologies for collaborative processes.
	2	At basic level and with autonomy and appropriate guidance where needed, I can:	• **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 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 competences 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).

- How is the EU DigComp strategy implemented? Does a national DigComp framework exist or is it being developed? How is the national framework linked to the National Qualifications Framework (NQF)? And: What is the current state at the pan-European level?

- Are there any gaps or challenges in the implementation of the DigComp strategy/framework at levels 1 and 2?

- What bottom-up initiatives are working towards the digital inclusion of persons with learning difficulties with a focus on promoting digital competences at levels 1 and 2?

The following data collection steps were taken:

- We conducted web searches for policy papers, reports, studies and information on policy-driven projects, as well as 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, and documented these materials (Prior, 2011, p. 95).

- We have used the following search terms, among others, and in various combinations: digital inclusion for all; digital competences; digital skills; digital literacy; digital initiatives for persons with learning difficulties; adult basic education; National Qualifications Framework; and validation of non-formal and informal learning;

- We surveyed the project's associated partners and identified key informants (Fetterman, 2008), in particular policy makers, digital strategy experts, persons with learning difficulties providers, and validation experts, through the web searches.

- Drawing on a question-based interview guide (Morgan & Guevara, 2008), we conducted interviews with selected key informants. Together we explored the effectiveness of (national) strategies for enhancing digital competencies, particularly focusing on initiatives for persons with learning difficulties, and delved into the challenges and (possible) key stakeholders to (further) promote digital inclusion, and explored issues of assessing and validating digital competencies for persons with learning difficulties and strategies to ensure their inclusion in digital environments.

For the data analysis process, we selected the most relevant documents in terms of understanding the current situation and included the recorded key informant interviews as the base material for analysis.

We followed the method of qualitative content analysis (Julien, 2008) and applied a basic form of interpretation, the "summary". The objective of such a "summary" is to "reduce the material in such a way that the essential contents remain, in order to create through abstraction a comprehensive overview of the base material which is nevertheless still an image of it" (Mayring, 2014, p. 64).

In order to provide answers to the research questions, we analysed the base material and identified the key messages that emerged from the documents and the key statements or comments that emerged from the interviews as the basis for this report to shed light on the status quo of the digital inclusion of persons with learning difficulties in relation to the EU DigComp framework, specifically in relation to proficiency levels 1 and 2.

2 Implementation of the EU DigComp strategy with regard to persons with learning difficulties

The 'National Strategy for the Inclusion of People with Disabilities 2021-2025' (A Estratégia Nacional para a Inclusão das Pessoas com Deficiência 2021-2025) was mentioned by key informants, as one of the strategic objectives is the valorisation of all citizens and this policy also covers the inclusion of persons with learning difficulties. According to a key informant "only a society that includes everyone can realise its true potential. The inclusion of persons with learning difficulties has cross-cutting implications for all areas of public policy, but priority objectives must be defined to guide action. A first fundamental element is to recognise that society is dealing with citizens with very different characteristics and realities, with varying degrees of autonomy/functionality, who need different support, bearing in mind that the challenges facing their inclusion are very diverse in nature."

According to the key informants the Constitutional Government considers the digital transition to be one of the essential instruments of the country's development strategy, in line with the political objectives that will guide European Union investments in the 2021-2027 programming period, in accordance with the new Cohesion Policy framework. The strategy works towards different fields, i.e.

- to a knowledge-based economy and society, in which productivity growth is based on innovation and people's skills
- to an inclusive society, which offers everyone the skills to participate in the opportunities created by new digital technologies, and
- to an open economy in which the state supports the process of internationalisation of companies and the modernisation of their structure, are therefore essential vectors for the country's economic development (Presidency of the Council of Ministers, 2020).

In the interviews, key informants mentioned INCoDe.2030 - the Portuguese strategy for increasing digital skills (i. e. the Portuguese version of the EU DigComp strategy). This initiative was launched in 2017 and aims to promote digital competences. The 'National Digital Skills Initiative e.2030, Portugal INCoDe.2030' reports directly to the Prime Minister and the Secretary of State for Digitalisation and Administrative Modernisation.

Digital skills are essential for the full exercise of citizenship and also act as a facilitator of employability by responding to the demands of the growing digitalisation of the labour market: a more qualified working population gives rise to new forms of work, new professions, innovative markets and products and, consequently, more robust and competitive economic activities. Digital competences are also of the utmost importance for the development of critical and multifaceted thinking, and for promoting inclusion, autonomy, well-being and social justice. This implies a strong digital commitment to education, inclusion, digital literacy, information literacy

and the promotion of the development of the digital skills necessary for the full exercise of citizenship. INCoDe.2030 aims to improve the level of digital skills of the Portuguese, thus placing Portugal at the level of the most advanced European countries in this dimension, in a time horizon that extends to 2030 and focuses on the following aspects:

- the digital transition of education or vocational training based on the training of students and teachers or trainees and trainers leading to the diversification of means, methodologies and educational resources, guaranteeing teaching that fosters inclusion, digital literacy, information literacy and the promotion of the development of competences necessary for the exercise of citizenship and professional integration,

- the generalisation of digital literacy, with a view to the full exercise of citizenship and effective inclusion in a society with increasingly virtual interactions,

- the digital transition as a factor in the inclusion of persons with learning difficulties, with a view not only to digital accessibility to content and information, but also to guaranteeing equal access to education, vocational training, employability and digital skills in public administration, social sector organisations, companies, research and development and knowledge production. (República Portuguesa, 2024)

Simultaneously key informants said that Portugal has already adapted the European Digital Competence Framework for Citizens (DigComp 2.1) to the national reality by creating the 'Dynamic Reference Framework for Digital Competence' (Quadro de Referência Dinâmico para as Competências Digitais - QDRCD). The QDRCD adapts the DigComp 2.1. descriptors, translated into learning outcomes according to the complexity of the tasks, the autonomy and the cognitive domain of the citizens, establishing five areas of competence, namely i) Information Literacy, ii) Communication and Citizenship, iii) Content Creation, iv) Security and Privacy and v) Solution Development, and organising them into four levels of proficiency - Basic, Intermediate, Advanced and Highly Specialised. (Iniciativa Nacional Competências Digitais e.2030, 2019)

In the case of persons with learning difficulties, they can attend training courses in community organisations (general resources) or in professional rehabilitation organisations that have strategies designed to facilitate the acquisition of digitals skills. The adapted training curricula are included in the 'National Qualifications Catalogue' (Catálogo Nacional de Qualificações - CNQ) listing - basic, intermediate and advanced level training references. (Agência Nacional para a Qualificação e o Ensino Profissional, I.P., 2024)

According to one key informant, in cases where learning difficulties do not allow persons with learning difficulties to successfully attend training courses run by community training bodies, - for example the 'Young + Digital' programme (Jovem + Digital) which aims to increase the employability of young people in digital areas by offering training that is more in line with the needs of the labour market, focusing on the creation of short and medium-term training courses that are part of the National Qualifications Catalogue in the digital area (Instituto do Emprego e

Formação Profissional, n.d.) - there are also specialised responses from professional rehabilitation bodies which, through training actions aimed specifically at this target group - individualised courses that are not part of the CNQ - implement Short-Term Training Units that also aim to develop digital skills.

As part of the National Digitisation Strategy, the 'Digital Academy Platform' (Academia Portugal Digital) was created by the Portuguese government as a complement to digitally empower people at various stages of their lives equipping them with skills that promote digital inclusion and accompany them on their digital journey, through guidance and counselling on training paths aimed at qualifications associated with the different career paths in the digital area. (Estrutura de Missão Portugal Digital, 2022). The key informants also believe that equipping persons with learning difficulties with skills that promote digital inclusion and accompany them on their digital journey, by diagnosing, guiding and counselling them on training paths aimed at qualifications associated with different career paths in the digital area.

This platform aims to guarantee:

- a self-diagnosis of digital competences, aligned with the Dynamic Reference Framework for Digital Competences (based on DigComp - European Framework for Digital Competences);
- a proposed digital skills training plan adapted to the level of digital proficiency and profile of each user;
- access to free face-to-face and online training in the digital area, provided by partners and developed in-house with the creation of Massive Open Online Courses (MOOCs). (Estrutura de Missão Portugal Digital, 2022)

In this context, the aim was also to create and make MOOCs available in the digital field, facilitating access to training content that responds to the need to promote citizens' transversal digital skills, but also to promote more specialised training that is fundamental to empowering workers, according to a key informant.

3 Gaps and challenges in the implementation at levels 1 and 2 with regard to persons with learning difficulties

According to a key informant, Portugal had 10.41 million people in 2022, of whom 1,792,719 have a disability, be it visual, motor, mental or hearing. The same key informant mentioned the eighth report of the Disability and Human Rights Observatory of the Instituto Superior de Ciências Sociais e Políticas, University of Lisbon which states that in the field of education we can observe that between 2015 and 2020, the inequality in the school dropout rate between young people with and without disabilities in Portugal increased in the 18 to 24 age group (+6.4 p.p.), and also in the 18 to 29 age group (+5.3 p.p.). Between 2017/2018 and 2022/2023 the number of students with disabilities attending higher education more than doubled (+128.3 p.p.). The majority of these students (88.p.p) were enrolled in public institutions. The report also informs that in 2022, as in previous years, the majority of persons with disabilities registered as unemployed were adults (89.7 p.p.; in absolute numbers 12870), were looking for a new job (83.5 p.p.; in absolute numbers 11974), and had been unemployed for more than a year (55.5 p.p.; in absolute numbers 7955) (Pinto et al., 2023).

Taking into account the answers given by the key informants in the interviews, we were able to identify certain difficulties and challenges in promoting competences on DigComp levels 1 and 2 for persons with learning difficulties. A starting point could be talking about digital accessibility, which is known as a fundamental aspect of inclusion and equal opportunities for persons with learning difficulties. We can then find several points that become challenges and failures when implementing it.

According to one key informant, the first to be identified are challenges in link with assistive technologies like a lack of support for assistive technologies which play a fundamental role in the daily lives of persons with learning difficulties, enabling them to interact effectively with the digital world. However, a lot of software doesn't offer adequate support for these technologies, which makes it difficult or impossible for users to utilise the software.

Another challenge faced by persons with learning difficulties when using non-accessible software is the lack of adaptable interfaces. A lot of software has interfaces that are difficult for persons with learning difficulties to use and make it difficult to navigate and interact with the software, making it inaccessible for these users.

Data entry is a fundamental part of interacting with any software, but it can also be a challenge for persons with learning difficulties. Non-accessible software can present barriers to data entry, such as poorly designed form fields that are not compatible with assistive technologies or that require fine motor skills that are difficult for some persons with learning difficulties.

A lot of non-accessible software is unnecessarily complex, which can make it difficult for persons with learning difficulties to use. This can include complicated workflows, confusing menus or too many options that make it difficult for users to find and use the functionalities they need.

The second gap identified by key informants is the training curricula for validating competences, which have little flexibility in terms of the learning outcomes that have to be achieved, taking into account the diversity of individual characteristics and the restrictions on participation that emerge from a lack of support of one's social environment. The key informant also mentioned that the training and certification systems need restructuring when it comes to combining the needs of persons with learning difficulties and the demands of the labour market.

Thirdly, according to the informants, nowadays there is a growing tendency for the majority of jobs to depend on information and communication technologies, so it will not be possible to develop a cohesive, competitive and knowledge-based society without organising learning opportunities that enable all citizens to appropriate and develop technological literacy skills in order to participate actively in society.

A key informant said that "Citizens and society are in a period of very rapid change, where they need to be able to take the lead in their development paths, develop lifelong learning strategies and acquire competences that enable them to deal with change". Changes in the division of labour have implications in terms of qualifications, skills and behaviour in professional performance. Technological developments, especially in ICT, require increasingly intellectualised and complex skills and professional practices with more variety, flexibility and quality, according to the key informant. Therefore the focus is mainly on promoting digital skills on higher proficiency levels and levels 1 and 2 and target groups like persons with learning difficulties are disadvantaged when it comes to offer training and assessment opportunities for them.

4 Bottom-up initiatives working towards the digital inclusion of persons with learning difficulties

By bottom-up initiatives, we mean activities and projects that are developed and implemented 'from below', by practitioners who have acquired relevant expertise in working with marginalised and vulnerable target groups, in particular with persons with learning difficulties. Some are presented here:

'I am Digital' Programme (Programa Eu Sou Digital)

The 'I am Digital programme' aims to promote the digital inclusion of info-excluded adults (45+), based on a national network of young volunteers and training centres. It is offered in centres across Portugal for free. The content covered in the programme includes, among other things, creating and managing an email account, being able to search online, consulting and using digital public services, accessing services such as online banking or accessing social networks in a simple way. It is aligned to the Dynamic Reference Framework for Digital Competence (QDRCD) and approved by the 'Foundation for Science and Technology' (Fundação para a Ciência e Tecnologia).

Find out more at: https://eusoudigital.pt/

Qualification measure for people with disabilities - Vocational training centres accredited by the Institute for Employment and Vocational Training

This measure supports the promotion of actions aimed at the acquisition and development of professional skills geared towards the exercise of an activity in the labour market, with a view to boosting the employability of people with disabilities, providing them with the appropriate skills to enter, re-enter or remain in the labour market. In the case of persons with learning difficulties, they can attend training in community organisations (general resources) or in vocational rehabilitation organisations that have strategies to facilitate the acquisition of these skills. In cases where learning difficulties mean that there are significant constraints on successful attendance at training courses run by community training providers, there are also specialised responses from vocational rehabilitation providers who, through training courses aimed specifically at these people - individualised courses that are not part of the CNQ (National catalogue of qualifications) – implement short-term training units that also aim to develop digital skills. According to the Vocational Training Referential adapted for People with Disabilities in the National Qualifications Catalogue, there are 24 adapted curriculums in which the transversal basic training favours an IT module with the general objectives of knowing how to operate a computer; knowing how to surf the internet; knowing how to manage an email inbox; knowing how to interact via platforms; knowing how to protect identity, privacy and personal data in digital environments.

Find our more at: https://www.iefp.pt/qualificacao-de-pessoas-com-deficiencia-e-incapacidade

AFID Diferença Foundation is an example of this initiative, promoting the C training pathways proposed by the institution. These pathways are individualised and based on training references not included in the National Qualifications Catalogue, and are specially adapted for people with mental disabilities, multi-disabilities, learning difficulties and other limitations that prevent them from attending other forms of training.

Find out more at: https://www.afid.pt/areas-de-intervencao/formacao-profissional/

The Diploma of Basic ICT Skills

The 'Gaia Professional Rehabilitation Center' (CRPG - Centro de Reabilitação Profissional) is an institution specialised in the professional rehabilitation of people with acquired disabilities, including persons with learning difficulties.

The organisation offers a Digital Proficiency - Basic Level training course which aims to equip people with the knowledge to search, store and organise data, create and edit files and use public and private digital services. The training is aimed at people with disabilities, and validates practical skills in the basic use of a computer, Internet access and email, covering skills like searching for data, information and digital content, storing and organising data, information and digital content, using public and private digital services, protecting the digital identity and reputation, creating and editing text, calculation, audio and image files, integrating information and digital content by applying copyright and licences or identifying protection measures in digital environments related to health and well-being. In Portugal, and based on the Convention on the Rights of Persons with Disabilities, the concept of disability states that disability results from the interaction between people with impairments and behavioural and environmental barriers that prevent their full and effective participation in society on an equal basis with others (Instituto Nacional para a Reabilitação, I.P., n. d.).

Find out more at: https://crpg.pt/proficiencia-digital-nivel-basico-formacao-continua/

Programa Incluir

Incluir is a training and recruitment programme for people at a disadvantage when it comes to accessing the labour market, namely people with disabilities. It is based on an innovative training and development methodology, personalised for each trainee and adapted to the functions that can be carried out in each of the business areas of the Jerónimo Martins Group.

The programme gives trainees the opportunity to develop competences considered necessary for the performance of the job, for example how to use information technologies in a work context.

Find out more at: https://www.jeronimomartins.com/pt/carreiras/inclusao/programa-incluir/

5 Conclusions

Portugal, as part of the European Union, has adopted the European digital skills strategy, demonstrating the country's proactive stance on digitalisation. Portugal aims to ensure that all citizens have basic digital skills by 2030.

Implementation of the EU DigComp strategy with regard to persons with learning difficulties

The European DigComp strategy plays a key role, as it aims to promote digital literacy for all citizens, including those with learning difficulties. Digital skills are increasingly important in today's society and are essential for social and professional inclusion.

The development of INCode 2030, based on the EU's DigComp framework, reflects Portugal's commitment to adapting the digital skills strategy to the Portuguese context. Capacity-building initiatives such as the Platform 'Portugal Digital Academy', are initiatives that actively contribute to the goals of making Portugal more digital. These programmes and initiatives are in line with the National Agency for Qualification and Vocational Education (ANQEP) and the CNQ (National catalogue of qualifications).

Despite significant progress in promoting the national strategy to ensure that all citizens can acquire basic digital skills by 2030, there are still challenges in implementing digital inclusion initiatives and in reaching out to citizens in general and to persons with learning difficulties in particular. Thus, there are significant gaps and challenges in the digital inclusion of persons with learning difficulties, which hinder the development of appropriate skills for digital inclusion.

One reason is the lack of inclusive pedagogical strategies and practices that enable all students to acquire the necessary digital skills. To tackle this issue it would be necessary to train teachers and provide resources suited to the specific needs of these students, thus ensuring their success at school and their full integration into society.

Gaps and challenges in the implementation at levels 1 and 2 with regard to persons with learning difficulties

The inclusive education of persons with learning difficulties and the promotion of digital skills are challenges that the education system in Portugal must tackle effectively and responsibly, with a view to equal opportunities for all citizens.

Although there are some policies in place to promote digital competences for all, key informants identified certain difficulties and challenges in promoting digital competences on levels 1 and 2 for persons with learning difficulties, such as a lack of support for assistive technologies, the lack of adaptable interfaces or barriers to data entry due to non- accessible software.

The current training programs for validating competencies lack flexibility in learning outcomes, not accommodating individual differences or social support restrictions. This calls for restructuring to better combine the demands of persons with learning disabilities (persons with learning difficulties) and labour market demands.

There's a growing dependence on information and communication technologies in most jobs. For a competitive, knowledge-based society, learning opportunities must enable all citizens to develop technological literacy to facilitate their access to the labour market, which is one of the areas of active participation in society, also for persons with learning difficulties.

Rapid societal changes necessitate lifelong learning strategies and competencies to manage change. The evolving division of labour requires new qualifications, skills, and behaviours. Technological advancements, especially in ICT, demand more complex skills and professional practices. Current training often emphasises high proficiency digital skills, disadvantaging persons with learning difficulties in accessing training and assessment opportunities.

Bottom-up initiatives working towards the digital inclusion of persons with learning difficulties

In Portugal, several actions have been implemented with the aim of promoting digital inclusion for people with disabilities. Some of the main outcomes of these initiatives include increased access to assistive technologies, training in digital skills, access to accessible digital content, and promotion of social and labour participation.

The results point towards greater autonomy, quality of life, and social participation for persons with learning difficulties, contributing to the development of a more inclusive and equitable society. Collaboration between all stakeholders is essential for the success of digital inclusion for persons with learning difficulties

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7 Annex

Key informants interviewed for this report

Name of the key informant	Organisation and/or area of expertise	Date	Duration	Setting
Célia Maria Adão de Oliveira Aguiar de Sousa	Coordinator of the Digital Inclusion Resource Centre Coordinator of the Masters in Special Education School of Education and Social Sciences POLITÉCNICO DE LEIRIA	8/4/2024	30 minutes	Online
Adalberto Fernandes	National Institute for Rehabilitation (Instituto Nacional de Reabilitação) - Scientific Advisor	7/5/2024	30 minutes	Online
Andreia Mota	CRPG (Centro de Reabilitação Profissional de Gaia) - Vocational training for people with disabilities	8/5/2024	45 minutes	Online
Caroline Bin	CRPG (Centro de Reabilitação Profissional de Gaia) - Vocational training for people with disabilities	8/5/2024	45 minutes	Online