InDiCo - Increase Digital Competences to Promote Inclusion

2023-1-AT01-KA220-ADU-000157647

Status quo of the EU DigComp framework implementation

Country Report
Spain

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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.
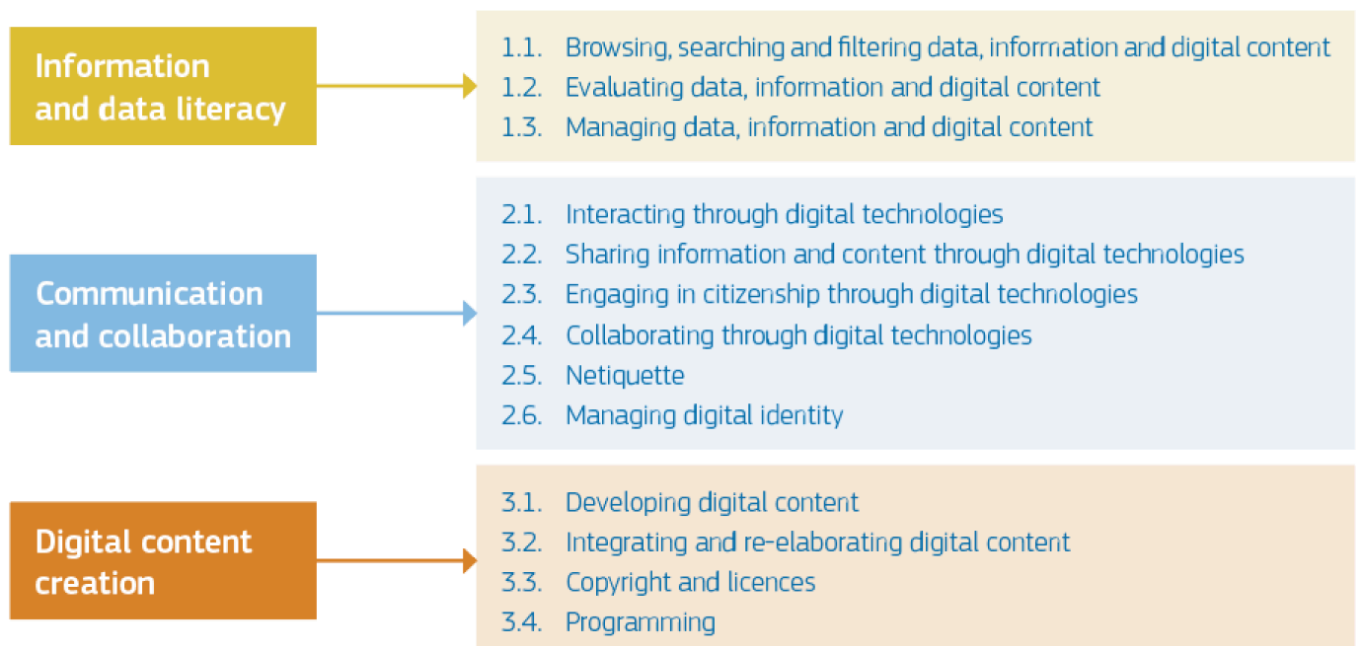
DigComp 2.2: The Digital Competence Framework for Citizens

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):

Information and data literacy
1.1. Browsing, searching and filtering data, information and digital content
1.2. Evaluating data, information and digital content
1.3. Managing data, information and digital content

Communication and collaboration
2.1. Interacting through digital technologies
2.2. Sharing information and content through digital technologies
2.3. Engaging in citizenship through digital technologies
2.4. Collaborating through digital technologies
2.5. Netiquette
2.6. Managing digital identity

Digital content creation
3.1. Developing digital content
3.2. Integrating and re-elaborating digital content
3.3. Copyright and licences
3.4. Programming

Safety	4.1. Protecting devices 4.2. Protecting personal data and privacy 4.3. Protecting health and well-being 4.4. Protecting the environment
Problem solving	5.1. Solving technical problems 5.2. Identifying needs and technological responses 5.3. Creatively using digital technologies 5.4. Identifying digital competence gaps

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 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 development and progress of digital technologies has led to globalisation worldwide, transforming the social and economic life of citizens and institutions; this unstoppable growth has modified most areas of life, social, labour, economic, of all generations, new and not so new. Currently, from a digital point of view, six generations coexist depending on how they relate to current technologies, these six generations go from the veterans to the silent generation, the millennials, generation z and alpha, the latter being the so-called digital natives, there is therefore a digital gap between the two extremes of these generations, Furthermore, taking into account that our population pyramid is regressive or bulb-shaped, so the population registered in Spain tends to be increasingly older and less able to integrate and absorb the large amount of digital information that is being implemented, added to this and more accentuated if possible, the digital divide has a high impact on vulnerable populations, among these populations is the group of people with disabilities (Espínola, A., 2020).

Spain's National Strategy Plan

In Spain, it was difficult to get information about the EU DigComp strategy, searching with keywords on a first screening we found that EPALE has a publication on its website speaking about the DigComp strategy, an there is an association "Somos Digital" that has worked on the translation of document, but there was no mention of this document in none of the official websites of the Ministry of Spain. Anyway, there is an existing strategy called **'Digital Spain 2026'** (España Digital 2026) on the website of the Ministry of Economy, Trade and Entrepreneurship, where one of its strategic axes is Digital Competences, which goal is to strengthen the digital skills of the workforce and citizens as a whole, reducing digital gaps; to complete the digital transformation of the education system; to ensure lifelong learning in digital skills; and to increase the percentage of digital experts in the Spanish economy by ensuring gender equality in this group. (Ministry of Economy, Gobierno de España, n.d).

Inside this strategic axe, there is a **National Digital Skills Plan**, which does mention the **EU DigComp strategy**, in what it consists and the existing levels of competences. Based on European strategy, the national digital skills Spanish plan divides in four important pillars:

1. Digital competence for all citizens.
2. Digital competence for labour force.
3. Digital competence for ICT specialist.
4. Digital skills for education.

However, the document does not make any special mention about people with disabilities or with learning difficulties during the writing of the national plan (Plan Nacional de Competencias Digitales). (Gobierno de España, 2021).

On the other hand, our screenings on DigComp have been mainly at the employment and education level, however, the key informants we have interviewed, who belong to these areas, were not aware of the European DigComp strategy. According to one key informant: "I don't know the Digcomp project, what I do know is the project developed by the Government of La Rioja called Digitalizate [...]". Another key informant also told us that he/she wasn't familiar with DigComp but that he/she was aware of the Digital Spain Agenda for 2026, which aims to achieve adequate digital connectivity for the entire population, including rural communities, women, men, the unemployed, workers, vulnerable people, which is what his/her organisation knows best and what they work on most in their organisation, they do this through National Employment Institute (INAEM) subsidies, which in the case of Aragon works for both working and unemployed groups, they work for people with disabilities and there is specific training for this group or specific training for women in rural areas... He/she is also aware, as a parent, of everything that is being worked on in schools from an early age and throughout the pupils' formative life, they work on digital competences in the classroom.

Spanish Conceptual Framework of Digital Competences

In recent years there has been an emergence to establish a conceptual framework of digital competences in the world of work with inclusive and diversified connotations in response to the needs of each social grouping / collective.

According to the eighth report of the Observatory on Disability and the Labour Market of the ONCE Foundation (2022), there are 1,929,400 people with disabilities of working age in Spain, i.e. between 16 and 64 years of age, which represents 6.3% of people of working age. Of these, 34.60% (1,261,100) are outside the labour market due to various circumstances.

There are agreed indicators that will help us to understand the degree of implementation, divided, as mentioned above, into 5 areas:

Area 1 Information, consists of identifying, locating, obtaining, storing, organising and analysing digital information, evaluating its purpose and relevance, the competences to be achieved are: browsing, searching and filtering information; evaluating information; storing and retrieving information. At a basic level the person should be able to search for certain information on the web using search engines.

Area 2 Communication, consists of communicating in digital environments, sharing resources through networked tools, connecting with others and collaborating through digital tools, interacting and participating in communities and networks, intercultural awareness, the competences to be achieved are: interaction through new technologies; sharing information and content; online civic participation; collaboration through digital channels; netiquette; digital identity management. At a basic level the person should be able to interact with others using the basic features of communication tools, e.g. mobile phone, chat, email.

Area 3 Content creation, consists of creating and editing new content (texts, images, videos), integrating and reworking previous knowledge and content, making artistic productions, multimedia content and computer programming, knowing how to apply intellectual property rights and licences for use, the competences to be achieved are: content development, integration and reworking, copyright and licences and programming. At a basic level the person should be able to create simple digital content.

Area 4 Security, consisting of protection of information and personal data, protection of digital identity, security measures, responsible and safe use, the competences to be achieved are: protection of devices, protection of personal data and digital identity, protection of health, protection of the environment. At a basic level the person should be able to perform basic actions to protect my devices, e.g. use of antivirus, passwords

Area 5 Problem solving, consists of identifying needs for the use of digital resources, making informed decisions about the most appropriate digital tools according to the purpose or need, solving conceptual problems through digital means, using technologies creatively, solving technical problems, updating own and others' competence, the competences to be achieved are: solving technical problems; identifying technological needs and responses, innovating and using technology creatively; identifying gaps in digital competence. At a basic level the person should be able to ask for specific support and assistance when technologies do not work or when using a new device, program or application. (Plan Nacional de Competencias Digitales, Gobierno de España, 2021, p.11.).

This report is particularly focused in areas 1 and 2 and whether the competences they deploy are a reality in the disability community. For the time being, none of the documents we have reviewed has gone into these areas in any depth.

Our Spanish Qualifications Framework for Lifelong Learning (MECU) is an internationally recognised document, which aims to guide the classification, comparability and transparency of officially accredited qualifications. It is structured in 8 levels that reflect a person's lifelong learning, which have improved their theoretical or practical knowledge, skills and competences. But reading through the document there is no information related to the EU DigComp strategy in its legislation. It is noticed that in a higher educational level there is awareness of the DigiComp strategy. However, digital competences are being developed at all educational levels, making young people digital natives, although it is true, as mentioned above, that there is no specific strategy for people with disabilities or learning difficulties; nevertheless, teachers, if they have specific training in special education, do adapt the contents to the students, but this is not always the case in educational centres that are not exclusively dedicated to special education (Ministry of Education, Vocational Training and Sports, Government of Spain, n.d.).

According to a key informant: "The Department of Education is extending digital competences to all public and state-subsidised centres, and it is true that special education centres are especially prepared to work on digital competences with people with disabilities, but I don't know if there has

been a generalised preparation of general teachers in ordinary centres to deal with situations of disability in ordinary centres. Just as we in our work sphere do not have a preparation in many things, specifically to deal with people with disabilities, however, those professionals in the administrative sphere as well as teachers in special education centres are prepared for them, it would be interesting if this preparation were extended to the general public."

With the screening and key informants information we can observe that the EU DigComp strategy is not consciously implemented in our country, although it is true that the plans related to digital competences do have this strategy as a reference, but they do not go into it in any detail in official documents.

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

The digital divide refers to the differences between individuals, households, companies or geographical areas with regard to the possibilities of access to ICT (Information and Communication Technologies) and the degree to which they make use of them. The digital divide can be, and is, another cause of social exclusion. The labour market, already transformed and consolidated in the use of ICTs, is a difficult path to follow for people from socially excluded groups, including people with disabilities (Mamaqi, X., & Marta-Lazo, C.,2020).

According to the screening and key informatns, the entities or associative movements that work directly with this group are the ones that put the focus on the difficulties mentioned and weave the answers to various questions, we find among the evaluated material a guide of digital competences for teachers published by Plena Inclusión, which describes and analyses the various difficulties faced by citizens in general, such as accessibility to digital content, and particularly the groups in attention to diversity, such as, among others, people with disabilities, in its guide differentiates the different existing barriers, such as: motor action barriers that minimise barriers related to the use of the keyboard and mouse in people with reduced mobility in upper limbs, sensory barriers that are intended to minimise the barriers that arise when the action requires the use of sight, or in other cases with motor limitations, such as screen amplifiers, voice recognition, screen readers, curricular barriers, the facilitators used are for example instructions prior to performing the activity, and even practice so that when performed autonomously it is done successfully, cognitive barriers, any student in general can benefit from the facilitators but also those related to the use of the keyboard and mouse (Plena Inclusión, 2022).

These facilitators are easy to understand and clear language, graphic organisers, self-instructions, video tutorials, communicative tools to minimise the barriers that may arise in communication, both in expression and comprehension (students with orofacial difficulties, persons with learning difficulties, hearing disabilities, learning difficulties), and these facilitators can use sign language, pictograms, accessible dictionaries.

It is evident that there are numerous initiatives aimed at assessing digital skills, yet these are largely confined to the third sector. There is a clear need for a unified approach to certification that can accurately assess digital skills in an official manner. As one of our key informants has observed: It would be beneficial to have a tool that would issue with general, agreed criteria the level of digital competence. Ultimately, each social entity does it in one way or another. Those who are very purist have built some kind of test or tool that gives you a diagnosis, so to speak. This tool allows you to determine your level of digital competence, which can be classified as level 1, 2, or 3, and so on. It is necessary to address certain gaps in the current approach. It is assumed that everyone has access to computers and the internet, which is an erroneous assumption. Coverage is another issue. It is assumed that everyone has coverage, but this is not necessarily the case. It is unthinkable that someone does not have coverage or a mobile phone. If everyone had the same access, the next step would be to adapt these training programmes.

When we talk about adaptation, we always relate it to persons with learning difficulties, but our country has a large percentage of people who have migrated from other countries where they do not have a high level, medium level, or low level of our language. Consequently, their comprehension and interpersonal dynamics diverge, necessitating a tailored approach. This entails the adaptation of content to a level of readability that aligns with the varying abilities of individuals, including those with disabilities that affect their comprehension.

Also in the National Employment Institute (INAEM) training section there is a wide variety of courses related to the digital area, computer science for beginners, advanced computer science, social networks, computer applications for daily use, computer security and digital signature, hardware, although they are not specifically aimed at the disabled, there are other defined groups such as women, women in rural areas, unemployed, young people under 30, where the unemployment rate is above average and it is necessary to train and recycle them in order to incorporate them into the labour market.

One of the significant challenges currently facing not only individuals with disabilities but also the general population is the rapid advancement of technology. This has resulted in a disparity between the pace of training and the digital growth that is occurring on a global scale. Consequently, the digital divide for individuals with disabilities or learning difficulties is becoming increasingly pronounced (Mamaqi, X., & Marta-Lazo, C., 2020).

Acording to a key informant: As a national strategy, training in digital competences is being provided, but it is not working at the same speed, on the one hand, technological progress is going much faster than the training that is being provided, and we would be behind these vulnerable groups, many of whom do not have computers, do not have the economic resources to have a powerful telephone, and in many cases it is difficult to obtain a digital certificate or a permanent password, which is also important to manage all these computer resources, and it is not working at the same speed, and it would be important, these people can fall into the risk of social exclusion because they cannot access the same resources as other people, to avoid this it is important that the training is continuous because it is not enough to do a training and let us fall into oblivion, but that the training is continuous that there are means that there are places where they can be given and means and computer equipment or different resources and well above all that there is funding to be able to impart it, that funding has to go to provide means, computers, tablets, teachers and training for these professionals.

Furthermore, one of the key informants emphasised that when working on digital skills with persons with learning difficulties, it is often necessary to consider that other skills must be developed before commencing digital skills training. Conversely, it is also crucial that the educator imparting the competencies is themselves up-to-date and possesses the requisite resources. As previously mentioned, this is not typically the case in the third sector, given that they are typically non-profit organisations. Consequently, the requisite updates often entail a significant financial outlay.

What is also a challenge, as some of our key informants mentioned in their interviews, is that professionals that work in social services or in resources that attend people with disabilities or persons with learning difficulties, unless they are trained by vocation, they do not have the basic knowledge of how to provide support for people with disabilities, and sometimes the teachers of digital competence courses themselves do not have this knowledge, so the materials are not adapted to these students. It is also the case with technological applications and tools, they are not adapted for people with learning difficulties or even for people with other difficulties.

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.

Below we highlight some of the initiatives that we have collected after the research carried out, both documentary and interviews with key professionals in digital inclusion of persons with learning difficulties, although it is true that most of these initiatives are in the private sector, more specifically in the social sector, carried out by non-profit organisations:

- **DIGTALIZATE+** is a state initiative carried out by the State Foundation for Training in Employment, where large technology companies or companies specialised in technology offer free training to anyone who wants to improve their digital skills. Several of our key informants talk about this initiative and how they have taken advantage of the free courses for their users with disabilities or learning difficulties. One of the key informants highlighted some of the digital competences they work on with this iniciative: Digitalizate, which is a series of 10 training courses, each lasting 10 hours,teaches digital skills on social networks, basic office automation, electronic documentation, electronic procedures with the administration, but are key informant also says that these training courses are not adapted to persons with learning difficulties, therefore they understand that the trainer's task is to adapt the contents, easy reading, so that the student can make the best use of them. This project is aimed at students who specifically have difficulties in computer literacy, not at teachers, a test is carried out beforehand to see each person's level. More information can be found here (in Spanish): https://experienciafundae.es/
- **'FULL INCLUSION'** (PLENA INCLUSIÓN). It is a confederation of several organisations that seek the full social inclusion of the most vulnerable people. Plena Inclusión has developed several guides and manuals guiding teachers on effective methodologies to deliver workshops and courses on digital skills for people with disabilities or learning difficulties.
More information can be found here (in Spanish): https://www.plenainclusion.org/
- **'BY DIGITAL TALENT'** (POR TALENTO DIGITAL). This is a permanent training programme in digital skills and technological professions of the ONCE Foundation, aimed mainly at people with disabilities. Through this initiative, the aim is for students to acquire knowledge and technological and digital qualifications, in order to favour their inclusion in the labour market in professions that are currently booming and in great demand.
More information can be found here (in Spanish): https://portalentodigital.fundaciononce.es/

On the other hand, several initiatives have been found at national level in Spain from different non-profit organisations that carry out digital skills workshops. In fact, our Spanish InDiCo partner, **Fundación Rey Ardid,** carries out these training sessions from the training and

employment department, with the aim of improving the digital skills of people with disabilities in order to increase their job opportunities and success in their future selection processes (Fundación Rey Ardid, n.d.).

Normally, in the organisations that are specialised in attending people with disabilities, the professionals are prepared with specific vocational training, particularly for people with intellectual disabilities, so that they can adapt the contents of the programme into easy-to-read language for example. One of our key informants also relates to digital tools to help them in their learning, such as digital whiteboards, making communication much more interactive and where the person can learn a lot more, or gamification as another alternative to conventional methods.

Labour initiatives related to digital competence supporting persons with learning difficulties

There are different actions and programmes, for example the training '**Working in Digital**' form the Incorpora Program of Fundación la Caixa, that brings, through different training modules, several interesting and necessary actions when looking for and finding employment, for example a digital knowledge through our telephone since it is with this terminal that we have access to our mail, Social Networks, internet, also the area of digital communication is worked on to be able to communicate in an effective and efficient way (Fundación La Caixa, n.d).

Accenture is an international enterprise that helps all types of businesses, governments and other organisations build their digital core, optimise their operations, accelerate revenue growth and improve citizen services, creating tangible value at speed and scale. This enterprise has created a programme called 'Employ+' (Emplea+), where they have stipulated a series of digital competences for people in risk of social exclusion that are key to unemployment, from how to operate a mobile phone, configure the wifi, to know about apps that can help people in the active search for employment, to the whole issue of file management or sharing in the cloud, etc. These competences are very necessary to have in our daily lives, because as a key informant says: who hasn't used Google maps to get to a job interview. (Accenture, 2024).

As it can be seen, most of the initiatives presented in the report are aimed at people with disabilities in general, but nevertheless, many of these tools or applications are not adapted to persons with learning difficulties. It is true that organisations that are dedicated to it do adapt their materials, but the tools created are not adapted from the beginning. The same thing happens a bit like in the field of official education that one of our key informants indicated to us, that the ordinary schools considered the students with disabilities, but nevertheless there was a lack of resources and tools to adapt the content one hundred per cent to the students. However, in special education schools, this was being done.

There are a variety of resources dedicated to teaching digital competences to people with disabilities, without specifying the type of disability, but there is no common certification or assessment to follow the same line of teaching or competence acquisition according to key informants.

5 Conclusions

With the España Digital 2026 strategic plan, the promotion of improving the digital skills of Spanish citizens is guaranteed; one only has to look at the thousands of initiatives, projects and programmes that exist to improve the skills of the general population. The problem comes when we want to focus on the most vulnerable population, people with few resources and/or people with some kind of disability, in particular persons with learning difficulties.

It is true that we see that there are services and resources that are adapted to these circumstances, but they are not sufficient or even non-existent for certain types of problems, such as intellectual disabilities, or physical disabilities such as those of blind people; these people need training adapted to their needs and circumstances, otherwise they will not have the option of acquiring minimum digitalisation skills.

There is a clear digital divide, which often influences their socio-occupational integration, since lacking digital skills or having insufficient digital skills for a world in continuous digital transformation, they are left out of the labour market, making their integration into the labour market even more difficult. The same applies to access to training; increasingly, the educational world is using technological tools that require a minimum level of digital skills.

As we have commented in the previous section, it is also necessary that teachers and professionals working with people with intellectual disabilities have knowledge on how to modify or adapt the contents of the training or the technological tools to the students. It is necessary to be aware of their circumstances and to know how to act in order to favour the social inclusion of these people.

We see then that there is still a long way to go to integrate people with disabilities, and even more so if these people, in addition to their health condition, also have other risk factors such as lack of resources (not being able to have a computer at home or simply having internet access on their phone), which can further distance them from social inclusion.

6   References

Accenture. (2024). https://www.accenture.com/es-es

Andersson, P. (2017). Validation as a learning process. In R. Duvekot, D. Coughlan, & K. Aagaard (Eds.), The learner at the centre: Validation of prior learning strengthens lifelong learning for all (pp. 121–127). European Centre Valuation of Prior Learning/VIA University College.

Bloor, M. (2011). Addressing social problems through qualitative research. In D. Silverman (Ed.), Qualitative research: Issues of theory, method and practice (3. ed., pp. 399–415). SAGE.

CEDEFOP. (2023). European guidelines for validating non-formal and informal learning (3rd ed.). Publications Office of the European Union. https://doi.org/10.2801/389827

DIGITALIZATE+ (2021). https://digitalizateplus.fundae.es/

European Commission. Directorate General for Communications Networks, Content and Technology. (2023). 2030 Digital Decade: Report on the state of the Digital Decade 2023. Publications Office of the European Union. https://doi.org/10.2759/318547

Espínola, A. (2020). Educación inclusiva e igualdad de las personas con discapacidad en la transformación digital. Revista jurídica valenciana, 35, 1-13. https://www.revistajuridicavalenciana.org/wp-content/uploads/0035_0006_01_EDUCACION-INCLUSIVA-A-DISCAPACITADOS-EN-ERA-DIGITAL.pdf

Ferrari, A. (2013). DIGCOMP: A framework for developing and understanding digital competence in Europe. Publications Office of the European Union. https://doi.org/10.2788/52966

Fetterman, D. M. (2008). Key informant. In L. M. Given (Ed.), The Sage encyclopedia of qualitative research methods (p. 477). SAGE.

Fundación La Caixa, (n.d). Formación Trabajando En Digital. Incorpora Formación.https://incorpora.fundacionlacaixa.org/detalle-actualidad/curso-competencias-digitales-insercion-usuario-afedes

Fundación Rey Ardid, (n.d). https://www.reyardid.org/formacion/

Given, L. M. (Ed.). (2008). The Sage encyclopedia of qualitative research methods. SAGE.

Gobierno de España,(2021). Plan Nacional de Competencias Digitales. https://portal.mineco.gob.es/RecursosArticulo/mineco/ministerio/ficheros/210127_plan_nacional_de_competencias_digitales.pdf

Julien, H. (2008). Content analysis. In L. M. Given (Ed.), The Sage encyclopedia of qualitative research methods (pp. 120–122). SAGE.

Lenhard, W., & Lenhard, A. (2013). Learning difficulties. In Oxford Bibliographies Online Datasets. https://doi.org/10.1093/obo/9780199756810-0115

Mamaqi, X., & Marta-Lazo, C. (2020). La Brecha Digital entre las competencias digitales y empleabilidad en los colectivos vulnerables: ¿qué competencias medir y cómo evaluarlas?. Nuevas fórmulas del ejercicio periodístico. https://idus.us.es/bitstream/handle/11441/100859/La%20Brecha%20Digital.pdf?sequence=3&isAllowed=y

Mayring, P. (2014). Qualitative content analysis: theoretical foundation, basic procedures and software solution. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-395173

Ministry of Economy, Spanish Government (n.d). España Digital 2026. https://portal.mineco.gob.es/es-es/ministerio/estrategias/Paginas/00_Espana_Digital.aspx

Ministry of Education, Vocational Training and Sports, Government of Spain, (n.d). Spanish Qualifications Framework. https://www.educacionfpydeportes.gob.es/mc/mecu/mecu.html

Morgan, D. L., & Guevara, H. (2008). Interview guide. In L. M. Given (Ed.), The Sage encyclopedia of qualitative research methods (pp. 469–470). SAGE.

Plena Inclusión (n.d.) https://www.plenainclusion.org/

Plena Inclusión (2022). Guía orientaciones básicas a docentes, Competencias digitales europeas para alumnado que encuentra barreras en el aprendizaje. https://www.plenainclusion.org/wp-content/uploads/2022/10/Guia-Competencias-Digitales-Docentes-2022.pdf

Por Talento Digital (2022). https://portalentodigital.fundaciononce.es/

Prior, L. (2011). Using documents in social research. In D. Silverman (Ed.), Qualitative research: Issues of theory, method and practice (3. ed., pp. 93–110). SAGE.

UNESCO. (2021). Media and information literate citizens: think critically, click wisely! Media & information literacy curriculum for educators & learners. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000377068

Villalba-García, E. (2021). Validation of non- formal and informal learning: The hero with a thousand faces? European Journal of Education, 56(3), 351–364. https://doi.org/10.1111/ejed.12468

Vuorikari, R., Kluzer, S., & Punie, Y. (2022). DigComp 2.2 – The Digital Competence framework for citizens: With new examples of knowledge, skills and attitudes. Publications Office of the European Union. https://doi.org/10.2760/115376

7 Annex

Key informants interviewed for this report

Name of the key informant	Organisation and/or area of expertise	Date	Duration	Setting
Anonymous Expert	Pedagogical and technical employment expert for disadvantaged groups. persons with learning difficulties provider expert.	25.03.24	19min	in person
María Pilar Mata Mata	Head of Vocational Training Planning Service. Education Council. Policy maker.	08.03.24	16,10 min	in person
María Florencia Utge Ripamonti	La Rioja Territorial Coordinator of Incorpora and prospector in Asprodema. persons with learning difficulties provider expert.	13.03.24	21,50 min	in person
Alicia Peña Fañanas	Atades employment technician. persons with learning difficulties provider expert.	21.03.24	16,15 min	in person