R1 - Toolkit for PWID

R1/A1 Initial research report

adile
Accessible Distance Learning

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1 THE ADILE PROJECT

As stated in the "Strategy for the Rights of Persons with Disabilities 2021-2030," there are still many barriers for persons with disabilities (PWDs) in terms of access to health care, education, employment, recreation, as well as in participation in political life, which limit their participation in society on an equal basis with others. The Covid-19 pandemic has amplified barriers and inequalities (UN Resources on Persons with Disabilities and COVID-19). People with disabilities have suffered from isolation due to social distancing rules, while limited accessibility of ICT tools, distance learning, and access to information related to COVID-19 have led to a deterioration in their quality of life.

Based on our experience as educators of adults with intellectual disabilities, as a result of the COVID-19 emergency, PWIDs have particularly suffered from the disruption of educational activities since the first lockdown in March 2020. In addition, the health emergency has highlighted several gaps in the social, political, and geographic knowledge of PWDs that may hinder their understanding of the global situation, jeopardize their health and autonomy, and hinder the exercise of their rights as (European) citizens.

The use of distance learning tools to address these gaps has proven to be a viable solution, but several problems have emerged regarding the accessibility of the currently existing virtual platforms for PWDs. As pointed out by the report, "Pivoting to Inclusion: Leveraging Lessons from the COVID-19 Crisis for Learners with Disabilities," (World Bank, 2020), with the pandemic crisis came numerous social and educational barriers for learners with disabilities.

This problem, which has also emerged at the local level within partner organizations, is not new: according to the Communication on the European Education Area 2025, systems at all levels should comply with the United Nations Convention on the Rights of Persons with Disabilities. As also highlighted in the "Strategy for the Rights of Persons with Disabilities 2021-2030", so far there has been insufficient systematic research on the conditions necessary for learners with disabilities to succeed in education. Confinement measures during the COVID-19 pandemic have added to the urgency of developing measures to make inclusive and accessible distance learning an option for all: accessibility is critical to ensuring the full participation of people with disabilities on an equal basis with others.

The general objective of ADILE project is to promote the empowerment and social inclusion of people with intellectual disabilities (PWDs), by promoting the accessibility of ICT tools for distance learning. ADILE also wants to contribute to the removal of social barriers and obstacles, through learning activities aimed at promoting civic education in a logic of inclusion for PWDs.
The specific objectives are the following:

SO1: Define an online educational pathway for PWDs, specifically focused on the acquisition of knowledge, skills and abilities aimed at improving autonomy, in the field of active citizenship, media literacy, democratic values, exercise of rights.

SO2: Develop an accessible online educational platform dedicated to PWDs, in an easy-to-read language, in order to foster equal opportunities for distance learning.

SO3: Define a European distance learning model for PWDs.

The main expected results of the project, listed below, are functional to achieve the specific objectives outlined:

- R1 (OS1) ADILE Toolkit. ADILE will develop an online training course dedicated to PWDs with the aim of improving their understanding of the world around them and increasing their autonomy. Our goal will be achieved through the creation of accessible educational materials and resources, through a highly understandable language. The educational plan will include notions of civic education, media literacy, geography, and mathematics, so as to ensure that PWDs understand current events and become autonomous in managing their daily lives.

- R2 (OS2) Educational platform ADILE. The platform is the central node of the project, through which the model of accessible distance education proposed by ADILE will be tested. In the platform will be uploaded all the training materials contained in the course (R1) and will allow the pilot action of testing the training in easy-to-read language in order to increase the autonomy of the PWDs.

- R3 (OS3) ADILE Guidelines for the establishment of a European model for accessible distance learning for people with intellectual disabilities. This result responds to one of the main aims of the project, as well as the need to respond to the needs of PWDs highlighted by European recommendations and policies. Starting from the evaluation of the experimentation, ADILE will in fact create a model of distance education for POIs that guarantees their accessibility, a model that is currently lacking at European level.

2 THE RESEARCH METHODOLOGY

The ADILE research is included within the Result 1. This result is in line with the S01 which is to define an online educational pathway for PWIDs, specifically focused on the acquisition of knowledge, skills and abilities aimed at improving autonomy, in the field of active citizenship, media literacy, democratic values, and exercise of rights.

This toolkit will develop an online training course dedicated to PWIDs with the aim of improving their understanding of the world around them and increasing their autonomy. Our goal will be achieved through the creation of accessible educational materials and resources, using highly understandable language. The educational plan includes notions of civic education, media literacy, etc…so as to ensure that the PWIDs understands current events and their rights as citizens and autonomy in the management of their daily lives.

In order to create the accessible educational material (the toolkit) it is necessary to carry out the research aimed to analyse the training gaps on key competences of PWDs that emerged with the recent pandemic crisis and the needs emerged in terms of accessibility of digital tools for distance learning of PWDs.

The research is based on a mixed methodology including desk research and field research (this field research will include 2 focus group)
The target groups of the research phase are the PWIDs and Caregivers, Families of PWIDs.

3 DESK RESEARCH

The desk research carried out intended to investigate the broader current situation on the project topics in each country/region and from a European Perspective. Moreover, the partnerships were asked to offer an overview on accessibility of digital distance learning and the needs and training gaps of PWIDs, Moreover, was asked to give examples of existing good practices/case studies but also methodologies, strategies, approaches that are useful to depict an upgrade of the digital learning tools in terms of accessibility and an upgrade of the skills and competences of PWDs.

The Desk Research consisted of the detailed analysis of these following thematic:

- Accessibility of digital distance learning tools for people with intellectual disabilities
- Needs and training gaps in key skills of people with intellectual disabilities that emerged with the recent pandemic crisis
- Best practices of accessible digitals tools and case studies.

4 ACCESSIBILITY OF DIGITAL DISTANCE LEARNING TOOLS FOR PEOPLE WITH INTELLECTUAL DISABILITIES

4.1 Accessibility of digital distance learning tools for people with intellectual disabilities: European Prospective

The pathway towards an accessible digital learning environment for PWID is still long. A literature review from Calle-Jimenez et al. (2021) identified previous studies centered on profiling of E-learners with accessibility needs in the use of MOOCs (Massive Open Online Courses). A total of 16 studies developed on the last 15 years have been selected by Calle-Jimenez et al.

The table composed through this analysis shows that: 3 studies addressed the use of digital learning tools for users with Dyslexia; two others comprised Cognitive impairments (one on ADHD, one on Asperger); and one article explicitly approached the usability of digital tools for Older people facing cognitive impairments. Accessibility to persons with ID is, thus, not sufficiently addressed as regards learning platforms such as MOOCs.

From the users' side, prior studies already pointed out the difficulty of PWID in the use of computer interfaces and web browsers, as frequent changes on such features can lead to confusion. A series of daily activities can be impairing to users with intellectual disabilities, such as use of social media platforms (Shpigelman, C.-N., & Gill, C.J.,2014) and, as reported by EASPD members, in the use of other devices such as ATM machines and banking applications.

As described by Pittman and Heisel, the main barriers faced by students with learning disabilities can be described as follows: In the online learning environment, cluttered websites and screen layouts may be difficult for students with learning disabilities to understand (Burgstahler, 2002). Students with cognitive disabilities often fail due to not having their problems addressed in the online learning environment (Grabinger et al., 2008).

The diverse array of cognitive disabilities makes it near impossible to design a course or material that can address each individual class of cognitive disability, but the use of universal design principles can make instruction more accessible (Grabinger et al., 2008). While a growing interest on distance learning tools for Persons with Disabilities emerged in recent years, the limited use of such resources is still remarkable. A survey conducted with Lecturers; students and other staff from university during INCLUDE project shows that 29% of respondents reported not using accessibility tools because they considered 'they were not needed', and 31% did not use them because they didn't know how to use accessibility tools. As pointed by this study, this hinders the inclusion of future students with disabilities in academic field, especially on the current context of growing number of digital platforms and tools for distance learning.

4.2 Accessibility of digital distance learning tools for people with intellectual disabilities: Spain

The International Convention on the Rights of Persons with Disabilities, ratified by Spain in 2008, establishes the general regulatory framework on disability in our country. Article 24 includes the right to inclusive education at all levels, as well as education throughout life.

Royal Legislative Decree 1/2013, of November 29, approving the Consolidated Text of the General Law on the rights of people with disabilities and their social inclusion, also

known as the General Law on Disability, aims to harmonize the framework regulations in force in coherence with the Convention. This law establishes:

- Regarding the right to education, an inclusive educational system is ensured, paying attention to the diversity of educational needs of young and adult students with disabilities, by regulating the corresponding supports and adjustments.

- Right to an independent life and accessibility: The accessibility conditions that must be met by the different areas protected by the Law are systematized and regulated to guarantee the same levels of equal opportunities for all citizens with disabilities, as well as positive action measures. aimed at supporting the exercise of the right to independent living. The protected areas include practically all the possible ones, including access to Telecommunications and the information society.

Digital supports and ICTs are increasingly used in education, rethinking the teaching-learning model, both in the classroom and through the different modalities of tele-training, based on the Web platform.

The possibilities opened up by technologies are already a verifiable fact for adult students with intellectual disabilities, although in order to guarantee participation in the new educational supports and practices it is necessary that they meet accessibility criteria, are known and can be facilitated/accessed to them by the educational community.

In recent years, different projects, studies and publications have been carried out, both under the auspices of the Ministry of Education, Culture and Sports, regional governments, associative entities and the educational community. It is then intended to facilitate access to information, favor digital inclusion and develop personal skills for the use of technology by adult students with intellectual disabilities or with an Autism Spectrum Disorder are objectives that are pursued.

4.3 Accessibility of digital distance learning tools for people with intellectual disabilities: Italy

According to the Publication by UNESCO Understanding the impact of COVID-19 on the education of persons with disabilities: Challenges and opportunities of distance education (https://unesdoc.unesco.org/ark:/48223/pf0000378404) the United Nations policy brief (2020a) further states that persons with disabilities 'have been disproportionately impacted by the COVID-19 outbreak.'

Even prior to the pandemic, millions of learners with disabilities were reported to be receiving inferior-quality education, often separated from their peers (CRPD, 2016). The situation is compounded in emergency contexts (UNICEF, 2020b)".

The Covid-19 pandemic has led to a major shift in the places, times, and modes of learning and PWID were at greater risk of exclusion and isolation. The pandemic has further revealed the inconsistency of regulatory objectives that, in our country, are not accompanied by real cultural and social change.

According to Anffas Onlus (National Association of Families of People with Intellectual and/or Relational Disabilities), it is crucial to move from a technology-centric approach

to one in which digital technology is understood in a social and organizational context. This allows for multiple points of view and a more holistic approach.

This seems to be a common trend in Europe. As highlighted by the study Promising Practices in the Use of Technology in Disability Services' Response to COVID-19 Pandemic commissioned by EASPD, it is crucial to help people with disabilities use technology.

This can take the form of courses, training sessions or simple explanations and exercises, for example. It enables them to overcome their hurdles in the field and to see the benefits. With regard to organisations, it is necessary to support and train their own employees (disabled, non-disabled) in the use of technology and in dealing with people with disabilities, and to make them feel good. It is much easier for employees to implement useful solutions. Therefore, it is important to refer to two different areas in the use of technology: from service providers for people with disabilities and from their customers".

In Italy there is still a lot to do in the field of skills and technologies for social inclusion. According to ASPHI, an Italian Foundation focused on digital technologies for people with disability, restarting from the skills means to make known the potential of technologies to those who work in the contexts of inclusion and care, to people with disabilities and fragility and their families. But this is not enough, we need a new relationship between companies, funding bodies, institutions and third sector organizations, to develop effective and incisive initiatives. It is therefore a priority to cooperate with various stakeholders so that technologies can be used as a valid support for the autonomy and communication of people with disabilities. The situation related to the emergency has forced and accelerated the use of tools even in those contexts less digitized, with the achievement of unexpected results by users, families and operators. It is now necessary to move from a situation of reaction to the emergency to the construction of a strategy that aims to enhance and consolidate the skills acquired with an overall view.

The research shows that in our country, unlike the school sector in which a lot of work is being done so that the ways of carrying out distance learning are defined in a precise and detailed way at a central level (MIUR) through the School Plan for Integrated Digital Didactics -DDI, the adult education sector is characterized by the scarcity of information and directives regarding procedures, methodologies and tools for inclusive education.

The various measures put in place to assist adults with ID and continue the activities dedicated to autonomy and educational support of people with disabilities in online mode are mostly the result of a joint effort of institutions and private stakeholders. Both in the emergency phase and now, organizations working with PWID have had to reorganize and imagine new ways of delivering services that would be equally effective. Finally, the (few) training opportunities aimed at developing key competences currently available online are exclusively addressed to young people with ID. In addition, the majority of active citizenship/autonomy pathways aimed at adults with ID in our country involve in-person activities.

4.4 Accessibility of digital distance learning tools for people with intellectual disabilities: Ireland

Researchers at Trinity College Dublin have partnered up with an Irish Start-up Company called, WaytoB to create DigiAcademy, an e-learning platform that aims to teach digital skills to people with intellectual disabilities. The platform itself, DigiAcademy, is part of Digi-ID. This is a European project that looks to address the current challenge of digital inclusion and digital literacy amongst people with intellectual disabilities.

The CEO of WaytoB, Talita Holzer (also a vocal advocate for inclusivity in Dublin) told Silicon Rebublic.com that what they found " Was that a lot of people weren't really able to communicate even with families and close friends because they were in lockdown. So they would need support to do this". They created the project to help teach people basic skills such as making an email address, calling someone on Zoom or using a web browser.

The platform is designed for anyone who would like help in learning some of the basic digital skills. This can also include older adults or people with vision impairments. They saw that this was critical during the COVID pandemic. Her company has made a navigation tool that aims to make independent travel easier for people with intellectual disabilities.

Holzer pointed out that although 15% of the global population has a disability, this group of people are rarely taken into consideration by companies that have built existing navigational tools, such as Google Maps and states " That the only reason that people with intellectual disabilities cannot use tools like Google Maps is because those tools weren't designed to be inclusive" Talita and WaytoB's co-founder, Robbie Fryers have designed a smartphone and smartwatch navigation system, that aims to support people with intellectual disabilities, providing them with icon-based directions and walking instructions that are integrated with public transport.

Their aim is to remove some of the obstacles that stand between people with intellectual disabilities and independent travel. Which can then really hold people back from accessing education, getting a job and socialising in the way that they would like too. DigiAcademy is an accessible digital education platform. It was co-designed with people with accessibility needs to ensure its inclusive to everyone. https://www.digi-academy.org/landing

4.5   Accessibility of digital distance learning tools for people with intellectual disabilities: Poland

Research carried out in Poland on the accessibility of digital distance learning tools for people with disabilities shows that there is a huge lack of such tools in general access. There are plenty of websites, materials and tactics adapted to the general public, but for people with mental disabilities there is a huge gap. It was possible to find a lot of materials that are aimed at teachers, carers and parents of people with disabilities, but for self-directed learning and adapted materials it was very difficult, almost impossible to find them.

In accordance with state policy and Article 69 - Persons with disabilities shall, in accordance with the law, be assisted by public authorities in securing their subsistence, education, preparation for work and social communication.

Also the ongoing changes, including rapid acceleration of civilisation, combined with the development of science and technology are forcing the formation of a new type of society, called Global Information Society, Knowledge Society. There are many useful applications for people with disabilities. Some are the responsibility of the government, others are the responsibility of foundations or people's initiatives. Some are able to translate spoken language into sign language, others can recognize denominations of money, the intensity of light in a room or colors, check different places for adaptations for people with disabilities.

For people with disabilities, it is important to note that the technical revolution brought about by universal computerization will bring about changes that may significantly affect their situation in society, including their educational situation. Global telecommunication networks make it possible not only to undertake distance work, the so-called teleworking, which may become a breakthrough in employing people who prefer to work from home due to a defect, but they will also change the approach to the organisation and methods of conducting the process of learning and revalidation of the disabled (Zielińska 2005, p.89).

The changes taking place in everyday life and in general education require similar transformations in special education. One of the important elements of these changes is the use of modern technologies in the educational and remedial process both at the level of software and appropriate platforms, specially adapted for people with mental disabilities.

The use of computers in learning processes helps to improve visual analysis and synthesis, perceptiveness, and attention, improves manipulative skills, eye-hand coordination and, most importantly, stimulates and motivates inhibited people, thus giving them a chance for a fuller contact with the rest of the society with disabilities.

The Polish Association for Persons with Intellectual Disability undertakes many activities to improve the functioning of mentally disabled people.

4.6 Needs and training gaps in key skills of people with intellectual disabilities that emerged with the recent pandemic crisis

4.6.1 Needs and training gaps in key skills of people with intellectual disabilities that emerged with the recent pandemic crisis: European Prospective

As described on the UNHR Guidance on COVID 19 and the Rights of PwD, the adoption of remote education raises new barriers to PwID and their families, be it for the lack of proper equipment, lack of internet access, lack of proper guidance and support, and even due to the instability on income households and growing isolation during confinement.

The demand for more online services reached a peak on several sectors during Covid-19 outburst, including the support services. "Zaagsma et al " reports that DigiContact, a Dutch application destined to provide support to people with ID living independently, had 282 new users during COVID confinement, an increase of more than 40%. As regards service providing on the disability sector, a study conducted by Sozialhelden e. V. and commissioned by EASPD showed that, out of 95 respondents (service providers), 91 per cent turned to online services in the context of covid crisis. 72 per cent of such services work with people with a cognitive or intellectual disability.

This shows that services for such groups were willing to adapt to the barriers brought by COVID. However, the situation of disabled persons and their families during COVID-19 crisis was overlooked, especially regarding the digital divide and isolation of persons with ID. In fact, the development and adaptation for more accessible distance learning was neither steady nor satisfactory throughout Europe. Countries such as Finland were adapted more easily due to a better access to online devices and connectivity of services and PwD. Greece and Poland faced more difficulties in responding to this new demand for online services during Covid restrictions period.

A 2020 survey conducted by the Fraunhofer Institut and the Inclusion Tech Lab with 1700 parents of children with disabilities in Germany reported that most families felt they were left completely alone on confinement context. They informed that they didn't have compensating measures for the lack of schooling or other activities essential to their family member living with a disability. As a result, 40% of the respondents expressed a wish for some kind of online support services. EASPD's 2020 report on Services For People With Disabilities During The Covid-19 crisis also detailed that the confinement period was permeated by intense stress from staff working with young users or users with more severe disabilities, as "user's parents were often confronted with overwhelming challenges and also needed a great deal of support". Besides the need for continuing support and follow-up on daily activities, the need to explain and educate both carers and people with ID on the characteristics, effects and prevention

4.6.2   Needs and training gaps in key skills of people with intellectual disabilities that emerged with the recent pandemic crisis: Spain

After the announcement of the "state of alarm" caused by COVID-19 in mid-March 2020, eight out of ten people with disabilities aged 6 or over who were studying at that time saw how the center where they were studying made it possible for them to being able to follow classes and studies from home (79.5%). On the contrary, the remaining 20% did not have this support. Despite the lack of help from the educational center, 8.3% were able to continue studying on their own at home or with the help of someone outside the educational center, and the remaining 11.5% were unable to continue with their training plan.

The proportion of people for whom the center where they studied before the pandemic did not allow them to continue with classes from home was somewhat higher among men (25%), as age increases (29.8% among those who have 45 years and over) and among the population that recognized having many difficulties to reach the end of the month (33.1%).

The lack of possibilities on the part of the center to continue with studies from home exceeds 25% among the population with mental health and psychosocial disabilities (25.9%), with several disabilities (27.8%) or with a disability 65% or more (26.8%).

The most common method to continue studying from home was sending notes, exercises and homework by email (72.9%), followed by communication by phone or video call with teachers (62.4%) and the classes through video calls (62.0%).

The majority of adult students had a computer at home (83.7%) as well as a good internet connection (75.9%) before the pandemic. On the contrary, 16% did not have a computer at home or it was not accessible and 8.4% did not have internet or had connection problems.

In relation to the degree of ease or difficulty in following the course with the materials, technology and devices available at home, nearly half recognized that it was quite or very easy, although 27.6% maintained that they it was quite difficult and 4.3% that it was impossible.

The fact that most of the people consulted had the possibility of continuing with their studies during the pandemic does not imply that they did not have problems derived from studying from home. In fact, more than half of the adult students acknowledge that it was more difficult for them to follow or understand the explanations of the teachers (55.3%), while 34% had problems being able to speak or write with their companions. Likewise, 27.8% of adult students who could continue their studies did not receive any calls from teachers of their no formal education during confinement.

Another of the problems detected is related to the need for help, which could not be covered in all cases. In this sense, although 38.2% of the adult students received the help they needed and 21.4% did not need any type of help, 28.6% needed support but did not receive it.

In general terms, the vast majority of adult students with disabilities who were able to continue their studies during the initial phase of the pandemic, characterized by home confinement, make a positive assessment of the support offered from the study centre or training (70.3%) and six out of ten consider that the centre offered them everything they needed to study from home (60.5%).

This does not imply, however, that studying from home has not caused certain difficulties and added problems. Indeed, nearly half of adult students acknowledge that studying from home affected their concentration and grades (48.1%), and 45.1% confirm that during these months discussions with people with disabilities increased for those who lived together.

Among the measures that are considered most important to be adopted in study and training centers so that the educational situation of people with disabilities improves during the difficulties caused by COVID-19, the following two stand out:

On the one hand, the need to have more teachers so that they can attend, individually, to each student according to their needs (45.2%) and, on the other, aid to people with disabilities so that they can have the support they need and have the same opportunities as other adult students (44.5%).

In addition to the opinion expressed by the people surveyed, the people who, as experts, have participated in the Delphi method carried out have provided other perspectives. In this line, they have highlighted, among other problems, the emotional and family impact that the detention of the face-to-face school year has had, unset the organization of the daily life of adult students and their families; the reduction or disappearance of the extracurricular supports received by some adult students with disabilities and that are essential for their academic evolution, or the lack of accessibility that both the methodology and the educational content used during the COVID-19 pandemic have presented.

From a broader perspective, they consider that there has been a limited educational response for people who have different needs, and that this situation has worsened in the case of those families who do not have access to ICTs due to lack of economic resources, digital skills or necessary support products.

Regarding the needs in term of improvements of key skills of people with intellectual disabilities that emerged with the recent pandemic crisis, those gaps are related to the following key competencies:

- Digital competence
- Learning to learn
- Social and civic competence

4.6.3 Needs and training gaps in key skills of people with intellectual disabilities that emerged with the recent pandemic crisis: Italy

According to the recent article written by two professors of sociology, Maddalena Colombo and Mariagrazia Santagati, The Inclusion of Students with Disabilities: Challenges for Italian Teachers During the Covid-19 Pandemic, new educational

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problems emerged during the COVID 19 scenario. Indeed, in terms of learning, it became increasingly difficult to customize lessons and activities for students with disabilities.

Some teachers reported that online lessons were like "talking to the wall" without knowing if someone is listening to you or not. Concerning the needs of PWD, the authors asked the latter to report the main challenges faced during school closures. Students mostly felt an impediment in interaction with both classmates, other impediments were the weakness of their Internet connection or the fact they have to share ICT devices with other members of the family. Another point raised concerns the fact that students with disabilities found it hard to cope with digital tools. In primary schools, difficulties in using ICT devices or digital platforms are greater than in secondary schools.

This could be, at least in part, one of the reasons why there is a meaningful share of students with disabilities who have difficulty in following online teaching activities: according to a survey made by the authors, 30.5% of primary school children "often/daily" cannot follow sync lessons and video calls regularly. Teachers see age as intersecting with the presence of a disability as a determinant of the different responses of students to the proposed learning activities: while children lacked more structural and digital tools and support, teenagers and adolescents were more challenged by the difficulty in understanding and doing specific school assignments, also because the personal interaction with teachers was strongly limited by distance learning.

4.6.4 Needs and training gaps in key skills of people with intellectual disabilities that emerged with the recent pandemic crisis: Ireland

In regards to the challenges and gaps that emerged by the participants and staff, they identified some challenges to online learning - difficulties with technology and communicating online. All participants reported that they use the internet and devices such as phones and tablets frequently, however, some reported that they needed help to log in to the classes on Zoom.

One participant who speaks in a very quiet voice reported that she found the online classes difficult - It's hard. They can't hear me (participant 6). The classes may be particularly challenging for a person who speaks in a low volume, as their responses may not be heard by the tutors or other participants. Similar difficulties were experienced by a participant with hearing difficulties. While overall, staff reported that online learning worked well, as one facilitator put it, it was 'a learning curve'.
The staff identified the following challenges to online learning:

- Technical difficulties
- Balancing turn-taking
- Holding the participants' attention.

Staff identified effective strategies to overcome these challenges. Effective strategies in online learning the staff identified the following strategies for teaching adults with ID online:

Rational Strategy Actively. Ensure that all participants get the opportunity to contribute. Turn-taking is more difficult in the online environment, so tutors needed to put in place strategies to manage this, such as muting all other microphones if they needed to hear a response from one participant.

Planning 'standalone' classes: Tutors found that these types of classes were much more effective online than project-based work, which required more organisational skills from the participants. Incorporating a routine into the classes the tutors felt that once the participants got used to the routine, they felt more comfortable and were more receptive to learning new material. Using shorter, more direct sentences in the absence

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of non-verbal communication as discussed previously, staff found that they had to adapt their verbal communication to support understanding.

Individual 'check-in': Facilitators called participants regularly to check-in, or if they needed support to finish an activity when a class had ended. Activities with a high language demand were particularly difficult, you couldn't really do things with loads of instructions and steps you know, it was hard to break complicated things down without being there with them in person (staff member 6) This may have been due to the absence of non-verbal communication which would typically support understanding in face to face interactions.

The activities that translated best to the online environment were activities which had low language demands, such as dance, exercise, singing or art. In future, activities with higher language demands could be supported by adding visual or text support to the classes to break down instructions and support understanding.

In the current context of extremely limited education and employment opportunities, which may be further limited by the social and economic implications of Covid-19 (UN, 2020), it is vital that all avenues of educational and employment opportunities for people with ID are pursued. People with LD are amongst the most disadvantaged in the educational system (Watson & Nolan 2011, p 38) and the least likely of all people with disabilities to be employed (National Disability Authority 2019, p 10). Unfortunately, this lack of opportunity is reflected in the online domain.

While online learning is becoming more and more prevalent, it is not seen as an option for people with ID. There is a concern that society holds prejudicial stereotypes, believing that people with ID are unable to participate in online learning. Inspire, in partnership with its participants, aims to demonstrate that a new pathway to education, educational choice and autonomy is possible.
While there are limitations to this case study, the voice of the participants is heard. The participants of this case study have illustrated that they can engage in online learning; that they are motivated to learn; and that they have a broad range of interests which they would like to pursue through online learning.

Further research is needed to determine how people with LD can engage in on-line learning, and what types of support are required in this area.

All research should have at its core the voice of people with ID. We would also like to make the readers aware of ARK, AHEAD's home for digital accessibility resources and know-how in tertiary education. Digital accessibility is key to inclusion, as it provides more equal access for students and staff to engage with institutions, their services and related educational materials in multiple ways.
ARK provides practical resources and know-how to support a range of institutional staff to be more accessible in their roles, and supports colleges and centres to consider a whole institution approach to digital accessibility, meet their legal obligations, boost accessibility compliance, and provide a better digital experience for all.

Built into ARK is:

- A range of free role-based short courses for educators, administrative, senior and technical staff, which can be taken directly with AHEAD, or used in internal CPD systems under a creative commons license.

- An introduction to key web accessibility legislation for further and higher education institutions and a legal FAQ on what the web accessibility directive

means in practice. • Links to lots of other valuable AHEAD and external resources to continue your accessibility journey can be found on www.ahead.ie

4.6.5 Needs and training gaps in key skills of people with intellectual disabilities that emerged with the recent pandemic crisis: Poland

People with disabilities want to learn and expand their abilities. They also think that the online way of learning is pleasant and easy for them. Unfortunately, there are not many tools and platforms available for them to use. The situation with the coronavirus pandemic has shown how serious this problem is and how many gaps there are in the system of online learning for people with disabilities. The platforms that do exist have some textbooks in electronic format, but this is not enough for people with disabilities.

People with intellectual disabilities who have not received professional support at school or in workshops may miss their chance for development and block their way to a relatively independent, adult life.

That is why it is so important to create a platform for them to use at every stage of their lives. It is a good idea to start by adapting websites for people with learning disabilities. Sometimes these people need strong colour contrasts, capital letters or a very simple layout. With proper site navigation they can reach the information they are interested in and not get discouraged while searching.

The pandemic crisis has shown that it is also worthwhile to teach people with disabilities the basic use of computers and their programmes. Very often people complain about this lack of knowledge and the lack of appropriate sources to educate them. They also noticed lack help to focus and encouragement to go further and deeper. Also, classes teaching basic information such as visiting a bank, post office, hospital or train station would be welcome, especially in the form of a video which keeps the learner engaged.

5   BEST PRACTICES AND CASE STUDIES

5.1   Best Practices and Case Studies: European Prospective

Hungary - Hand in Hand Foundation Erasmus Access Project: Internet Safety for Persons with Intellectual Disabilities https://kezenfogva.hu/node/1796
Spain - Virtual itineraries in the city of Sevilla Itinerarios virtuales en la ciudad (Sevilla) y el territorio (us.es)

Finland -.Poljento (Cadence) project involves PWID for the development of digital communities on social media and stimulate their active participation by producing content to those platforms.

5.2 Best Practices and Case Studies: Spain

RAID Project
To ensure the accessibility of digital tools, the RAID project was developed.

Description: Resources for Accessibility and Digital Inclusion.
It is a project developed by FEAPS (Spanish Confederation of Organizations for People with Intellectual or Developmental Disabilities). Its general objective is to favour the digital inclusion of adult students with intellectual and developmental disabilities, as a specific objective, to develop personal skills for the use of the Internet.

Adult students have an easy-to-read manual to facilitate Internet accessibility and take advantage of network tools. The teaching staff has a series of pedagogical tools to develop the necessary skills in adult students with intellectual or developmental disabilities for the use of the Internet.

Target audience: Teachers / Adult students / Family
URL: http://www.proyectoraid.org/
Picaa: Learning support system
Application designed by the GEDES research group of the University of Granada for the creation and personalization of personalized didactic activities adapted to adult students with intellectual disabilities, considering the profile of the end user who is going to carry them out. 5 types of activities can be created: association, puzzles, exploration, organization and memory.

Both the design and the execution of the exercises are carried out on mobile devices, providing mobility, immediacy and autonomy.

Target audience: Teachers/ Adult students/ Family

Technical characteristics: For iPhone/iPod touch or iPad mobile devices, it is necessary to have iTunes.

Multi-Languages: Spanish, Galician, English and Arabic.

Accessibility: The system has been designed to serve adult students mainly at the following levels: cognitive, visual and auditory. The activities can be adapted in different aspects: Being able to select the multimedia resources (images, sounds, text, animations, etc.) that best suit the needs of adult students.

Increasing or decreasing the difficulty of the exercise or the way it is presented. Choice between different touch interaction modes. Timing, being able to establish a calendar of activities for each day of the week.

URL: http://scaut.ugr.es/picaa/

5.3 Practices and Case Studies: Italy

Auto-Click: Autonomie nell'autismo – Social Cooperative Serena (Ferrara) Digital platform to support people with intellectual disabilities and autism in conditions of lack of educational support and to enhance face-to-face training in presence for the generalization of skills.

IDA (https://sites.google.com/view/inclusivedigitalacademy/home)- Erasmus+ programme It aims to develop and improve the digital skills of people with intellectual disabilities. With the interactive support of people with mental disadvantages, IDA created an App to train these skills.

Breaking Barriers and building bridges (https://www.totalinclusion.org/) - Erasmus+ programme. It aims to raise awareness of young adults with intellectual disabilities on their rights and common social issues to strengthen their active citizenship and civic engagement.

Poseidon (https://www.poseidon-project.org/about/) FP7 programme. It develops personalised and smart technology solutions to help people with Down syndrome become more independent and more included in society.

5.4 Best Practices and Case Studies: Ireland

Here is some interesting information on innovative organisations in Ireland. One of them is called AHEAD www.ahead.ie (association for higher education access and disability) Another is called Inspired (Focusing on ability) https://inspired.ie/.On the following pages is a very interesting case study. Titled a review of inclusive Education.

Case Study 1:

Declaration of interest: The researcher has a personal connection to this organisation - one family member is a participant in the organisation, and another family member sits on the board of education of the organisation. This information was clearly communicated to all research participants and consent forms indicated that refusal to take part would have no adverse impact on any relationship they have with the organisation or its staff members.

Introduction

When the Covid-19 lockdown was announced in March 2020, 'Inspired', a community organisation for people with Intellectual Disabilities, quickly decided to move its' classes online. Online learning is not a mode of education that has typically been used by adults with Intellectual Disabilities (ID) in Ireland.

In the context of the Covid-19 pandemic, with online learning becoming more and more prevalent, it is important to capture and document experiences of people with ID in online learning so that the educational inequalities that people with ID

have experienced in traditional face to face education are not perpetuated in the online domain.

Inspired - The organisation Inspired provides education, employment opportunities and community participation opportunities for adults with learning disabilities (LD). The organisation was started in 2014 by a group of parents of adults with ID who were 'desperately seeking an alternative to traditional post-secondary institutional settings' (Inspired, 2020).

One of the organisation's core values is that the participants are the decision-makers of the organisation, deciding what classes and opportunities should be offered. Initially, the organisation was funded entirely from the fundraising initiatives of the parents; now it is part-funded by the European Social Fund and the Health Service Executive (Inspired, 2020).

The online learning programme developed consisted of three 60 to 90-minute classes per day.
The organisation posted a weekly schedule to each participant, which contained class details and login details. All classes took place over Zoom, a widely used online video conferencing website.

The organisation provided iPads to participants if they did not have a computer and delivered materials if they were required for a class, for example, art materials.

These classes were led by a tutor and were also attended by a facilitator. The role of the tutor is to teach the class. The role of the facilitator is to support the participants – for example by ensuring that participants' technology is working, supporting communication, monitoring for understanding, etc. Once online learning was established with the full-time participants of Inspired, it was also offered to other groups of people with ID. These groups included a mixture of adults who were known and not known to the organisation, for example, school leavers from local special schools and a group of adults with ID in another county.

Case study 2

This case study was completed through Queen's University Belfast, with the support of Dr Alison MacKenzie.15 research participants took part in the case study: nine participants with ID, two tutors and four facilitators. The staff members engaged through questionnaires and focus groups.
The participants with ID were offered three methods of participation – questionnaire, individual interview or focus group. The case study aimed to be as inclusive as possible through the use of accessible information sheets and consent forms, offering choices of method of participation, sending questions in advance and having the option to bring a family member along to interviews.

The results

- Participants found Covid-19 restrictions very challenging

The participants reported feelings of sadness due to the restrictions; missing loved ones; missing work or educational activities and missing incidental social interactions. Some participants spoke about feeling sadness or feeling stress during

this time: It was sad, very stressful...it was hard (participant 6). I think I wish the virus was gone because I wish everything was back to normal (participant 4).

Many of the participants spoke about how hard it was to be separated from loved ones: It's hard because I can't see my family, or my boyfriend and you know I miss them...It's not easy (participant 1).

One participant spoke about how he missed incidental social interactions such as 'meet[ing] people...downtown or in the street or in the pub' (participant 8). Many participants spoke about the monotony of the day during lockdown, about 'trying to keep [themselves] going' (participant 2).

Participants also spoke about how they missed work or engaging in educational opportunities and hobbies: It feels a bit quiet. Because we can't go to work or anything like that (participant 3)[speaking about her job in a hair salon] - I couldn't sweep the hairs or wash the cups...I couldn't fold the towels (participant 6).

Some participants were disappointed that they were missing other opportunities, such as holding a 40th birthday party. One of the participants who lives in a supported living environment moved back to her parent's house during lockdown. She said that while it was the right decision to move home, she missed her housemate. I find it very hard not seeing my housemate, because I find that I miss her. She's very lonesome all by herself, you know? (participant 4).

All participants reported that lockdown would have been harder without the classes, mostly because they would have had nothing to do during the day. Participant 8 expressed this very eloquently – 'I'd have no hope...there's no question about it, I got no hope, no fun and no craic'
Staff viewed the Covid-19 restrictions as being more difficult for the participants due to social isolation; a reliance on routine; and difficulty understanding the pandemic and government restrictions.

I think a lot of the participants felt lost and isolated when everything closed and the online classes were a lifeline for a lot of them (staff member 2).

- All the participants found the classes valuable

This was because participants enjoyed the classes, and they helped participants to stay active. I learn different things, different classes in [the organisation] and it keeps me active when I'm at home (participant 1).

One participant spoke about how the classes were a good distraction from worrying about the Covid-19 pandemic. Well, if not like this then then then there was then I would in thinking about that, about that coronavirus (participant 7).

Some of the participants spoke about the physical and mental health benefits of the online exercise classes. I do Zumba and yoga because I find them very good, because they help me to relax and motivated like to relieve my stress as well (participant 4).
The staff also spoke about the mental health benefits of the classes in terms of providing a routine to the day, when the participants most needed routine

Their routine was supported by the online classes, I think it gave them a sense of comfort and security and most of all fun (staff member 3).

- The participants viewed the classes as a social opportunity

This may be where the organisation's classes differed from a generic online class. The participants were not only getting an opportunity to learn and engage in enjoyable activities but also to connect with people who are important to them. Participants spoke about how they liked seeing their friends and catching up with them. Staff also viewed the classes as a social outlet for the participants, during a time when social interactions were very limited. After a few weeks, the participants began to log in early, so that they could talk to their friends before class

A few of them would come on a few minutes before the class to have the chat, because you know they need that too... it's lovely to see them meeting there a bit early (Staff member 3).

One participant who lives in a very isolated rural area described how the classes gave her the opportunity to meet her friends, but also to feel part of a wider community. Well, yeah, because I think...they help me more to benefit towards the community and be part of [the organisation], be part of the environment, interact with other communities as well (participant 4)

- The classes helped people with ID to learn new skills

Many participants spoke about the educational benefit of the classes. I found it very good for like helping me like to learn new things...It is giving me more independence and more confidence...it's good because l because I'm learning new things and like, meeting, communicating with other people. (participant 4).

Some participants viewed online learning as a new opportunity in their lives outside of the Covid-19 pandemic, and spontaneously generated ideas for new classes such as classes about makeup and nails, an online fashion show event, literature, literacy and numeracy class, amongst others.

Some participants of this study found online learning difficult due to the emotional impact of Covid-19 restrictions, spoke about how it was hard to see people, but not be able to meet them in real life. For these participants, seeing their friends in this unusual context seemed to amplify the stress of the pandemic. Some participants spoke about how it was difficult to see people on Zoom

My friends. The pictures are really smaller I can't see them. I want to see my friends... I can see them but it's sad (participant 6).

- Staff members were surprised at how well people with ID engaged in online learning

The tutors reported that from the beginning, they expected the participants to engage in online learning successfully. When I asked whether they had concerns that the participants would be able to engage in online learning, their response was very brief 'We never doubted them, did we?' (staff member 6).

However, they were concerned that the participants would not be able to learn new skills online and saw it as an opportunity to reinforce skills learned face to face.

The tutors reported that in fact, the participants were able to learn new skills online.

While the tutors did not have concerns about whether online learning would be accessible to the participants, the facilitators felt differently. They spoke about their initial concerns, that they wouldn't be able to engage with the participants online, or that the participants wouldn't be able to access the technology - 'First I thought "Oh My God, how is this going to work"...we didn't know how they'd manage with it' (Staff member 1).

Despite trepidation, the facilitators reported that they were pleasantly surprised when participants could access the classes, and 'presented to them' (staff member 1). While some participants took time to adjust to the online environment, 'they all managed in their own way really' (staff member 4).

Overall, facilitators felt that all participants were suitable for online learning and 'not only [connect] with each other but to get involved in whatever subject or activity' even though they might engage in it differently. They viewed their role in online learning as supporting '...the participants to be involved in a way that suits them the best' (staff member 3).

5.5   Best Practices and Case Studies: Poland

An excellent example of websites tailored to the needs of people with mental disabilities is: https://danone.pl/ and http://tradycjadostrzegana.pl/ These sites have used a number of facilities to make it easy for everyone to navigate through them. People with disabilities confirm that such features of websites greatly improve their reception.

Features used include:

- High contrast and letter size.
- Alternative text
- Clear interface
- Consistent navigation and compatibility
- Multi-page page (the opposite of one page) which was developed based on simple subpages with content in the form of text, graphics and video.

Already at the stage of first contact with the page we receive a header in the form of a video, a simple menu without additional subcategories making it difficult to click on the appropriate tab, as well as a wheelchair icon opening the settings window for people with disabilities.

5.6   Cross-country analysis of Desk research

The desk researches carried out in all countries showed that digital supports and ICTs are increasingly used in education, rethinking the teaching-learning model, both in the classroom and through the different modalities of tele-training, based on the web platform.

In terms of accessibility, from a European point of view and in all countries it is showed that the pathway towards an accessible digital learning environment for PWID is still long. In Ireland it seems that the development of accessibility tools is a bit faster than in the other countries. In Italy and Spain, the situation is similar, the total accessibility is still missing in distance learning tools but there are some steps that are taken in order to improve this situation, research carried out in Poland on the accessibility of digital distance learning tools for people with disabilities shows that there is a huge lack of such tools in general access.

In all countries, people with disabilities have suffered from isolation due to social distancing rules, while limited accessibility of ICT tools, distance learning, and access to information related to COVID-19 have led to a deterioration in their quality of life. The situation with the coronavirus pandemic has shown how serious this problem is and how many gaps there are in the system of online learning for people with disabilities, therefore there is still work to do to achieve the accessibility of the digital learning environment.

Moreover, this situation has worsened in the case of those families who do not have access to ICTs due to lack of digital skills or necessary support products.
In fact, from the desk researches emerged that the principal limits of distance learning, especially during the pandemic crisis, were due to problem with internet access, technology and communicating online.
Regarding the needs in terms of improvements of key skills of people with intellectual disabilities that emerged with the recent pandemic crisis, those gaps are related mainly to the digitals competences.

Digital accessibility is key to inclusion, as it provides more equal access for students and staff to engage with institutions, their services and related educational materials in multiple ways.

Regarding the best practices and case studies, it is showed that mainly private enterprises and universities are developing accessible tools. The cases and the practices have in common that the possibilities opened up by technologies are already a verifiable fact for adult students with intellectual disabilities, although in order to guarantee participation in the new educational supports and practices it is necessary that they meet even more accessibility criteria.

6 FIELD RESEARCH

Focus group research is a qualitative research method/data collection technique that seeks to gather information that is beyond the scope of quantitative research.

This research method is particularly useful when the interaction between participants can enrich the topic and the co-construction of the discourse is useful for the research objectives.

Focus groups consist in a small group of selected participants that are stimulated with open-ended questions in a discussion type atmosphere in order to generate comparative analysis of a given topic.

The field research was based on two focus groups carried out in some organizations that work for the inclusion of PWIDs.

Those focus groups focused on the identification of the needs of adults with ID in terms of autonomy and empowerment and involved beneficiaries such as educators, trainers, family members, caregivers and potential stakeholders, in order to obtain complete information.

Specifically, 1 focus group involved adults with ID and 1 focus group involved educators, trainers, caregivers and families of adults with ID.

6.1   Data of Focus groups with PWIDs

6.1.1   Focus groups with PWIDs in Spain

In Spain the focus group with PWID was organized on 19 of April, it took place in the head quarter of the association ALEPH-TEA in a blended modality, part of the participants assisted in a face to face way and part of the participants participated virtually by connecting trough zoom. In total the participants were 10. Regarding the profile of the participants, they were adults with different levels of autism spectrum disorders (ASD).

According to the people interviewed, during the pandemic period they used online digital tools for distance learning and they are still using them. The devise they are using is mainly the mobile phone and the computer and they use zoom and google meet. According to the participants, distance learning at the beginning was a bit stressful for them during the COVID-19 pandemic.

In general, they claim that the digital tolls are helping them, however there are some limits in terms of accessibility, these are the following:

- Confusion during the moment of entering to the meeting as they don't immediately recognize the link they have to click since there are too long links.
- The sound is not always good, and this create some problems related to the understanding of the online activities
- The interaction sometimes is limited

They would like to learn about more digital skills, like how to participate in a more interactive way with digitals tools. They expressed their interest as well in courses about work and employment and courses related to creativities activities.

The difficulties that they faced the most other than those related to the accessibility of the digital skills were that sometimes it was not easy to pay attention or to understand the objective of the activity and why it is was important do develop certain online activities and curses.

The needs emerged in the focus group in terms of accessibility of digital tools for distance learning of PWIDs were:

- Needing of an easier way of acceding to the meetings
- Needing of an easier way of digital interaction during the activities

The training gaps on key competences of PWIDs emerged in the focus group were the following:

- Communication in mother tongue
- Digital competence
- Learning to learn
- Social and civic competence
- Cultural awareness and expression.

6.1.2   Focus groups with PWIDs in Italy

In Italy the focus group was organized the 8 of April, it took place face to face with 7 participants. The profile of PWID were people with Down Syndrome and one with ASD. According to the people interviewed during the pandemic period they used online digital tools for distance learning, and they are they currently still using online digital tools for distance learning.

During the distance learning they used their PC, Tablet and smartphone. The PWID think that the use of digital tools facilitated/helped them.

Participants used Zoom, Meet and Teams as online platforms.

They all reported that it was difficult to connect at first but then it became easier.

No participant reported being stressed by the digital tools but rather by the Covid period and the lockdown itself.6 out of 7 participants used the Zoom platform every day to connect to simplified educational courses in the subjects of mathematics, Italian, current affairs and civic education, time, logic, affectivity. All connect independently except 1, helped by his mother - initially all were helped by their parents.

The principal limits in terms of accessibility were the following:

- Internet connection
- Connect audio and video

- Enter the password - especially if the letters were upper and lower case
- Figure out which link to access on Zoom (it's too long)
- In addition to the problems with accessibility, the participants report that they had no other difficulties and that they saw digital tools as an opportunity and not a stress

They would like to learn to connect alone, without the help of the caregiver (in this case only one participant- the others are autonomous in connecting).

Needs emerged in the focus group in terms of accessibility of digital tools for distance learning of PWIDs:

- More training on how to use the tools
- Easier language
- Tools in Italian

The training gaps on key competences of PWIDs emerged in this focus group were the following:

- Communication in mother tongue
- Mathematical competence and basic competences in science and technology
- Digital competence
- Social and civic competence
- Sense of initiative and entrepreneurship
- Cultural awareness and expression.

6.1.3   Focus groups with PWIDs in Poland

In Poland the focus groups took place face to face on 18.03.2022 with 7 participants. Regarding the profile of participants, they are people with mental disability. It was a mild degree and the participants were able to communicate and answer questions very well.

According to the people interviewed during the pandemic period they used online digital tools for distance learning and they are still using them. The device used is the PC. According to the participants, distance learning for them during the COVID-19 pandemic was stressful.

The participants with PWID claimed that the use of digital tools helped them, regarding the principals limits of the digital tools in terms of accessibility, the participants acknowledged that the main limitation of digital tools was the internet connection.

The next problem was the difficulty of finding material online, especially material that was accessible to them. Many times there was a need to print something out and this option was not available. People with disabilities need simple and concrete messages. Also, were missing elements that sustain attention and enter into some kind of integration with the learner, like sounds, video, pictures, badges, banners, these are all welcome.

For them the most important thing is to learn how to use electronic devices and how to use the Internet and the opportunities it offers. Another frequently mentioned aspect was learning to maintain concentration and these other factors:

- Personal and social functioning
- Activities to develop communication
- Classes that develop creativity

They most often encountered difficulties related to inadequate materials. They were not adapted to them and did not contain all the information they needed. Very basic information was also often missing. In the offline world, they could be guided by a teacher who explained a lot, but in the online world, they were on their own and when they encountered difficulties, they were overwhelmed and discouraged from learning more. Sometimes their parents or caregivers were not able to help them because they also lacked digital knowledge.

Concerning the needs emerged in the focus group in terms of accessibility of digital tools for distance learning of PWIDs were mainly related to the online world that people with disabilities had to go to through COVID-19 revealed that there were basic knowledge gaps in how to use computers and the applications available on them.

Regarding the gaps in terms of their skills, it emerged that the lack of knowledge was so basic that people did not know how to turn on the internet, how to search for information on the web, how to set up an email and communicate.

The next problem people with disabilities experienced were websites that were not adapted to them. Sometimes it was enough to enlarge the mouse cursor so that it was very large and easy to use, and it was much more pleasant for them to use websites.

The biggest annoyance was the interruption of the connection and the stuttering of programmes. The problem with focusing, keeping attention and the desire to spend time learning on their own in front of the computer is another need to be developed.

The training gaps on key competences of PWIDs emerged in your focus group
- Digital competence
- Learning to learn
- Social and civic competence
- Cultural awareness and expression.

6.1.4   Focus group with PWIDs in Ireland

The focus group with PWID in Ireland took place face to face with 5 service users with a variety of intellectual disabilities, aged between 18 and 25, attending a day service. All of the group attended a literacy group, they would all like to learn more about computers.

According to the people interviewed during the pandemic period they used online digital tools for distance learning and they are currently still using online digital tools for distance learning.

They mainly used the PC and the Tablet. According to the participants, distance learning for them during the COVID-19 pandemic was a bit stressful, they claimed that the use of digital tools facilitated/helped them.

About the principal limits principals limits of the digital tools in terms of accessibility, everyone needed assistance.

The participants would like to learn how to send emails and basic computer skills.

The difficulties they faced the most are the following:

- Accessing digital tools by themselves
- Getting used to seeing their friends online in this way
- Sound issues
- The size of people on the screen
- Their interests not being an online option

The needs that emerged in then focus group in terms of accessibility of digital tools for distance learning of PWIDs is that there is a big gap in where the majority of this group were in terms of digital skills and where they would need to get too, in order to access a digital learning platform themselves.

People would like to be able to follow their interests, using a computer, such as 2 from the group were really into fashion and design, and liked to draw, but never experienced anyway that this interest could be facilitated digitally.

The Digital language can be very hard to understand, everyone would like a basic computer course that was easy to access and easy to use, one service user used windows 10 and thought this was great. Another service user uses a tablet at home to access music, tv programs and games and finds this easy to do, everyone was familiar with zoom and used this throughout COVID to keep in touch with their day services.

The training gaps on key competences of PWIDs emerged in the focus group:
- Communication in mother tongue
- Digital competence

6.2   Cross-country results of focus groups with PWIDs

The focus groups with PWIDs took place in 4 organizations from 4 different counties (Italy, Poland, Ireland and Spain)
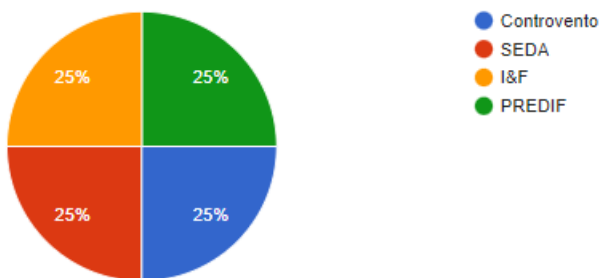
A total of 29 participants with intellectual disabilities participated to the focus groups.

The focus groups took place mainly face to face, just in one country the focus group was made in a blended modality, in the same session part of the participants participated face to face and part of them participated virtually by connecting trough zoom.
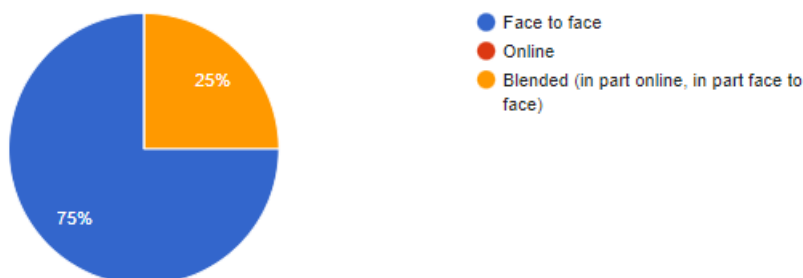

The profile participants were people with a variety of intellectual disabilities, some of them were people with autism spectrum disorders (ASD) and some of them were people with Down syndrome.

According to the people interviewed in all the focus groups, 100% of them during the pandemic period used online digital tools for distance learning

1.6 According to the people interviewed during the pandemic period did they use online digital tools for distance learning?
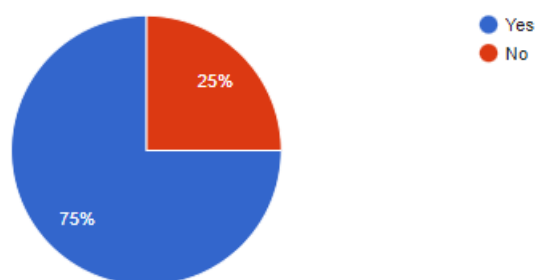
4 respuestas

31
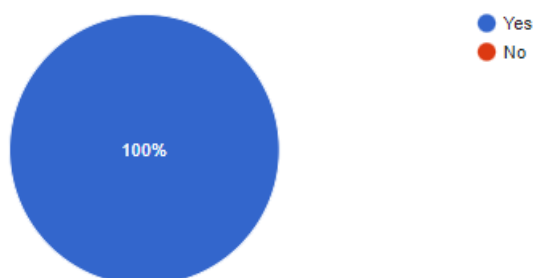
According to the participants, in 3 focus groups out of 4, the PWID claimed that they are still using online digital tools for distance learning.

1.7 Do they currently still using online digital tools for distance learning ?

4 respuestas

According to the participants of all focus groups, the majority used the PC, following to the tablets and the mobile phones.
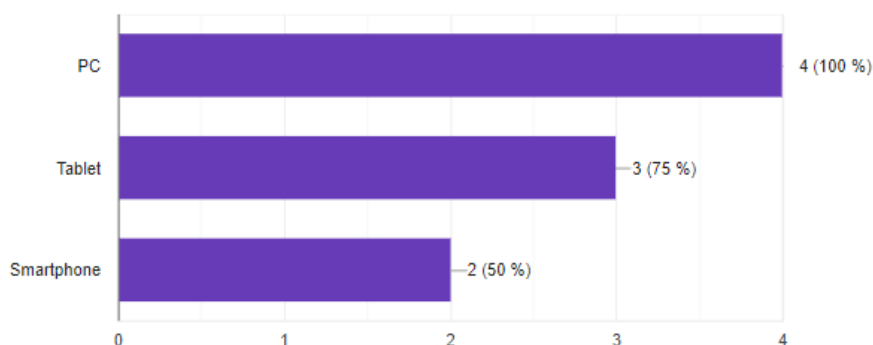

For distance learning, zoom and google meet are the mostly used.

According to the participants 25% declared that distance learning for them during the COVID-19 pandemic was not stressful at all, another 25% claimed that was stressful and 50% declared that was a bit stressful.

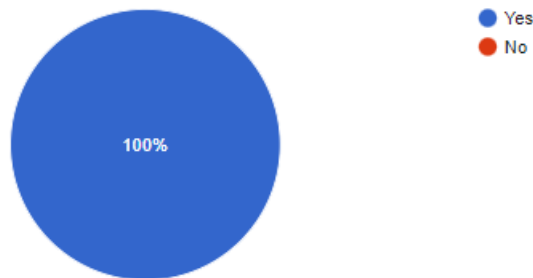1.9 According to the participants, how stressful was distance learning for them during the COVID-19 pandemic?

4 respuestas

- Not sressful at all
- A bit stressful
- Stressful
- Very stressful
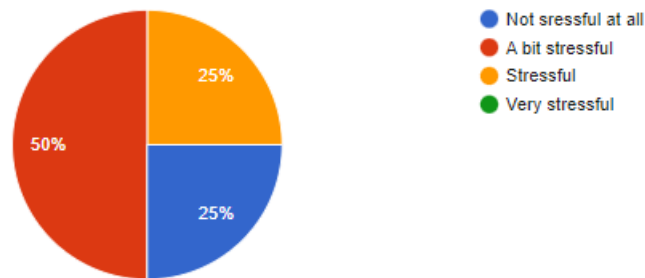
100% of the participants declared that the digital tools facilitated and helped them

1.10 Do they think the use of digital tools facilitated/helped them?

4 respuestas

- Yes
- No

In general, they claim that the digital tools are helping them, however there are some limits in terms of accessibility, these are the following:

- Confusion during the moment of entering to the meeting as they don't immediately recognize the link they have to click since there are too long links.
- Enter the password - especially if the letters were upper and lower case.
- The sound is not always good, and this create some problems related to the understanding of the online activities.
- Internet connection.
- Connect audio and video
- Difficulty of finding material online, especially material that was accessible to them. Many times, there was a need to print something out and this option was not available. People with disabilities need simple and concrete messages.
- Also missing were elements that sustain attention and enter some kind of integration with the learner. Sounds, video, pictures, badges, banners, these are all welcome.

Skills that would they like to learn to improve their use of digital tools and in order to learn new interesting themes:

- Basic computer skills
- How to create an email account and send e-mails
- How to use electronic devices and how to use the Internet and the opportunities it offers.
- Personal and social functioning
- Activities to develop communication
- Classes that develop creativity
- Course related to the employment (how to look for a job or specific curses related to some specifics careers)

Needs emerged in your focus group in terms of accessibility of digital tools for distance learning of PWIDs:

- Basic knowledge gaps in how to use computers and the applications available on them.
- Easier way to access meetings
- An easier way to interact during the activities
- Websites and materials that were not adapted to them.
- Problem with focusing, keeping attention and the desire to spend time learning on their own in front of the computer is another need to be developed.

The key competences gaps emerged in the focus groups with PWIDs are mainly the following:

- Digital competences (4/4)
- Social and civic competences (3/4)
- Cultural awareness and expressions (3/4)
- Communication in mother tongue (3/4)
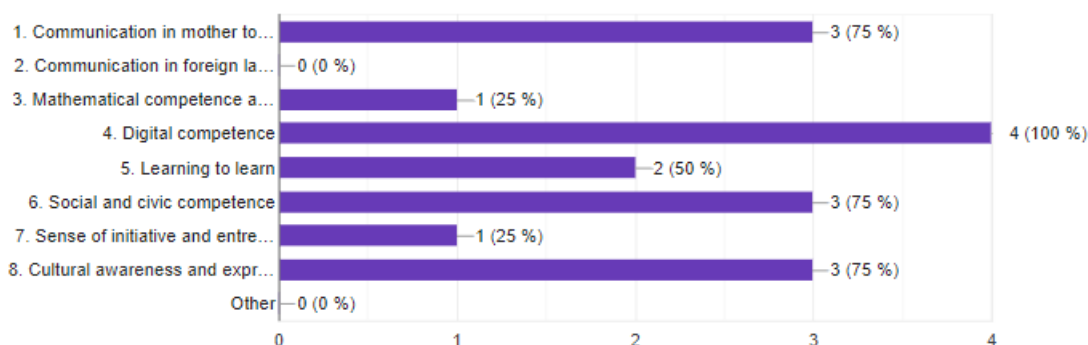
6.3   Data of the focus groups with professionals, caregivers and families

6.3.1   Focus groups in Spain with professionals, caregivers and families

In Spain the focus group took place on 18/04/2022 online by google meet video call with professionals' caregiver, they were 4 participants.

They are taking care mainly of people with TEA of different levels, and people with other intellectual disabilities. According to the people interviewed, they were helping the PWID in the remote learning during the pandemia but now they are more independent.

The participants claimed that the PWID felt well about distance learning. Some of them felt a bit stressed at the beginning because they needed the physical contact but some of them were comfortable, they could focus even more since they adopted the distance learning and there are more participants attending the classes. Now their courses meetings are mixed, some people go physically to the association and some of them participate virtually because they prefer this way.

According to the participants, distance learning was effective but with room for improvement. In general, the digital tools were not very accessible and some of the limits are related to the fact that these instruments were not very visual, to enter to the meeting it was difficult because there is more than one link, the PWIDs needed to be have an initial course to use zoom or be called, most difficulties when there are interactive activities online, for those activities the PWIDs needed more skills.

The participants said that digitals learning tools could have more visual elements and digital pictograms. The difficulties the PWID faced the most were related to the adaptation to the new technologies and new way of learning, they need elements of interaction for interactive activities because they could interact verbally but for the PWIDs that need to interact also in other ways these tools are not very accessible. For meaningful learner-content interaction to occur, it is essential that the learner actively engages in the learning process, trying to understand and assimilate the study materials.

Moreover, many people for their profile tea, can have some obsessive and recurring, so their difficulties were linked to self-control for good use of internet and the digital tools.

They think it is important to involve PWIDs in the creation of accessible online digital tools for distance learning and the way they can better participate is when testing new tools because just by observing their behaviour it is possible to detect if the digital tools has been accessible, effective and if the course is being really useful and interesting for them.

According to the participants their major interest in taking part in such a project will be to test and participate to the courses and materials generated.

The skills they think that the PWID needs to improve are mostly digital competences (how to make email account and send emails) and how to understand the importance of some courses.
The training gaps on key competences emerged in your focus group are:

- Communication in mother tongue
- Digital competence
- Learning to learn
- Social and civic competence
- Cultural awareness and expression.

6.3.2 Focus groups in Italy with professionals, caregivers and families

In Italy, the focus group has been implemented face to face on 14 of April with 6 participants that are the parents of people with down syndrome.

Parents reported that they only helped the first few times but not any longer. According to the participants, the remote learning for the PWID has been effective but with rooms for improvements.

The limits they detect on digitals learning tools in terms of accessibility for PWIDs were related to the issues with video, audio and internet connection. The digitals learning tools could be more accessible for PWIDs with these improvements:

- Tutorials could be made in simplified language on how to use them.
- They should be written in Italian
- There should be a single password and no changing passwords
- The link invitation should be in Italian and in simplified language.

According to the participants the difficulties the PWID faced the most related to his/her skills in using digitals learning tools were the following:

- Password (big and small letters)
- Unforeseen events (a meeting is missed, and new password have to be made again)
- Internet connection

According to the participants, the competences that the PWID need to improve are related to the English language. They would like the PWID to be faster and have more English skills in order to be able to access.

Participants believe that every digital tool should take into account the needs of a person with intellectual disabilities, therefore is fundamental to involve PWIDs in the creation of accessible online digital tools.

The participants expressed major interest in taking part in such a project by contributing to the creation of accessible tools.

The needs emerged in your focus group in terms of accessibility of digital tools for distance learning of PWIDs are the following:

- Simplified platform language
- Improving digital skills
- creating simpler solutions such as platforms that do not require different passwords
- platforms in Italian and accessible

The training gaps on key competences that emerged in the focus group are:

- Communication in mother tongue
- Communication in foreign language

- Digital competence
- Social and civic competence
- Sense of initiative and entrepreneurship
- Cultural awareness and expression.

6.3.3   Focus groups in Poland with professionals, caregivers and families

The focus groups that took place in Poland on 18/03/2022 was face to face with 7 participants. The participants were parents of people with disabilities, but also the caretaker of the centre they attend and a teacher.

According to the people interviewed, they were helping the PWID during the remote learning. They are taking care of people with Mild intellectual disability plus autism and Asperger syndrome.

The participants claimed that distance learning is a good and helpful thing, but many improvements are needed to make the system more adapted to the needs of people with disabilities. Some classes cannot be replaced online, but many can be successfully managed through distance learning.

The time they spent with PWID in distance learning couldn't be very long because such people have difficulty staying focused and engaged in learning. However, about 1-3 hours per day can be successfully obtained in each case.

According to participants the remote learning for the PWID has been effective but with room for improvement. They think that the digitals learning tools used have been accessible for PWDs but with the following limits:

- Too few icons and interaction windows
- Too much need to search and click from page to page
- Sentences too long and not clear
- Pages not visually attractive enough
- Mouse cursor is difficult to control
- Unnecessary processes of logging in, remembering and entering login and password
- Website too confusing
- Too complicated, people with disabilities need simple pages, commands and tasks as possible
- Lack of help in case of technical problems

According to the participants the digitals learning tools could be more accessible for PWIDs if the aspects mentioned in the previous question were improved, it would be much better and accessibility would increase a lot for people with disabilities.

The difficulties the PWID faced the most related to their skills in using digitals learning tools are the difficulty in clicking on something and pointing. It is easier if the site gives freedom or the windows to click in are very large. Listening versions for people who have difficulty reading would also be useful.

The competences they think that the PWID needs to improve are:

- Digital competence

- Social and communication competences
- Activities to develop creativity
- Classes on the basic functioning of money and banking, how to spend it, how to count it and how to avoid financial fraud.
- Introductory classes with visits to the clinic, dentist, etc., preparing to deal with such matters on your own
- Looking for a job and taking on the responsibilities of having one
- Talking to the boss, negotiating a contract and terms and conditions
- Human and disability rights
- Learning about the world and ecology
- Learning about current events, politics, media, war
- Activities of daily life: visiting the post office, cinema, restaurant
- Self-development and finding hobbies
- Motivation for an active life

The participants said that it is important to involve PWIDs in the creation of accessible online digital tools for distance learning, it is an important factor because they themselves know best what helps and what harms them. This can be done through live observation, interview surveys, written surveys.

According to participants, their major interest in taking part in such a project will be showing them the project and its results. Going through the created results together and reminding them to look at the website themselves.

Recording the results is also an important aspect, and it would be good if some place with the points scored appeared on the page with a loud and visible annotation that more points had been scored for progressing further in their education. In addition, information adapted to them and topics of interest to them which are useful in their daily lives.

In terms of needs it was found that people with disabilities are very eager to use remote learning tools. Also, they want to be very independent and not use the help of other people. They are very willing to go for learning and computers. This is a very good signal and a chance for a great adoption of the ADILE project.

The training gaps on key competences emerged in the focus group are:

- Mathematical competence and basic competences in science and technology
- Digital competence
- Learning to learn
- Social and civic competence
- Sense of initiative and entrepreneurship

6.3.4   Focus groups in Ireland with professionals, caregivers and families

The focus group in Ireland took place on 10/5/2022 one to one phone interviews with 5 participants that were care staff and 1 training officer, all working in day services for PWD. They are taking care of people with a variety of Learning and physical disabilities such as Autism, Asperger's, Down Syndrome, cerebral palsy.

The participants claimed that distance learning was valuable. It was very difficult at the beginning but over time it became easier. There were many challenges but it was worth it. For so many it kept the connection for the service users with staff and their friends and all of the clinician appointments were online too, so at least they were able to be maintained (with challenges of course too)

There was a direct comparison between 2 units. 1 unit continued with exercise and movement classes online, throughout the lockdown and the other unit didn't. All of the staff and tutors noticed that the PWD that had kept up their classes online, did not have a decrease in their mobility and flexibility, whilst the other unit did. Also, when the services opened up again, and because people were familiar with classes being online, whilst the numbers still had to remain low in the units, for a while they used to Zoom the tutors to the unit, and people were fine with an online tutor, because they had gotten used to it.

Some service user had 1 class a day, some had 2 and some only had 2 or 3 classes in a week, and even that was a struggle 40 minutes for attention seemed to be the ideal time per class.

The participants claimed distance learning was very effective and accessible
They detected the following limits on digital learning tools in terms of accessibility for PWIDs:

• Literacy of the service users.
• Age was a huge barrier.
• Not having email accounts for different apps and set up.
• Sight can be very limiting.
• Wifi can cause limit too.

Alexa was useful for those with sight issues but can be very draining on Wifi. 1 unit had to turn off Alexa when they were doing Zoom calls because it would cause zoom to crash. According to the participants the digitals learning tools could be more accessible for PWIDs by the following ways:

• The language used needs to be more understandable.
• Grants for computers and specific training would help
• More support with setting up at the beginning

According to the participants the difficulties the PWID faced the most related to his/her skills in using digitals learning tools are the following:

• Accessing on their own.
• Understanding the language used or the way things were described.
• Remembering.
• Dexterity.
• Tapping on the screen.
• Shaky fingers.
• Not knowing how to go back if they went in the wrong direction.
• Getting started.
• Getting set up.
• Not having email accounts.

In services for older service users, one email account was set up for the whole service to use to access apps etc.

The competences that the PWID needs to improve are Literacy and dexterity but some people are always going to need support, if there was more support around literacy, this would help. If the tools were made more accessible and easier to use this would be better.

Everyone agreed this was very important to involve PWIDs in the creation of accessible online digital tools for distance learning. One-to-one involvement in action, every step of the way, not just at the end product to try it out, but all the way through. This is the only way that you can truly find out how to make it more accessible

According to participants, their major interest in taking part in such a project is to help make it accessible and understandable and to optimise the effectiveness and usability.

The needs emerged in the focus group in terms of accessibility of digital tools for distance learning of PWIDs are related to the fact that the language needs to be so clear. Support for many will always be needed. Dexterity issues will need to be taken very seriously in designing tools.
The training gaps on key competences emerged in the focus group are:

- Communication in mother tongue
- Communication in foreign language
- Mathematical competence and basic competences in science and technology
- Digital competence
- Learning to learn
- Social and civic competence
- Sense of initiative and entrepreneurship
- Cultural awareness and expression.

6.4   Cross-country results of focus groups with professionals, caregivers and families

The focus groups were made by 4 organizations in 4 different countries (Spain, Italy, Ireland and Poland).

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The total number of participants was 22. The profile of the participants was mainly parents of people with disabilities, professionals,' caregiver and a training officer working in day services for PWD.

2 focus group were made face to face and 2 were made online.

In all focus groups the participants claimed that they helped the PWID during the remote learning, especially at the beginning.
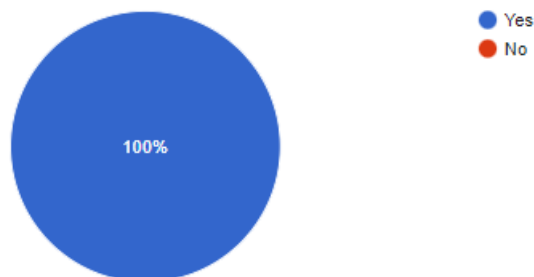
The people interviewed take care of people with Down Syndrome, TEA, Mild intellectual disability plus autism and Asperger syndrome. A variety of Learning and physical disabilities such as Autism, Asperger's, Down Syndrome, cerebral palsy. Majority TEA, different levels, and people with other intellectual disabilities.
The participants in general think that the PWID felt that the distance learning is a good and helpful thing, but many improvements are needed to make the system more adapted to the needs of people with disabilities.

Zoom was mostly used for distance learning.

According to participants remote learning for the PWID has been effectively but with room for improvement in 3 focus groups and very effectively in one focus group.

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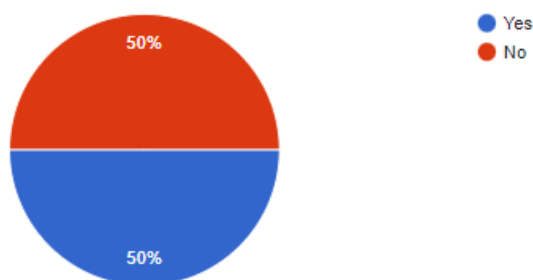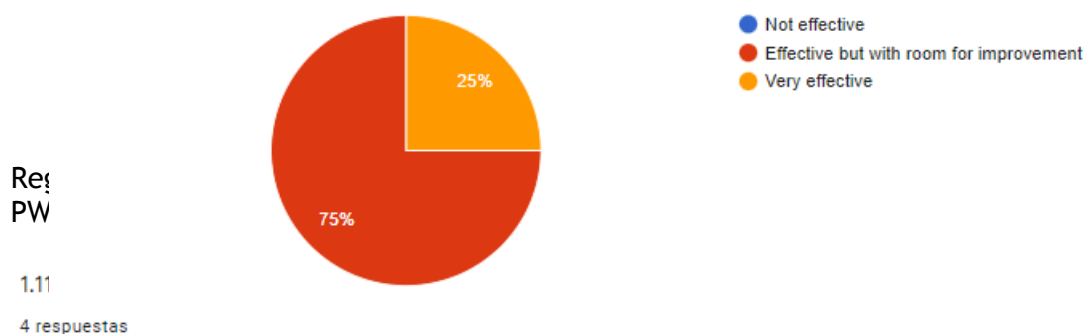
The limits they detected on digitals learning tools in terms of accessibility for PWIDs are the following:

- Some of the limits are related to the way that these instruments were not very visual, to enter to the meeting it was difficult because of the long links
- Unnecessary processes of logging in, remembering and entering login and password
- Interactive activities online were difficult, for those activities the PWID needed more skills
- Too few icons and interaction windows
- Too much need to search and click from page to page
- Sentences too long and not clear
- Pages not visually attractive enough
- Mouse cursor difficult to control
- Website too confusing
- Too complicated, people with disabilities need as simple pages, commands and tasks as possible
- Lack of help in case of technical problems with the site
- Issues with video, audio and internet connection
- Literacy of the service users. Age was a huge barrier.
- Not having email accounts for different apps and set up.
- Sight can be very limiting.

According to the participants, digitals learning tools could be more accessible for PWIDs in the following ways:

- Digital pictograms should be used more, elements of interaction, tactile support
- Tutorials could be made in a simplified language on how to use them, they should be written in local language
- There should be a single password and no changing passwords
- The link invitation should be shorter
- The language used needs to be more understandable and simplified.
- Grants for computers and specific training would help
- Should have more support with setting up at the beginning

The difficulties the PWID faced the most related to his/her skills in using digitals learning tools:

- Adaptation to the new technologies and new way of learning, interactive activities, they could interact verbally but for the PWID that need to interact also in other ways these tools are not super accessible.
- Many people for their profile (for example people with TEA), can have some obsessive ideas and interests so the difficulty is related to the self-control for the good use of digital tools
- Difficulty in clicking on something and pointing. It is easier if the site gives freedom or the windows to click in are very large. Listening versions for people who have difficulty reading would also be useful.

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- Issues with passwords
- Understanding the language used or the way things were described. Remembering. Dexterity.

The PWID needs to improve the following skills:

- Digital skills
- Social and communication skills
- Activities to develop creativity
- Activities related to the employment (looking for a job and taking on the responsibilities of having one)

In all of the focus groups it was recognized that was important to involve the PWID in the development of digital tools and materials, it is an important factor because they themselves know best what helps and what harms them. This can be done through live observation, interview surveys, written surveys.

In all the focus groups they expressed their interest in participating in the project mainly for contributing to the creation of accessible tools and courses.

The needs emerged in the focus groups in terms of accessibility of digital tools for distance learning of PWIDs:

- Simplified platform language
- using more pictograms and elements of interaction online
- Improving digital skills
- platforms that do not require different passwords
- Dexterity issues will need to be taken very seriously in designing tools.

The training gaps on key competences emerged in your focus group are:

- Digital competence (4/4)
- Social and civic competence (4/4)

Followed by the following competences:

- Learning to learn (3/4)
- Sense of initiative and entrepreneurship (3/4)
- Cultural awareness and expression (3/4)

7 CONCLUSION AND NEEDS ANALYSIS: FROM THE RESEARCH TO THE ADILE TOOLKIT

The results emerging from the both the desk and the field research have stressed gaps on accessibility of digital tools and materials that should be better adapted for the PWIDs. The situation with the coronavirus pandemic has shown how serious this problem is and how many gaps there are in the system of online learning for people with disabilities, therefore the pathway towards an accessible digital learning environment for PWID is still long.

Moreover, this situation has worsened in the case of those families who do not have access to ICTs due to lack of digital skills or necessary support products. People with disabilities have suffered from isolation due to social distancing rules, while limited accessibility of ICT tools, distance learning, and access to information related to COVID-19 have led to a deterioration in their quality of life.

The use of distance learning tools to address these gaps has proven to be a viable solution, but several problems have emerged regarding the accessibility of the currently existing virtual platforms for PWDs.

The analysis made with the focus groups (those with PWIDs and those with educators, caregivers, and families), seemed to confirm the preliminary findings on the desk research, stressing the digital competences needs, emerged as well other needs and gaps.

The digital tools for distance learning mostly used are emerged to be zoom and google meet.
In specific, the needs in terms of accessibility of the digital tools, are mainly resumed to the following:

- Easier ways to access to the meetings courses (shorter joining links, avoiding the use of passwords)
- Use of more pictograms
- Simplified platform language
- Elements of interaction online during the meeting and the courses
- Dexterity issues need to be taken very seriously in designing tools.

The difficulties the PWIDs faced the most related to their skills in using digitals learning tools are the following:

- Not having email accounts for different apps and set up, difficulties in creating an email account and send emails
- Acceding to meetings in zoom and google meet due to the complexity of the links and passwords
- Adaptation to the new technologies and new way of learning, interactive activities, they could interact verbally but for the PWID that need to interact also in other ways these tools are not super accessible.
- Many people for their profile TEA, can have some obsessive ideas and interests so the difficulty is related to the self-control for the good use of digital tools

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- Understanding the language used or the way things were described. Remembering. Dexterity.

During the focus groups emerged as well that other that the PWIDs are interested to learn activities to develop creativity and activities related to employability.

The gaps mostly recognised in trainings are connected to the following key competences:

- Digital competence
- Learn to learn
- Social and civic competence
- Cultural awareness and expressions

In the next chapter there will be a proposal of 12 modules related to the key competences above.

8 MODULES PROPOSAL

Moving from the research results to the design of the Toolkit, it should be taken in consideration all the elements of accessibility that have been detected in the need analysis.

Taking into account the needs in term of accessibility the modules proposal corresponds to key competences that are emerged to present gaps in the skills of PWIDs.
Competences are defined as a combination of knowledge, skills and attitudes appropriate to the context. Key competences are those which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment.

The gaps mostly recognized in trainings are connected to the following 4 key competences:

Digital competence
Learning to learn
Social and civic competence
Cultural awareness and expressions

Each key competence will correspond to an area, therefore there will be 4 areas. Every area will contain 3 modules, so the total of modules will be 12.

Regarding the learning process, adult PWIDs as every student tend to learn in different ways and they prefer to use different teaching resources as well. Learning materials should be designed for all kinds of students and all kind of learning styles.

Therefore, the following modules that will be developed can always be adapted taking into account personal approaches, so can be adjusted depending on levels and necessity of the learners, moreover the modules can be used individually so the learning itinerary is more adaptable depending on the necessities and topics of more interest.

The modules will contain the learning objective, a storytelling related to the theme, to entertain and understand the application and use of the topics learned, it will contain as well a theoretical part (that will include pictograms) in order to present the concepts.

There will be element of interactivity to play and exercise interiorizing what learned, therefor the platform will allow the learners to play by dragging elements.

Based on the common findings and considerations coming from this report, partners identified some modules that should be developed:

AREA1_DIGITALS COMPETENCES

Module 1.1   Email account
Module 1.2   Zoom meetings
Module 1.3   Google meet meetings

AREA 2_LEARNING TO LEARN

Module 2.1 Understanding of a text
Module 2.2 Understanding the news
Module 2.3 Memories techniques

AREA 3_ SOCIAL AND CIVIC COMPETENCE
Module 3.1 Democracy and voting
Module 3.2 Rights and civic conduct
Module 3.3 Active citizenship and Participation

AREA 4_CULTURAL AWARENESS AND EXPRESSION
Module 4.1 European geography
Module 4.3 European Heritage and Identity
Module 4.2 Culture of work