

Digital Readiness
of Vocational Educational Institutions
in an Inclusive Environment

PR1: Good Practice Catalogue

T1.2: Analysis and Mapping

T1.3: Lessons learnt

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Abbreviations

AT: Assistive Technology

CV: Curriculum Vitae

ETCF: ENTELIS+ Trainers Competence Framework

EU: European Union

ICT: Information and Communication Technology

NGO: Non-Governmental Organization

VET: Vocational Educational Training

# Τ.1.2 Analysis and Mapping

## 1 INTRODUCTION

### 1.1 Background

Project Result 1 (PR1): DIG-i-READY Good Practice catalogue - Mapping of Existing and Good Practices, includes promising practices on inclusive Digital Readiness. The aim of this PR is to generate knowledge to build a catalogue regarding already existing tools and methodologies under the umbrella of digital, inclusive (related to disability), and vocational education practices in Europe. This catalogue and the analysis that follows sums up the findings and conclusions of the call for Good Practices among partners. The analysis of existing promising practices on inclusive digital readiness (T1.2) was preceded by the desk research conducted by all the partners of the consortium.

Special focus has been paid to analyzing and mapping solutions implemented recently in the COVID-19 crisis. These solutions were collected in order to extract the key success factors for inclusive digital readiness.

Task 1.1. of the DIG-i-READY project focused on the research and collection of the State-of-the-art tools and methodologies, in relation to assistive technology (AT) and the enhancement of accessibility, digital skills and social skills in vocational education. The collection of information was focused on examining existing resources, publications, practices, and views on gaps and needs in relation to:

* + - Accessibility barriers and (most importantly) opportunities: guidelines, techniques, standards, and tools for implementing **mainstream** digital accessibility (developer, content/system owner, content provider)
		- Digital literacy/skills for **persons with disabilities in VET area and their educators, families, and carers (end-users):** a) attitudes, b) using AT, c) mastering accessibility features, and d) working with mainstream applications. Digital skills in managing/implementing the holistic process of AT implementation/use (“AT is a service, not only a tool”) for the diversity of people with disabilities.
		- Social skills for **persons with disabilities in VET area:** AT, accessibility, and ICT, including attitudes, with a particular focus on inclusive education.

### 1.2 Methodology

In order to conduct this desk research and obtain a comprehensive view on the above-mentioned issues, a number of smaller tasks were built in order to provide suggestions for digital competence development in organizations, groups, and persons.

**Resources Collection Tool**

The resources collection tool used for the Entelis+ project (Ref 612194-EPP-1-2019-1-BE-EPPKA3-IPI-SOC-IN) was adjusted according to the needs of the current project, to collect any kind of resources available among the DIGI-READY consortium partners, as well as identified on the internet or through other sources and stakeholders. The tool was designed in order to provide a collection of resources including:

* books and handbooks
* curricula
* manuals
* policy documents
* publications (empirical and theoretical)
* reports
* seminars
* other practices

The resources collection tool was completed by each partner of the consortium, using a combination of inclusion and exclusion criteria that were aligned with the scope of the DIGI-READY project. These criteria were the following:

***General criteria***

* Resources relevant to the main project aims.
* Resources evolving from year 2018 till 2022.
* Resources available in English or the national languages of the consortium partners. In the case of resources in partners’ national languages, partners provided a brief description in English.

***Specific criteria***

* What the resource describes: the resource could describe a methodology, tool, or practice. A methodology should have the potential to lead to a practice, thus, a tool should appear connected to a methodology or practice.
* Possible connections of the resource: the resource could be connected to an existing project, given that this is an indication that the resource might be more holistic.
* Level of implementation of the resource (the resource could pertain to more than one levels):
	+ It could relate to an administrative level, referring to actions of individual VET centres and schools to facilitate the process of getting digitally ready.
	+ It could be useful on a methodological level, in order to prepare teaching staff to tackle digital education, in response to a lack of digital skills.
	+ It could be used on the learner’s level, in order to assist the person to cope with digital education, in the event that they are not used to digital educational methodologies and instruments, even though they might be experts in using technologies in other fields, e.g., gaming, social networking, telephoning, etc.
	+ It could work on a social level, to enable families to address their children’s educational needs, e.g., making available access to computers, tablets, or suitable internet connection. If the resource operates on a social level, then it could also be recorded whether the practice:
		- Mitigates the risk of isolation.
		- Mitigates the interruption of educational pathways.
		- Mitigates the loss of daily habits (especially relating to social spaces).
		- Mitigates stress and worsening of problem and frailty behaviours.
* Skills addressed: the resource could address more than one category of issues, meaning accessibility, digital or social skills issues, or a combination of these.
* Needs addressed: the resource might address the needs of persons with disabilities, their educators, their parents, or carers.
* Impact: measuring the impact of a resource does not fall within the scope of the project. Nevertheless, if there is any information available as to the number of persons having deployed it, this could be recorded.
* Advantages and disadvantages: if the stakeholder themselves mentioned any advantages and disadvantages, these could be recorded.
* Feedback: if there is any feedback available by the target audience, this could be recorded.
* Award: if the practice, methodology or tool has been awarded, this is interesting, and it should be recorded.

# 2 RESOURCE COLLECTION TOOL

As previously mentioned in Section I, the Resources Collection Tool aimed to collect any kind of existing resource available from DIG i-READY consortium partners and beyond.

## 2.1 Organization of the sources gathered

The DIG-i-READY partners collected initially 38 different resources throughout the various categories. Out of them, a selection of 21 was made at a later stage, in order to create the catalogue of good practices. The selection was made after the application of specific criteria.

### 2.2 First level of criteria for identifying good practices

One of the main objectives of launching the Resource Collection Tool was to analyze the existing resources in order to identify good practices and provide input to further define the training material in PR2.

Before starting with the analysis of the good practices, it is necessary to understand what is meant when defining a good practice. For the purposes of this report, the definition is based on definitions used by key international such as the World Health Organization[[1]](#footnote-1) and the Food and Agricultural Organization of the United Nations (FAO)[[2]](#footnote-2).

Adapting these definitions to the DIG-i-READY project, we can define a good practice as an individual training course, elements of training curricula, tool or other practice that, through experience and research, has proven reliably to lead to the desired result of reaching the target group and improving accessibility opportunities, digital skills, social skills, other skills and teaching, in relation to assistive technology (AT), Accessibility and ICT.

In order to successfully identify the good practices, a first level of criteria was considered to help determine whether a given resource qualified for our definition of a good practice. It should be noted that not all good practices have to comply with all of the different criteria. Good practices may be highlighted for being extremely strong in one or more of the different criteria.

The first level of criteria used in the identification of the DIGI-READY project can be seen below.

**Table 1** *Criteria used to identify good practices*

|  |  |
| --- | --- |
| Name of the criteria | Description |
| Geographic coverage | The number of countries/regions targeted by the different initiatives were considered. Multinational approaches to education in accessibility are of specific interest to the DIG-i-READY project.  |
| Range of topics covered | The different initiatives were also analyzed according to the topics that were covered and the extent to which these topics were aligned with the objectives of the DIG-i-READY project. Attention has been given to both those initiatives that go into detail on one specific topic, or those which cover all of the main topics related to the DIG-i-READY project.  |
| Innovative elements | The innovative elements of the different initiatives are an extremely crucial factor when highlighting good practices in education in accessibility and inclusion. Attention was paid to those initiatives that used a variety of learning methodologies, approaches, forms of certification, learning technologies, etc. Innovation criteria might be different for different countries and diverse needs. |

## 2.3 Mapping of existing practices

A total of 21 practices were identified initially as good practices by the research team, spanning from national to European programmes and tools that can be used globally. A summary of each of the different initiatives was elaborated initially, with the use of the following descriptive parameters:

* Score: total points “gained” from each practice, according to analytical criteria.
* Funding: the way the practice was funded. This could have been an EU project (e.g., Erasmus+), funding by a ministry, a university project, actions taken by an NGO, or work elaborated by a private company.
* Type of resource: type of resources identified for this initiative application (books-handbooks, content creation, curricula, empirical publications, gamification, job-searching platforms, learning platforms, manuals, multimedia, policy documents, reports, seminars, theoretical publications, other practices)
* Target group: persons with disabilities, teachers, parents, carers, combination of those. Type of disability could be recorded.
* Description: general description of the practice, including year of initiation or of access to essential information, and stakeholders.
* Geographic coverage: participating countries (one, more than one, global)
* Pandemic relevance: whether the practice is par excellence associated with pandemic reactions, or in another way connected to pandemic, or not connected.
* Stakeholders: so that the reader is able to know who is involved.
* Level of education: primary, secondary, post-secondary, higher, combination of those
* Education setting: formal, non-formal, informal, combination of those.
* Digital tools involved: hardware or software, websites and platforms, documents.
* Timeframe: short-term, mid-term, long-term.
* Sustainability: in progress (the practice is in progress), completed (in the recent past), continuing (took place in the past and is still continuing).
* Competences aimed: accessibility, digital, social, other, combination of those.
* Level of implementation: administrative, methodological, learner’s, social, combination of those.
* Pillars of importance: This is documented with six probable criteria:
	+ Successful contribution to the implementation of UNCRPD
	+ Impact
	+ Co-production
	+ Innovation
	+ Prospects
	+ Accessibility and inclusive education
* Number of criteria met: The six criteria were: 1. UNCRPD, 2. Impact, 3. Co-production, 4. Innovation, 5. Prospects, 6. Accessibility and Inclusive Education.
* ENTELIS+ Trainers Competence Framework (further ETCF): A brief description of association with the competencies needed by those supporting persons with disabilities in accessing digital environments.
* More information: Sources of information (mostly digital), some included interviews, contact information could be included.
* Full reference: APA 7-oriented full reference of main source of information.

After the description of each practice according to these parameters, the partners met during the second Transnational Project Meeting in Cyprus and agreed on a final set of 8 criteria, which would allow the consortium to keep in the catalogue only the practices that were most relevant to our project. The procedure was named “sorting”and was associated with the relevance of each practice to our project and not with their quality in any way . The final set of criteria are briefly presented in Table 2:

***Table 2 Final set of criteria: relevance sorting***

|  | **Characteristic** | **Cases of characteristic** |
| --- | --- | --- |
| **01.** | Vocational relevance | no = 0 | yes = 3 |  |  |
| **02.** | Number of countries | one = 1 | more than one = 2 |  |  |
| **03.** | Emergency relevance | no = 0 | yes = 1 | par excellence = 3 |  |
| **04.** | Sustainability | in progress = 0 | completed = 0 | continuing = 3 |  |
| **05.** | Basic aims | accessibility = 1 | digital skills = 1 | social skills = 1 | other skills = 1 |
| **06.** | Level of intervention | administrative level = 1 | methodological level = 1 | learner's level = 2 | social level = 1 |
| **07.** | Number of criteria met | 2 = 1 | 3-4 = 2  | 4-6 = 3 |  |
| **08.** | Awards | no = 0 | yes = 2 |  |  |

Each criterion is described with the name of the characteristic, and also the cases of the specific characteristic (could be from one to four cases). The logic behind the assignment of “value” to each parameter is described below:

1. Vocational relevance: if the practice did not have specific vocational relevance, it would receive 0 points. If it had vocational relevance, it would receive 3 points. In this way, the practices that were vocationally related, were advanced in the sorting.
2. Number of countries: if only one country was associated with the practice, it would receive 0 points. If more than one country were associated (e.g., Erasmus+ project or a tool being used in a lot of countries), it would receive 2 points.
3. Emergency relevance: if there was no emergency relevance, the practice would receive 0 points. If there was some relevance, but not immediate, it would receive 1 point. If the practice were associated “par excellence” with the pandemic, it would receive 3 points.
4. Sustainability: a project that would be currently in progress (not evaluated yet) or completed in the past, would receive 0 points. On the other hand, a practice that was implemented in the past and is still continuing, it is considered to have received a good evaluation and would receive 3 points.
5. Basic aims: each aim (accessibility, digital skills, social skills, other skills) would receive 1 point (4 points max).
6. Level of implementation: each level of implementation (administrative, methodological, social) would receive 1 point, except from learner’s, which would receive 2 points (emphasis on the learner’s perspective).
7. Number of criteria met: 1 point for two criteria, 2 points for three to four criteria, 3 points for four to six criteria. The six criteria were: 1. UNCRPD, 2. Impact, 3. Co-production, 4. Innovation, 5. Prospects, 6. Accessibility and Inclusive Education.
8. Awards: The practice would receive 2 points if awarded by a different entity.

What follows below, is the list of the 21 practices that were more relevant to our project. They are presented in alphabetical order. It is noted that the choice of terminology used in the description of the practices was kept as provided by the stakeholders during the search phase of the project.

## 3 LIST OF GOOD PRACTICES OF THE CATALOGUE

### "Technology and Inclusion" training course

**Funding:** Ministry of education (regional office of Emilia Romagna)

**Type of resource:** Other practices

**Target group:** Teachers

**Description:** The Regional Education Office of Emilia Romagna conducted a training course in 2021, addressed at the needs of teachers. This seminar aimed at exploring the following three issues: 1) Access to technological devices, which included critical issues in the use of standard and special input devices; 2) Use of technological devices to facilitate teaching, including useful software in the paths for training in the use of tools, software useful for improving usability and accessibility and software for productivity. 3) Use of technology to promote autonomy and interpersonal communication.

**Geographic coverage:** Italy

**Pandemic relevance:**

**Level of education:** Post-secondary

**Education setting:** Informal

**Digital tools involved:** All

**Timeframe:** Mid-term

**Competences aimed:**

* Digital skills: presentation of an overview of the evolution of generic and specific technologies in an inclusive function

**Level of implementation:**

* Administrative
* Methodological

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: The practice enhances equality, accessibility, inclusion, and improvement of educational settings (Art. 5, 9, 19, 24).
* Impact: The training course is at its 3rd edition (2020, 2021, 2022).
* Co-production: The course is developed in collaboration with local stakeholders and professionals of different fields.
* Prospects: The course was improved and is being repeated over the years.
* Accessibility and inclusive education: The course addresses accessibility and inclusion practices in educational settings.

**ETCF:**

* identify accessibility and AT use barriers, identify opportunities for AT use and accessibility
* select, create & modify, share
* information & media literacy, communication

**More information:**

* Link <https://www.istruzioneer.gov.it/wp-content/uploads/2022/01/2022-PERCORSO-FORMATIVO-TECNOLOGIE-E-INCLUSIONE.pdf>

**Full reference:** Istituto Comprensivo di Ozzano dell’ Emilia. *Percorso Formativo “Technologie e Inclusione”.* Retrieved May 25, 2022, from <https://www.istruzioneer.gov.it/wp-content/uploads/2022/01/2022-PERCORSO-FORMATIVO-TECNOLOGIE-E-INCLUSIONE.pdf>

### Anton Lernapp

**Funding:** Private company actions

**Type of resource:** Learning platform, content creation

**Target group:** Students between 7-18 years old

**Description:** Application collection.

**Geographic coverage:** Germany, with possibility for global use

**Pandemic relevance:** Yes

**Level of education:** Primary and secondary

**Education setting:** Non-formal

**Digital tools involved:** Platform for learning and playing

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Digital skills: Universal Learning Platform (Web and Mobile) for schools, students, and independent learning in an interactive classroom setting
* Pedagogy

**Level of implementation:**

* Learner’s: all school subjects to be used in school from class 1 (6 years of age) till class 12 (18 years of age)

**Importance:**

* Impact: 10,000 exercises, 200 interactive exercises
* Co-production: developed by the State of Saxony in cooperation with different stakeholders.
* Innovation: It is a collective resource of different stakeholders.
* Prospects: It will be developed and made accessible to other users.

**ETCF:**

* No

**More information:**

* Application link <https://anton.app/en_us/>
* Legal notice and communication information <https://anton.app/en_us/legal-notice/>

**Full reference:** Anton Lernapp (2020). ANTON Have fun learning!. Retrieved May 25, 2022, from <https://anton.app/en_us/>

### B-Wise

**Funding:** Erasmus+

**Type of resource:** Manuals, curricula

**Target group:** Workers with support needs, job trainers/coaches, managers

**Description:** Year of initiation: 2021. European Association of Service Providers for Persons with Disabilities (EASPD), The European Network of Social Integration Enterprises (ENSIE), Arbeit Plus, JKU - Johannes Kepler Universität Linz, Lichtwerk, Fundacion ONCE, Fundacion Coremsa, RES - Réseau d’Entreprises Sociales, NASOR - National Association of the Socially Responsible Employers, Excellia, ACT group, Faculty of Law in Zagreb University, Fédérations française des Entreprises d'Insertion, AFPA, Rise Romania, ADV Fundatia Alaturi de Voi, MARGARITA vtc, EV ZIN, SENT, Cene Štupar, AIAS Bologna onlus, Idee In Rete, Social Entrepreneurship Association of Latvia, Samaritan Association of Latvia, De Omslag, ROC van Amsterdam, Stowarzyszenie Współpracy Regionalnej, Izba Rzemieślnicza Małej i Średniej Przedsiębiorczości w Katowicach, European Research Institute on Cooperative and Social Enterprises, Scuola Centrale Formazione.

**Geographic coverage:** Austria, Belgium, France, the Netherlands, Bulgaria, Latvia, Poland, Romania, Croatia, Greece, Italy, Slovenia, and Spain.

**Pandemic relevance:** No

**Level of education:** Post-secondary

**Education setting:** Non-formal

**Digital tools involved:** Website <https://www.bwiseproject.eu/>

**Timeframe:** Long-term

**Sustainability:** In progress

**Competences aimed:**

* Accessibility: The project will identify the digital skill gaps currently experienced by the WISEs sector and develop a credible and sustainable plan to match demand (employees/employers) and supply (VET providers) of identified skills needs, while updating the transnational vocational training curricula according to the new needs of the labour market. This will contain accessibility options to create more inclusive workspaces through the utilization of technological solutions.
* Digital skills: Aims to develop a European strategy to address the skills needs, in particular regarding digital skills, in the Work Integration Social Enterprises (WISEs) sector.
* Other skills: Employment skills related to digital support for better productivity, finding and maintaining employment by decreasing the digital gap.

**Level of implementation:**

* Administrative: Development of a European Strategy to continue addressing the skills needs in the WISEs sector even after the end of the project.
* Methodological: Blueprint, certifications and curricula for professional supporters and persons with disabilities
* Learner’s

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: Article 9 – Accessibility, Article 27 - Work and employment
* Prospects: The new curricula will become a reality by testing them in 13 countries and validating them by national and EU central certification authorities

**ETCF:**

* No

**More information:**

* Program site <https://www.bwiseproject.eu/en/>
* Events list <https://www.bwiseproject.eu/en/events#paging:currentPage=0>

**Full reference:** B-WISE project. *Project.* Retrieved June 16, 2022, from <https://www.bwiseproject.eu/en/project>

### BYOD as educational method leading to improve employability of adults with intellectual disability

**Funding:** Erasmus+, KA204-343D43F2

**Type of resource:** Manuals, multimedia, content creation

**Target Group:** Persons with intellectual disabilities, trainers, carers and parents, employers

**Description:** The consortium of this Erasmus+ project consists of the following partners: Polish Association for Persons with Intellectual Disability (Poland), Vocational Training Center MARGARITA (Greece), Harran University (Turkey), Association for Activism, Education, Culture and Art Civil Center “AktivUm” (North Macedonia), Fundació Espurna (Spain). The partners attest that persons with intellectual disabilities can be employed in the community, along with persons without disabilities, and earn competitive wages. The project aims at making sure that these persons are supported to have the resources to seek, obtain, and be successful in this community employment, by being able e.g., to create a “catchy" CV or meet other job-related training and searching activities. Also, the project aimed at providing training material for best practices, for staff of employment and school-to-work transition programs. Training persons with intellectual disability in the use of mobile technologies and informing employers on the usefulness of these technologies, when hiring a person with intellectual disability, is also a scope of BYOD project.

**Geographic coverage:** Poland, Greece, Turkey, North Macedonia, Spain

**Pandemic relevance:** Yes

**Level of education:** Post-secondary

**Education setting:** Non-formal

**Digital tools involved:** Publications in PDF (handbook for trainers, easy-to-read brochure for persons with intellectual disability), videos for persons with intellectual disability, webinars (for trainers and persons with intellectual disability), MOOCs for trainers

**Timeframe:** Long-term

**Sustainability:** Completed

**Competences aimed:**

* Accessibility: Training of people with intellectual disabilities in the use of mobile technologies, training of trainers in why and how to use these technologies, informing employers about ways to take advantage of digital technologies when hiring a person with intellectual disabilities to make more inclusive workspaces and work activities. The participants were trained on the accessibility options of the selected mobile applications.
* Digital skills: (brochure and videos with instructions for digital tools with easy-to-read and easy-to-understand content). The contents targeted BYOD has a series of applications that increase the autonomy of people with intellectual disabilities in everyday and working life. These applications target the following fields: 1. Transportation, 2. Communication, 3. Alternative communication, 4. Social media, 5. Time organization, 6. Tracking tools, 7. Teaching tools, 8. Job seeking, 9. Digital numeracy skills, 10. Finances, 11. EMAILS and productivity tools.
* Social skills: Social digital skills were improved by learning basic rules on how to use social media, emails, and popular communication apps, such as WhatsApp and Viber
* Other skills: Employment digital skills were improved by learning how to use Indeed Jobs and by being introduced in video CV development principles. The PwID learned how to participate in digital learning by knowing how to use applications like Kahoot! and Mentimeter.

**Level of implementation:**

* Methodological
* Learner’s
* Social

**Importance:**

* Successful contribution to the implementation of UNCRPD: Article 8 - Awareness-raising, Article 9 – Accessibility, Article 24 – Education, Article 27 - Work and employment
* Co-production: Persons with intellectual disability and their trainers have been involved in the creation of the training resources, within an Erasmus+ consortium
* Prospects: Educational material in 6 languages: English, Polish, Greek, Spanish, Macedonian, Turkish
* Accessibility and inclusive education: Easy-to-read training material addressing the needs of persons with intellectual disabilities (PDF brochure with adequate text, videos with the participation of persons with intellectual disabilities and screen recording directions)

**ETCF:**

* identify accessibility and AT use barriers, identify opportunities for AT use and accessibility
* select, create & modify, share
* information & media literacy, communication, content creation, safety (responsible use), problem solving

**More information:**

* Programme site <https://byod-project.eu/>
* Publications <https://byod-project.eu/library/publications/>
* Educational videos for persons with ID <https://byod-project.eu/library/films/>
* Videos from webinars <https://www.youtube.com/channel/UC9rTvJXYcIgXvQzSCyAnzWw/videos>
* Presentations from webinars <https://byod-project.eu/library/webinars/>

**Full reference:** BYOD - Bring Your Own Device (2020). *Publications.* Retrieved May 25, 2022, from <https://byod-project.eu/library/publications/>

### Clerks Workshop and Educational Technology Workshop

**Funding:** NGO actions

**Type of resource:** Curricula, gamification

**Target group:** Persons with intellectual disabilities and trainers

**Description:** Vocational Training Center MARGARITA operates with (among others) two workshops related with the use of technology. The clerks Workshop is the one with the oldest history. Its’ scope is the training of people with intellectual disabilities in the use of mobile technologies, using also the manuals developed by the workshop and lately by BYOD project. In addition, tangible office tools are being used, so that the beneficiaries obtain the skills of clerk employees. In the Educational Technology Workshop, people with intellectual disabilities are trained in the use of technologies, awareness raising about people with disabilities' rights to accessibility, how to transform documents, material, and websites in order to make them accessible for all, inclusive design and inclusion principles. The aim is to prepare them for their digital and social inclusion. In specific, the beneficiaries are trained in two levels; in order to familiarize themselves and use technology as a means to communicate, educate and inform themselves, but also in order to boost their digital skills in order to be more prepared for the labour market.

**Geographic coverage:** Greece

**Level of education:** Post-secondary

**Education setting:** Non-formal

**Timeframe:** Long-term

**Sustainability:** Continuing

**Digital tools involved:** Kahoot!, emails, google translate, Text-to-speech and speech-to-text functions, video maker, PowerPoint/ Kinems, Learning Apps, Computers, Microsoft tools, Live Worksheets, Google Workspace, Microsoft Office, Blog (<https://tech-turtles.blogspot.com/>), Wordpress websites (<http://supportedemployment.gr/>), (<https://mathesis.cup.gr/>), easy-to-read manuals, videos

**Competences aimed:**

* Accessibility: Training of people with intellectual disability in the use of mobile technologies using the manuals developed in BYOD project/ Training in the use of technologies, awareness raising about people with disabilities' rights to accessibility, training on how to transform documents, material, and websites in order to become accessible for all, training on inclusive design and inclusion principles.
* Digital skills: 1. Training in windows environment, 2. Use of Microsoft Word for creating MARGARITA's student magazine, 3. Receiving and sending emails, 4. Internet surfing, 5. Searching the internet for resources, shopping, and entertainment, 6. use of digital games for training in social skills, money management skills and consuming, functional literacy and numbers/ Enhancement of digital skills through familiarization with different technologies (e.g. tablets, mobiles, PCs), production of digital content (e.g. videos), website & blog administration, etc.
* Social skills: Internet and social networking safety, finding useful information/ Training on social skills, personal data, GDPR (videos, role-playing, social stories).
* Other skills: Enhancing professional skills/ Creativity, interpersonal & intrapersonal skills.

**Level of implementation:**

* Methodological
* Learner’s
* Social

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: Article 8 - Awareness-raising, Article 9 – Accessibility, Article 24 – Education
* Impact: 30 people were involved in the training. The training enhanced the theoretical and practical knowledge of service providers and people with intellectual disabilities regarding accessibility and digital skills. Service providers will use the knowledge acquired to create educational programs and accessible resources, while people with intellectual disabilities will now be able to acknowledge their rights to accessibility and alter resources to make them accessible.
* Innovation: Creation of accessible educational material

**ETCF:**

* No

**More information:**

* Contact info Communication with Sophia Karagouni, Project Manager, research.development@eeamargarita.gr

**Full reference:** Communication with Sophia Karagouni (Project Manager), Georgia Kouri (educator of Clerks Workshop) and Elli Kafritsa (educator of Educational Technology Workshop)

### Daugavpils Stropu Basic School-Development Center "Support measures for pupils with disabilities in learning Math"

**Funding:** NGO actions

**Type of resource:** Manuals

**Target Group:** Schoolchildren with disabilities, educators

**Description:** The Daugavpils Stropu Basic School-Development Center published a report with brief info on special education programs in Latvia, informs on kinds of learning disabilities, learning support measures, assistance in Mathematics of the 5th-6th grade, practical examples of teaching basic mathematical concepts for children with different learning disabilities. Visual support, practical work, active participation, meaningful tasks, acceptable teaching materials, interactive games.

**Geographic coverage:** Latvia

**Pandemic relevance:**

**Level of education:** Secondary

**Education setting:** Formal

**Digital tools involved:** Interactive boards, learning platforms

**Timeframe:** Long-term

**Sustainability:** Completed

**Competences aimed:**

* Digital skills:
* Social skills:

**Level of implementation:**

* Methodological

**Importance:**

* Successful contribution to the implementation of UNCRPD: Giving accessible information to disabled people and better access to information, disabled schoolchildren have access to innovative technologies, disabled schoolchildren get proper support for learning.
* Impact: The practice has a positive impact in providing/enhancing access to high-quality community-based services for persons with disabilities promoting inclusion. Based on observations of children who experience difficulties with math, this material gives useful guidance for teachers and overview on why individual students “struggle” with math. The presentation contains summary information on methods of teaching mathematics for learners of the 5th-6th levels of Basic School who have learning disorders/mixed development disorders - dyslexia (reading disorders), dysgraphia (writing disorders), dyscalculia (disorders of mathematical skills) - for the two last school years (2020-2021, 2021-2022). With appropriate and special teaching strategies, school children can be successful in mathematics.
* Accessibility and inclusive education: The practice addresses accessibility and inclusive education issues (Microsoft accessibility, UDL).

**ETCF:**

* No

**More information:**

* Link <http://dspac.lv/wp-content/uploads/2022/05/mac.trauc%C4%93jumi._TT.pdf>

**Full reference:** <http://dspac.lv/wp-content/uploads/2022/05/mac.trauc%C4%93jumi._TT.pdf>

### DECIDER

**Funding:** Erasmus+ project, KA204-A0B8C67B

**Type of resource:** Manuals, application

**Target group:** Persons with intellectual disabilities and their families

**Description:** This Erasmus+ project was launched in 2021 and is still under development. Its scope is the enhancement of life experiences for adults with special learning needs, and also of their trainers’ and parents’, through supported decision-making (SDM). The digital tools that will be developed during the project, aim at enhancing the persons’ with disabilities autonomy and quality of life. Also, training resources for the professionals of the services to the people with disabilities will be available, during the course of the project. The overall scope is to make possible the change of paradigm marked by the Convention on the Rights of Persons with Disabilities and the European Disability Strategy 2010-2020, which highlights Education and Training as a key area of action.

**Geographic coverage:** Poland, Lithuania, Spain, Greece, North Macedonia

**Pandemic relevance:** No

**Level of education:** Post-secondary

**Education setting:** Non-formal

**Digital tools involved:** Publication (case-studies on supported decision making and the use of technology), a mobile application for supported decision making (in progress), easy-to-read training multimedia material to enhance supported decision making (in progress)

**Timeframe:** Long-term

**Sustainability:** In progress

**Competences aimed:**

* Accessibility: Accessibility issues are addressed with the use of accessibility tools for better interaction with DECIDER application.
* Digital skills: These are developed through the interaction with the DECIDER application. Understanding the concept of logging in, co-creation of digital content with the supporter, Human-Computer interaction through the selection of games of the application for decision making.
* Social skills: These are developed by learning how to express opinions and feelings on the different options available in decision making.
* Other skills: Enhancing life experiences for adults with special learning needs, trainers, and parents through supported decision-making.

**Level of implementation:**

* Methodological: Case-studies have already become available
* Learner’s: Use of multimedia and mobile application
* Social: Active participation in their own life

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: The overall scope is to make possible the change of paradigm marked by the Convention on the Rights of Persons with Disabilities and the European Disability Strategy 2010-2020, which highlights Education and Training as a key area of action. Article 9 – Accessibility, Article 12 - Equal recognition before the law, Article 19 - Living independently and being included in the community. Co-production: Persons with intellectual disabilities, their trainers and parents have been involved in the creation of the training resources (piloting).
* Co-production: Persons with intellectual disabilities, their trainers and parents have been involved in the creation of the training resources (piloting).
* Innovation: No similar undertaking has been known before this in participant countries.
* Accessibility and inclusive education: Easy-to-read training material addressing the needs of persons with intellectual disabilities, supported decision making mobile application.

**ETCF:**

* Yes

**More information:**

* Program site <http://decider-project.eu/>

**Full reference:** DECIDER. *Enhancing life experiences for adults with special learning needs, trainers and parents through supported decision-making.* Retrieved May 25, 2022, from <http://decider-project.eu>

### DIGI-Coaches

**Funding:** NGO actions

**Type of resource:** Curricula

**Target Group:** Educators

**Description:** In 2022, the organization FAB (Verein zur Förderung von Arbeit und Beschäftigung), meaning Association for the Promotion of Work and Employment, launched the project DIGI-Coaches. Through internal organisation monitoring, it was concluded that "staff members" (educators) and enablers lack in development of digital skills and have to be adequately trained, in order to be able to train persons with disabilities. The project aims at the special training of FAB employees who work as coaches, with the intention to overcome digital barriers and develop target group-specific solutions. These coaches will support the employees of the FAB in their daily requirements when dealing with digital media. This approach should thus prevent the danger of digital exclusion for the latter.

**Geographic coverage:** Upper-Austria

**Pandemic relevance:** No

**Level of education:** Post-secondary

**Education setting:** Formal

**Digital tools involved:** Computer

**Timeframe:** Long-term (new, but intended to be long-term)

**Sustainability:** Continuing

**Competences aimed:**

* Accessibility: The DIGI-Coaches will support other employees in accessing digital devices and support them in dealing with digital media in order to prevent digital exclusion.
* Digital skills: The project aims at improving digital skills of supporters and enablers, such as the use of office programs and collaboration platforms.

**Level of implementation:**

* Administrative

**Importance:**

* Innovation: The practice successfully demonstrates innovation on national level (implementation in almost all FAB sites), as it identifies the lack of digital skills of educators in VET centres and also enablers in social enterprises for work integration of the organisation FAB. It also identifies how their lack of digital skills can be overcome and their gained knowledge can be used to also train persons with disabilities.
* Prospects: Sustainability and scale-up of the project is feasible, since the target group of the project is currently extended to include persons with disabilities. Relevant learning content currently being developed.

**ETCF:**

* Yes

**More information:**

The introduction of DIGI: Coaches is intended to overcome digital barriers and develop target group-specific solutions. The in-house DIGI-Coaches will support FAB employees in their daily requirements in the area of dealing with digital media, and the aim is to prevent the risk of digital exclusion. This project was supported by the Styrian Chamber of Labor within the framework of the Labor Project Fund (<https://stmk.arbeiterkammer.at/beratung/DIGI-Coaches_-_FAB_Verein_zur_Foerderung_von_Beschaeftigu.html>)

**Full reference:** Telephone interview with Stefanie Breinlinger, 29.03.2022

### Digital Tutors

**Funding:** NGO actions

**Type of resource:** Other practices

**Target Group:** Educators, trainers, and people with disabilities

**Description:** AIAS Bologna onlus is an NGO that, among others, supports the vocational development of persons with disabilities. This organization provides for the training of employees who act as specialised operators. These operators can, by appointment, intervene remotely (by telephone or video call) or physically (by visiting people's homes) to accompany and support users in use of the web, social media, and other digital tools. Therefore, people with disabilities and frailties are supported, but also trained, so that they are allowed to become active citizens of the digital society. This practice was crucial during the COVID-19 pandemic and quarantine.

**Geographic coverage:** Italy

**Pandemic relevance:** Par excellence

**Level of education:** Higher

**Education setting:** Non-formal

**Digital tools involved:** All

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Digital skills: improvement of the digital skills of educators and trainers of the center, that work with people with disability and support the development of their digital skills

**Level of implementation:**

* Methodological
* Learner’s
* Social

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: The practice enables people with disabilities to be active citizens of the digital society (Art. 5, 19, 21 and 29).
* Impact: The practice enabled persons with disabilities to access services and be in contact with peers during the lockdown period. Loan of the digital tools and assistive technologies were especially important for families who did not have the financial affordance to buy the equipment themselves. In general, the training of operators fosters their technological and digital knowledge and allows them to provide direct assistance and support to users and to plan educational activities.
* Innovation: There were no such services and the demand for intervention and support during the pandemic was remarkably high.
* Accessibility and inclusive education: Loan of devices and training allow persons with disabilities to take advantage of the services and participate in the activities offered online.

**ETCF:**

* identify accessibility and AT use barriers, identify opportunities for AT use and accessibility
* select, create & modify, share
* information & media literacy, communication, content creation, safety (responsible use), problem solving

**More information:**

* Initiative site <https://www.aiasbo.it/rimaniamo-in-linea-nascono-i-tutors-digitali/>

**Full reference:** AIAS Bologna onlus. *Rimaniamo in linea! Nascono i Tutors Digitali.* Retrieved May 25, 2022, from <https://www.aiasbo.it/rimaniamo-in-linea-nascono-i-tutors-digitali/>

### Digitale Wissenswerkstatt

**Funding:** NGO actions

**Type of resource:** Seminars

**Target Group:** Young adults between 15 and 21 years with psychological disorders, developmental delay or learning difficulties

**Description:** In 2021, the organization FAB (Verein zur Förderung von Arbeit und Beschäftigung - Association for the Promotion of Work and Employment) launched the project "Digitale Wissenswerkstatt", which is a part of "Produktionsschule Villach". The latter is a project in which young adults (with psychological disorders, developmental delay or learning difficulties) are trained and prepared for the open labour market. In the module "digitale Wissenswerkstatt", the participants gain competences regarding digitalization and digital transformation of everyone´s daily life and of the labour market. The learning content is adequate to the learning ability of the young adults. During the lockdowns, the learners received worksheets (these were analog in the beginning and digital later). During the next lockdowns, there was use of digital tools, such as learning games and other applications (existing ones). The project is divided in six content-groups: Digital transformation, basics of digitalization, media competences, basic internet competences, internet methods expertise and internet social expertise.

**Geographic coverage:** Carinthia

**Pandemic relevance:** Yes

**Level of education:** post-secondary

**Education setting:** Formal

**Digital tools involved:** Computers, smartphones

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Digital skills: Digital transformation, basics of digitalization, media competences, basic internet competences, internet methods expertise
* Social skills: Internet social expertise

**Level of implementation:**

* Learner’s

**Importance:**

* Impact: According to the project leader, there has been positive feedback on behalf of the learners who participated. Overall, "Produktionsschule" was nominated and chosen as best-practice example in the frame of the EU InvestEU.
* Innovation: The project demonstrates innovation in a local and regional level and is considered as beneficial within the organisation FAB. It is the only project within the organisation that follows a developed concept, since previous projects were all developed through a trial-and-error approach. Before the project was implemented, a detailed concept and strategy on which learning outcomes are relevant and how the units can be structured were developed.
* Prospects: The project is sustainable and scaling-up is possible. It tackles a very actual and prominent topic and although it addresses digital readiness for a special target group. This target group could be broadened.
* Accessibility and inclusive education: Inclusive education requirements are fulfilled by means of the needs-based adaptation of the learning content, on the basis of the learning level of the learners. Appropriate tools are selected taking into consideration individual competences.

**ETCF:**

* No

**More information:**

* As part of the investEU campaign, the initial project was selected as one of the showcase projects. The project was presented to a group of fifteen international journalists from Portugal, Hungary, Poland, Bulgaria, Latvia, and Austria. <https://www.fab.at/de/aktuelles/presse/detail/produktionsschule-villach-teil-der-eu-kampagne-investeu.html>

**Full reference:** Telephone interview with project leader Tobias Raunigk, 27.04.2022

### Entelis+

**Funding:** Erasmus+

**Type of resource:** Manuals

**Target group:** Persons with intellectual disabilities and trainers

**Description:** The ENTELIS+ project aims at developing and implementing innovative methods and practices to foster inclusive education and promote common values, as well as enhancing the digital skills and competences of digitally excluded groups, particularly persons with disabilities of all ages, through strategic public and private partnerships. The ENTELIS+ project aims at having an impact on three levels: 1) Raising awareness about the importance of accessibility as an enabler for inclusive learning and teaching, 2) Developing the digital skills of persons with disabilities and older persons so that they can participate in the digital society, 3) Enhancing the capacity of the key actors in charge of the design and implementation of facilitating frameworks. Partners in this project are: European Association of Service Providers for Persons with Disabilities (EASPD), AIAS Bologna Onlus, Funka Nu AB, Johannes Kepler Universitat Linz, European University Cyprus, Association for the Advancement of the Assistive Technology in Europe (AAATE), ATEMPO, Saint John of God Community Services clg., Vocational Training Center MARGARITA, Association of European Border Regions

**Geographic coverage:** Belgium, Italy, Sweden, Austria, Cyprus, Ireland, Greece, Germany

**Level of education:** Post-secondary

**Education setting:** Non-formal

**Timeframe:** Long-term

**Sustainability:** Completed

**Digital tools involved:** Kahoot!, emails, google translate, Text-to-speech and speech-to-text functions, video maker, PowerPoint

**Competences aimed:**

* Accessibility: Training of people with intellectual disabilities and their trainers on what accessibility and digital accessibility is, the people with intellectual disabilities' rights to accessibility and how to transform documents, other media, and websites in order to become accessible for all.
* Digital skills: They were trained to use and transform documents and other media in order to become accessible. They enhanced their digital skills by using software and applications and experimented on how to make transformations in order to reach accessibility. They also enhanced their digital skills by sending emails and keeping a friendly relationship with beneficiaries from other countries, during the pen pals subproject of ENTELIS+.
* Social skills: They enhanced their social skills by using software and applications and experimented on how to make transformations in order to reach accessibility. They trained on what information can be shared during a conversation with a new friend, in terms of personal data and GDPR.

**Level of implementation:**

* Methodological: Training of trainers
* Learner’s
* Social

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: Article 8 - Awareness-raising, Article 9 – Accessibility, Article 24 – Education
* Impact: thirty people were involved in the training. The training enhanced the theoretical and practical knowledge of service providers and people with intellectual disabilities regarding accessibility and digital skills. Service providers will use the knowledge acquired to create educational programs and accessible resources, while people with intellectual disabilities will now be able to acknowledge their rights to accessibility and alter resources to make them accessible.
* Innovation: Creation of accessible educational material

**ETCF:**

* identify accessibility and AT use barriers, identify opportunities for AT use and accessibility
* select, create & modify, share
* information & media literacy, communication, content creation, safety (responsible use), problem solving

**More information:**

* Program site Program site: <https://entelisplus.entelis.net/>
* Contact info Leader: omor.ahmed@easpd.eu, tel: +32 2 233 7720, Greek partner: research.development@eeamargarita.gr, tel: +30 210 613 34 81

**Full reference:** Entelis+ (2022). *The project*. Retrieved June 15, 2022, from <https://entelisplus.entelis.net/the-project/>

### Improving the Employability of People with Hearing Impairments – proHear Interactive e-Learning Platform

**Funding:** Erasmus+, 2017-1-PL01-KA202-038756

**Type of resource:** Learning platform

**Target group:** People with hearing impairments, differentiated by their employment status (inactive/ unemployed/ employed), and associations of people with hearing impairments

**Description:** In 2018,the Union of the Deaf in Bulgaria, the University of Social Sciences in Poland, the Polish Association of the Deaf Lodz Department, the Public Institution Valakupiai Rehabilitation Centre (VRC) in Lithuania, the National and Speech Institute of Iceland and the University of Iceland, created a platform that works as an online learning environment for a practice-oriented learning course. The platform aims at providing integrated support tailored to the needs and specificities of people with hearing impairments, through the development of innovative training tools and materials, so as to increase their motivation and self-awareness, and create incentives for their acquiring of new soft skills necessary for efficient job search and employment performance.

**Geographic coverage:** Bulgaria, Poland, Lithuania, Iceland

**Pandemic relevance:**

**Level of education:** General

**Education setting:** Informal

**Digital tools involved:** Documents and videos with sign language translation

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Accessibility
* Social skills

**Level of implementation:**

* Social

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: The platform provides support tailored to the needs and specificities of persons with hearing impairments.
* Innovation: The training content and proHear curriculum for hearing impaired persons are innovative in a national context.
* Accessibility and inclusive education: The platform includes videos with sign language translation and addresses accessibility and inclusive education issues, through the development of these innovative training tools.

**ETCF:**

* No

**More information:**

* Program platform <http://prohear-platform.eu/>
* Program site [http://prohear.eu](http://prohear.eu/)

**Full reference:** proHear E-learning Platform. Retrieved May 25, 2022, from <http://prohear.eu/Article/Details/4>

### In-Vesti Digitali

**Funding:** NGO actions

**Type of resource:** Other practices

**Target group:** Teachers, families, and vulnerable students

**Description:** The Italian organization Piazza dei Mestieri supports young persons in their training for an occupation and their search for a job placement that fulfils their aspirations. The aim of the specific project that was implemented during the school year 2020-2021 was to foster digital competences in order to guarantee and improve the inclusion of vulnerable students, especially migrants and students with disabilities. The project foresaw different activities: 1) Teachers' training with the aim of encouraging the exchange of knowledge and experience on new models of educational intervention, in order to allow the replication and development of the project. 2) Students' training aimed at developing computational thinking and knowledge of digital tools and social media for teaching purposes. 3) Digital education and infopoints for families. The project gave the opportunity to families who do not have the possibility to borrow digital instruments.

**Geographic coverage:** Italy

**Pandemic relevance:** Par excellence

**Level of education:** Secondary

**Education setting:** Formal

**Digital tools involved:** Loan of digital tools

**Timeframe:** Mid-term

**Sustainability:** Completed

**Competences aimed:**

* Digital skills: fostering full citizenship and the development of digital skills through workshops and training experiences, extending and breaking new ground on the educational offer of schools.
* Social skills: families had the opportunity to borrow digital equipment

**Level of implementation:**

* Methodological
* Learner’s
* Social: families had the opportunity to borrow digital equipment

**Importance:**

* Successful contribution to the implementation of UNCRPD: The practice enabled people with disability to be active citizens of the digital society (Art. 5, 19,21,29).
* Impact: Borrowing digital tools was key during the lockdown period, to allow students who did not have the financial capacity to follow the classes remotely. This allowed the young persons to not abandon their school. The feedback was positive and after the end of this project, another similar project was presented and financed.
* Prospects: The project was scaled in the territory and the target was enlarged in the following project.
* Accessibility and Inclusive Education: Loan of devices and training allow persons with disabilities to take advantage of the services and participate in the activities offered online.

**ETCF:**

* Yes

**More information:**

Report site <https://piazzadeimestieri.it/progetti/in-vesti-digitali/>

**Full reference:** Piazza dei Mestieri.*In-Vesti Digitali.* Retrieved May 25, 2022, from <https://piazzadeimestieri.it/progetti/in-vesti-digitali/>

### JAMBA - online platform that connects people with diverse abilities and their future employers

**Funding:** NGO actions

**Type of resource:** Job-searching platforms

**Target group:** Persons with disabilities, Employers

**Description:** JAMBA is a job-searching platform, which was launched in Bulgaria in 2018, developed by JAMBA non profit organization, persons with disabilities and employers. The platform provides access to education, skills acquisition, and career start for people with various levels of abilities. Also, the platform addresses accessibility and inclusive education issues by offering online courses and training targeted to the attainment of professional or technical skills in various fields. The platform focuses on development of soft skills, as well as preparation for job interviews and practices of successful methods for integration in the workplace. Jamba supports persons with disabilities in their attainment of key skills and competencies in different professional fields, through trainings and internships. As a next step, the organization assists with their inclusion in the job market and even in their career advancement. The JAMBA site is accessible for people with vision impairment through software that includes text to speech functionality, is dyslexia friendly, includes interactive vocabulary and has translation functionality.

**Geographic coverage:** Bulgaria

**Pandemic relevance:** No

**Level of education:** Higher

**Education setting:** Informal

**Digital tools involved:** Educational on-line platform Jamba

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Accessibility
* Digital skills
* Social skills

**Level of implementation:**

* Learner’s
* Social

**Importance:**

* Successful contribution to the implementation of UNCRPD: JAMBA contributes to equal access to education, acquisition of key skills and competencies, as well as career start for people with various levels of abilities.
* Impact: By making use of the platform, persons with various levels of abilities can register to receive access to work positions based on their skills and qualification. They can take part in different trainings, online courses, or live sessions. Also, the platform connects employers with motivated and qualified job seekers with diverse abilities.
* Co-production: The platform is developed in co-production with the Bulgarian Ministry of Labour and Social Politics. The foundation that supports JAMBA, is a licensed labor intermediary. The co-founders of Jamba have experience in the non-government sector while collaborating with people with hearing impairment. JAMBA’s team includes a variety of experts among which are a sign language expert, involved in adapting training materials and information materials in sign language, as well as an accessible environment consultant.
* Innovation: The platform is innovative for Bulgaria, since it offers support, trainings, online courses for people with various levels of abilities and access to work positions based on their skills and education. JAMBA uses software for web access for the blind and persons with vision impairment. This is an innovative web access solution based on the cloud services that enables the users to personalize a web site according to their own needs in order to use it at their convenience.
* Prospects: The development of the platform relies on a stable team of specialists, including an expert in business development and development of digital technologies, an expert in communication and digital marketing, all of whom are working for the future activity, sustainability and scaling-up of JAMBA.
* Accessibility and inclusive education: The platform addresses accessibility and inclusive education issues by offering online courses, trainings targeted to the attainment of professional or technical skills in various fields. The JAMBA site is accessible for persons with vision impairment through software that includes text to speech functionality, is dyslexia friendly, includes interactive vocabulary and has translation functionality.

**ETCF:**

* No

**More information:**

* Program platform <https://jamba.bg/>
* Program site <https://jamba.bg/all-courses/>

**Full reference:** JAMBA online platform.Retrieved May 25, 202, from <https://jamba.bg/>

### Kahoot

**Funding:** Private company actions

**Type of resource:** Learning platform, content creation

**Target Group:** Teachers and educators as well as students between 7-18 years old

**Description:** Kahoot! (2019) is a global learning platform company that wants to empower everyone, including children, students, and employees, to unlock their full learning potential and thus offers digital learning solutions.

**Geographic coverage:** Global

**Pandemic relevance:** Yes

**Level of education:** Primary and secondary

**Education setting:** Informal

**Digital tools involved:** Platform for digital learning: games, quizzes, questions and answers, evaluation of progress

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Accessibility
* Other skills: Kahoot! is a global learning platform company that wants to empower everyone, including children, students, and employees, to unlock their full learning potential.

**Level of implementation:**

* Learner’s: learner's /all school subjects to be used in school from class 1 (6 years of age) till class 12 (18 years of age)

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: The creators claim that it is inclusive.
* Impact: Kahoot! provides community based digital learning solutions. Users: 87% of top universities; 9M teachers; 50M public learning games.
* Co-production: Teachers and educators can create their own content and make it publicly usable.
* Innovation: It is an innovative solution on all levels of education and admistration.
* Prospects: The content is highly adaptable and usable and therefore future orientated.
* Accessibility and inclusive education: Creators (<https://kahoot.com/company/>) claim that Kahoot! offers inclusive and accessible digital solutions.

**ETCF:**

* No

**More information:**

* Company website <https://kahoot.com/>

**Full reference:** Kahoot!. (2019). Retrieved May 25, 2022, from <https://kahoot.com/>

### No one was left behind!

**Funding:** NGO Actions

**Type of resource:** Manuals

**Target Group:** Students of a vocational education school, also with disabilities, educators

**Description:** At the beginning of the pandemic, Escola Profissional Amar Terra Verde provided to their students’ digital content through digital platforms. They also provided teacher training and worked for the creation of guiding principles for the organization of the new teaching modality (remote). Their priority was to ensure that all students, with special focus on students with disabilities were in continuouscontact with their teachers in order to continue their learning process and avoid dropout. Their first move was a detailed inquiry of these cases, which was conducted through a telephone survey. In this first contact, the recordings concerned the conditions of internet access and the existence, or lack thereof, of technological means that the students had at their disposal to attend remote classes. Solutions were found for 27 students, six of whom did not have any computer equipment at home and no Internet access, and four of whom lived in places without access to landline or mobile Internet. Computers or tablets with mobile internet access were lent or offered to them. For the cases of students who lived in areas without access to any kind of network, the solution was to make available/deliver to their homes, personally or by mail, all the study materials in a printed format. This work was conducted in a personalized and differentiated way, articulating it with all the elements of the Pedagogical Team. Contact was made regularly during the week, in which small study manuals were delivered (by mail or personally at their homes), with a compilation of the tasks and learning activities to be conducted. During this personal and permanent contact, the students received feedback on the tasks completed in the previous week and were oriented and clarified about the tasks and learning activities they had to develop during the following week. In a second phase, the priority was no longer “to develop the cognitive skills of acquisition and understanding of these students, through oral, reading, writing and logical-abstract reasoning training.” The issues were the constant and permanent supervision and clarification of doubts that arose in the performance of learning tasks, through video calls, phone calls and the TEAMS platform.

**Geographic coverage:** Portugal (Braga)

**Level of education:** Post-secondary

**Education setting:** Formal

**Timeframe:** Mid-term

**Sustainability:** Completed

**Digital tools involved:** Provision of digital content through digital platform (Microsoft Teams), teacher training and the creation of guiding principles for the organization of this new (remote) teaching modality

**Competences aimed:**

* Accessibility: Devices were lent, and mobile internet was offered to students who did not have access in the first place.
* Digital skills: Students were supported in the use of online platforms.
* Social skills: Students kept contact with their school environment, continued their learning process and did not leave school early.

**Level of implementation:**

* Administrative: Services of the school collaborated for the support of students with disabilities.
* Methodological: Distinct phases of the pandemic entailed different approaches, creation of guiding principles for the organization of this new (remote) teaching modality.
* Learner’s: Learners proceeded with their studies.

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: Article 24 – Education, Article 27 - Work and Employment
* Impact: twenty-seven students were not left behind, since seven students who were in their last year of the professional course were able to defend their Professional Aptitude Test (PAP) and thus conclude their courses. The other twenty students successfully transitioned to the next school year.
* Innovation: The reaction was instant after during the stages of the pandemic

**ETCF:**

* Yes

**More information:**

* Link <https://epatv.pt/wp-content/uploads/2021/10/e-Book-%E2%80%93-Schools-4.0-Innovation-in-Vocational-Education.pdf>

**Full reference:** Schools 4.0 – Innovation in Vocational Training and Education (2021). *Schools 4.0 – Innovation in Vocational Training and Education*. Retrieved May 25, 2022, from <https://epatv.pt/wp-content/uploads/2021/10/e-Book-%E2%80%93-Schools-4.0-Innovation-in-Vocational-Education.pdf>

### Quabis

**Funding:** University

**Type of resource:** Curricula

**Target Group:** Persons with disabilities

**Description:** Since May 2019, there have been education and inclusion experts at the TUD. At the beginning, they were called education specialists, but they have changed their name. QuaBIS means "Qualification of Education and Inclusion Officers in Saxony" and is an acronym in German. In the QuaBIS project, people with experience of disability work from Monday to Friday. They do a kind of training at the TUD and learn how to combine their knowledge with topics that are important, for example, for teacher education. They learn and work at the same time. The project also exists in Leipzig. What is special about this project is that it is part of the university, where member parts of committees do research and design their own seminars. In this way, they influence knowledge and help the TUD to implement the requirements of the UN Convention on the Rights of Persons with Disabilities.

**Geographic coverage:** Germany - Saxony

**Level of education:** Higher

**Education setting:** Formal

**Digital tools involved:** Computer use, video conference use (e.g., zoom), use of digital formats for exchange e.g., Padlet

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Accessibility: providing and improving access of disabled persons according to UN Convention on the Rights of Persons with Disabilities
* Social skills

**Level of implementation:**

* Administrative
* Methodological
* Learner’s
* Social

**Importance:**

* Successful contribution to the implementation of UNCRPD: Quabis' aim is the implementation of Article 24 of the Convention on the Rights of Persons with Disabilities.
* Impact: The project should become a permanent practice of the university and remain an integral part of teaching. It received awards for diversity-sensitive teaching in 2021. Within the last year, the awards for diversity-sensitive teaching were conferred for the fourth time in a row. The award has been designed to honor lecturers and teaching concepts that address diversity, on one or several diversity dimensions (e.g., gender, inclusion, origin, family responsibilities, etc.) in line with TU Dresden’s Diversity Strategy 2030.
* Accessibility and inclusive education: Quabis provides advice and support for the further development of teaching and other existing forms of educational work.

**ETCF:**

* Yes

**More information:**

<https://tu-dresden.de/gsw/forschung/projekte/weitere-forschungsprojekte-an-den-fakultaeten/quabis>

* <https://tu-dresden.de/tu-dresden/universitaetskultur/diversitaet-inklusion/preise-und-wettbewerbe>

**Full reference:** Quabis. Retrieved June 16, 2022, from <https://tu-dresden.de/gsw/forschung/projekte/weitere-forschungsprojekte-an-den-fakultaeten/quabis>

### Smart Learning Suit Online

**Funding:** European Regional Development Fund (ERDF)

**Type of resource:** Learning platform, content creation

**Target group:** Educators and schools

**Description:** SMART created in 2020 a platform for digital learning, which includes: games, quizzes, questions and answers and evaluation of progress. The online lessons can be self-made.

**Geographic coverage:** Global

**Level of education:** Secondary

**Education setting:** Non-formal

**Digital tools involved:** Digital learning solutions for the creation of online lessons.

**Timeframe:** Long-term

**Competences aimed:**

* Digital skills: learning platform for the creation of ready-made or self-made lessons in a digital environment
* Other skills: pedagogy

**Level of implementation:**

* Learner’s: learner's /all school subjects to be used in school from class 1 (6 years of age) till class 12 (18 years of age)

**Pillars of importance:**

* Innovation: It is a collective set of resources that foster digital learning. The platform has won several awards.
* Prospects: Digital solutions
* Accessibility and inclusive education:

**ETCF:**

* Νο

**More information:**

* Company website <https://legacy.smarttech.com/>

**Full reference:** EdTech, SMART Boards & Lumio Classroom Learning Software. *Company webpage*. Retrieved May 25, 2022, from <https://www.smarttech.com/en/education>

### SpielDig – Leib und Söl

**Funding:** NGO actions

**Type of resource:** Gamification

**Target Group:** Persons with disabilities

**Description**: In 2021, the organization Leib&Söl Styria launched this project, aiming at the development of technology-supported learning games that are intended to improve the digital skills of persons with disabilities. Special learning training and support offered in day-care centers are being developed for practical use. The aim of the project is to increase the opportunities for equal participation in society.

**Geographic coverage:** Styria

**Pandemic relevance:** Yes

**Level of education:** Post-secondary

**Education setting:** Informal

**Digital tools involved:** Computer

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Accessibility: The digital games are adjusted to the needs of the users and their level of digital knowledge.
* Digital skills: With the project, digital skills are acquired and promoted with the help of learning training. Programming language, logic and algorithmic thinking is promoted.

**Level of implementation:**

* Learner’s

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: UN provisions are fulfilled, as the project aims to enable (digital) participation in society by increasing digital skills by means of adjusted learning games.

**ETCF:**

* No

**More information:**

* This project was supported by the Styrian Chamber of Labor within the framework of the Labor Project Fund (<https://stmk.arbeiterkammer.at/beratung/SpielDig_-_Leib_und_Soel.html>)

**Full reference:** SpielDig – Leib und Söl. *SpielDig – Leib und Söl.* Retrieved May 25, 2022, from <https://stmk.arbeiterkammer.at/beratung/SpielDig_-_Leib_und_Soel.html>

### Support me - educational platform in support of children with disabilities, their teachers and parents

**Funding:** Ministry of Education and Science and UNICEF

**Type of resource:** Learning platform

**Target Group:** Children with disabilities, educators, parents

**Description:** This project was implemented in 2021, with the collaboration of the regional Center for Support of the Inclusive Education Process in Sofia, the ministry of Education and Science and UNICEF. "Support Me" provides video learning materials and resources for children with special educational needs, developed by specialists and teachers. They are located in the *Resources* section of the platform and are structured in two sections - educational and therapeutic resources, some of which are publicly available, and others, which are more specialized, require a request from the parent. All resources in the platform are free for use.

**Geographic coverage:** Bulgaria

**Pandemic relevance:** Par excellence

**Level of education:** Primary

**Education setting:** Informal

**Digital tools involved:** Videos and documents containing educational and therapeutic resources

**Timeframe:** Long-term

**Sustainability:** Continuing

**Competences aimed:**

* Accessibility
* Other skills: Educational and therapeutic purposes

**Level of implementation:**

* Methodological
* Learner’s: Opportunity to use educational material, probably with the assistance of parents
* Social

**Importance:**

* Successful contribution to the implementation of UNCRPD: With the assistance of the platform, education will be more accessible to children with disabilities, their teachers and families, in close cooperation with relevant specialists, will be able to gain knowledge and resources that will be more useful to children.
* Impact: The platform has a positive impact in expanding the opportunities for children with special educational needs for additional support, throughout the country. During the first 30 months, 500 specialists (learners) and 200 parents will be supported.
* Co-production: The resources in the platform are created with the assistance of psychologists, speech therapists and teachers, and are approved by the Ministry of Education and Science.
* Innovation: "Support me" is the first Bulgarian educational on-line platform for children with disabilities.
* Prospects: An additional module will be added, which will facilitate the work and communication between parent, child and specialist. That will allow an individual support plan to be developed for every child, and each specialist will be able to select resources from the system to support the individual needs of children with special education needs.
* Accessibility and inclusive education: The platform, especially during a pandemic, will help teachers, parents and professionals to have free access to a variety of support resources. The platform meets the requirements for EN 301 549 - European standard for digital accessibility.

**ETCF:**

* No

**More information:**

* Program platform <https://podkrepime.mon.bg/>

**Full reference:** “Support me” educational platform.Retrieved May 25, 2022, from <https://podkrepime.mon.bg/>

### Transition Program from School to Employment in Youths with Intellectual Disability: Evaluation of the Irish Pilot Study E-IDEAS

**Funding:** Seventh Framework Programme, PCOFUND-GA-2013-608728

**Type of resource:** Curricula, empirical publication

**Target group:** Intellectual disability needs: academics, educators, professionals in the field of employment, parents, also young persons 18 years old or older have already benefited from the pilot phase

**Description:** This is a study that was conducted under the auspices of the National University of Ireland Galway. The purpose of this pilot that was published in 2021 in an academic journal, was to evaluate the effectiveness of the E-IDEAS curriculum. This curriculum was specifically designed for workplace inclusion of young persons with intellectual disabilities. The pilot aimed for the transfer of social, communication, independent living and employment skills and it was attended by five participants who were supported in five different work-placements. The duration of the study was a total of four months. The work-placements took place across a period of three months out of the total four months of the pilot. The training in the use of tablets for the educational platform AVAIL had a frequency of two hours, for two days per week. This training took place during the classroom activities at the training center and during the participants’ work-placement, with the support of job coaches. The participants were supported for a total of 96 hours.

**Geographic coverage:** Ireland

**Pandemic relevance:** None

**Education setting:** Non-formal

**Digital tools involved:**

* tablets (iPads) used with applications appropriate for the level of skills of the participants
* AVAIL-educational platform, which utilizes the principles of Applied Behavior Analysis (ABA) (audio/video modeling and other prompting) in order to help individuals to acquire skills that are critical to their success and to their independent living, through the utilization of key strategies, task analysis, chaining, prompt-fading and positive reinforcement

**Timeframe:** Mid-term

**Sustainability:** Completed

**Competences aimed:**

* Digital skills: basic skills that include health and wellness, and ICT-AT
* Social skills: communication, adult related, self-related
* Other skills: money management, independent living (navigation in the community, time management, professionalism, advocacy skills), employment skills (team building, job searching, safety at work)

**Level of implementation:**

* Methodological
* Learner’s
* Social

**Pillars of importance:**

* Successful contribution to the implementation of UNCRPD: Article 19 - Living independently and being included in the community (independent living and employment are highly connected for persons with intellectual disabilities), Article 24 - Education, Article 27 - Work and Employment
* Impact: The practice was approved for publication in an academic journal. It provides education using (also) digital means, aiming at successful employment. Two assessment tools were used to demonstrate the acquisition of such skills and evidence-based improvement of their quality of life. Pre-and post-intervention standardized assessments were also used for measuring the improvement in quality of life and adaptive behavior. There was a 3-month follow-up of the five participants, which provided information about the skills acquired. The results indicate increase in the acquisition of the above-mentioned skills, enhanced engagement in learning, as well as increased participants' independence (less need for a job coach). Also, some participants had the chance to acquire additional work experiences after the completion of the curriculum and the work placement. One participant was successful in gaining employment in a restaurant (four days per week), one participant obtained a paid job at a supermarket, and for another participant, the work-placement period was extended for two months. The other two participants were appointed for job interviews at a cafeteria and a restaurant. Two assessment tools were used to SpielDig – Leib und Sölthe acquisition of such skills and evidence-based improvement of their quality of life. Pre-and post-intervention standardized assessments were also used for measuring the improvement in quality of life and adaptive.
* Co-production: Trainers, job coaches, psychologists, young persons with intellectual disability and their families contributed to the implementation and evaluation of the study.
* Innovation: Successful employment contributes to improving the quality of life of persons with intellectual disability. Nevertheless, there is currently not enough empirical research (on a global level) addressing specific strategies and methods for transferring employment skills and providing experiences in real work settings for individuals with intellectual disabilities.
* Prospects: Only partially met: The research delivers useful elements to replicate, adapt or re-design transition programs grounded on evidence-based research and real work experiences. Caregivers, educators and teachers can use the E-IDEAS curriculum, for the needs of young individuals with intellectual disabilities.
* Accessibility and inclusive education: The study addresses job-placement related to the educational needs of young persons with intellectual disabilities.

**ETCF:**

* No

**More information:**

* Article source <https://doi.org/10.1080/17518423.2021.1941373>
* Platform used <https://availsupport.com/>
* Contact info: ivan.traina@gmail.com

**Full reference:** Traina, I., Mannion, A. & Leader, G. (2021). Transition Program from School to Employment in Youths with Intellectual Disability: Evaluation of the Irish Pilot Study E-IDEAS. *Developmental Neurorehabilitation, 25*(2), 87-100, <https://doi.org/10.1080/17518423.2021.1941373>

## 4 DIAGRAMS

***Figure SEQ Figure \\* ARABIC 1 Frequency of practices per year***

***Diagram SEQ Figure \\* ARABIC 1 Frequency of practices per year***

**Figure SEQ Figure \\* ARABIC 1***Frequency of practices per year*

It can be observed that most of the practices were initiated or published in 2021.

**Figure SEQ Figure \\* ARABIC 2***Frequency of type of funding*

Most of the practices were funded by NGOs or by Erasmus+ projects.

**Figure SEQ Figure \\* ARABIC 3***Frequency of range of number of countries participating*

In most of the practices identified, only one country has been involved.

**Figure SEQ Figure \\* ARABIC 4***Frequency of practices with specific pandemic relevance*

An almost equal percentage of practices can be considered to have been used par excellence during the pandemic, was used, or was not used at all for this purpose.

**Figure SEQ Figure \\* ARABIC 5***Frequency of types of resources*

It is important to note that no policy documents that addressed the specific vocational educational needs of the persons with disabilities were identified.

**Figure SEQ Figure \\* ARABIC 6***Frequency of timeframe*

Most of the practices identified were long-term and some of them mid-term.

**Figure SEQ Figure \\* ARABIC 7***Frequency of type of sustainability*

Of all the practices identified, 33% have beencompleted in the past, 62% are continuing, and 33% are currently in progress (first period of implementation).

**Figure SEQ Figure \\* ARABIC 8***Frequency of type of Basic aim met*

Social skills were aimed at these 21 practices to a lesser degree, but not with a noticeably significant difference.

**Figure SEQ Figure \\* ARABIC 9***Frequency of total number of Basic aim types met*

Of all the practices, ten in total met one or two Basic aim types, and three met all four of them.

**Figure SEQ Figure \\* ARABIC 10***Frequency of level of education*

About half (10) of the practices identified were related to post-secondary level of education. We also had some information about primary education, but these were not further analyzed, as they were beyondthe scope of this project.

**Figure SEQ Figure \\* ARABIC 11***Frequency of type of education setting*

Eight practices referred to non-formal education, six referred to formal education, another six to informal education, and one to formal and non-formal education.

**Figure SEQ Figure \\* ARABIC 12***Frequency of type of Level of implementation met*

Only eight of the practices were implemented on a social level.

**Figure SEQ Figure \\* ARABIC 13***Frequency of total number of Levels of implementation met*

Many of the practices (8) met only one Level of implementation and only one of them met all four Levels of implementation.

**Figure SEQ Figure \\* ARABIC 14***Frequency of practices that meet each criterion*

Most of the practices (17) met the criterion of Accessibility and Inclusive education, and also UNCRPD aims. The smallest number of practices was found regarding the criterion of Co-production.

**Figure SEQ Figure \\* ARABIC 15***Frequency of practices that meet specific range of criteria*

Two practices met three criteria, ten practices met 3-4 criteria, and eight practices met 4-6 criteria.

# Τ.1.3 Lessons Learnt

## Introduction - a challenging situation holds opportunities

Digital distance education can be defined as an educational process “that bridges the separation between students and educators mediated by the use of technology and minimal face-to-face meetings” (Sholikhati et al., 2021, p. 145). Initiated by the COVID-19 pandemic, in a total of 150 countries, there was a complete or partial shift in educational processes from face-to-face to digital. This was accompanied by a change in roles; teachers took on a role in which they guided learners to use digital media independently. Some students were not reached digitally, for example, due to the lack of technical resources as well as the lack of individual support in the teaching-learning process. This widened the socioeconomic gap, leaving behind families that were in a less advantageous position (Schwab & Lindner, 2021).

The COVID-19 pandemic[[3]](#footnote-3) and repeated school closures are especially impacting families with children or youth with disabilities (Bešić et al., 2020; Calahorrano et al., 2021; Fettweis & Zorn, 2022; Fickermann & Edelstein, 2021; Schwab & Lindner, 2021). The forms of distance or hybrid education have little or no focus on the needs of these students (Calahorrano et al., 2021; Fickermann & Edelstein, 2021). One study from Germany which analysed the impact of COVID-19 on families with children with disabilities showed that 40% of parents reported developmental regression (Calahorrano et al., 2021). Another study by Schwab and Lindner (2020) confirmed this result. On the other hand, Bešić et al. (2020) pointed out that learners with disabilities did show an increase in independence and self-directed learning when the teacher created an inclusive digital environment. Prompt and individual feedback on learning progress as well as involvement in communication with the whole class are particularly essential for sustained motivation and the avoidance of social isolation. Participation in distance learning for children with disabilities was primarily limited by a lack of accessibility in the tools used (Bešić et al., 2020).

During this period, however, there was also a development in the digital skills of the teaching staff (Bešić et al., 2020) and a digital reform push in the education sector (Bešić et al., 2020; Schwab & Lindner, 2021). Different technical and didactic strategies were used (Schwab & Lindner, 2020). It should be noted that distance learning can take on different forms, including the use of digital technologies such as devices like e.g., smartphones, tablets, computers, or tools such as apps, websites, social networks, and virtual learning environments (Bravo et al., 2020). However, the essential characteristic of distance education is that all educational processes take place online, as well as communication and the various forms of examination (Sholikhati et al., 2021).

This report discusses good practices as part of the Erasmus+ funded project "Digital Readiness of Vocational Training Institutions". Good practice examples were surveyed using a collection grid by a total of nine project partners: Internationaler Bund (Germany), European University Cyprus (Cyprus), Johannes Kepler University Linz (Austria), Technical University Dresden (Germany), Daugavpils Technical School (Latvia), Bulgarian-German Vocational Training Centre State Enterprise (Bulgaria), AIAS Bologna Onlus (Italy), European Association of Service Providers for Persons with Disabilities (Belgium), Association for the Advancement of Assistive Technology (Austria). Many of these innovative examples have successfully developed a strategy for dealing with the challenges of the pandemic.

## Good practices of inclusive digital education: between trends, patterns, gaps and options

A total of 21 good practices were selected for analysis and interpretation on the basis of their relevance to the project’s aims. The selection was based on an evaluation of submitted and/or researched good practices on digital readiness in an inclusive environment. The selection was discussed intensively and approved by the project consortium (see above). In the following, commonalities between the selected good practices as well as trends, patterns, gaps and opportunities are presented and considered in detail.

### Trends and patterns

The selected good practice examples on digital readiness in an inclusive environment show that the pandemic raised awareness about the importance of digitization in the educational sector. Many of the examples were used during the pandemic or were created as an initial response to the challenging situation and the changing conditions during and also between the lockdowns (see Figure 4 in T1.2). Two practices started in 2018, three in the year 2019, three in 2020, a total of ten practices started in the year 2021 and also three in the year 2022 (see Figure 1 in in T1.2). Most of the good practices are continuing, about one third is completed and 5% of the selected practices are still in progress (see Figure 7 in in T1.2). By the same token, more than 80% of the good practices were developed to provide long-term solutions while the rest aimed at mid-term solutions (see Figure 6 in T1.2).

Looking at the types of funding, it can be highlighted that most of the good practices were either initiated by non-governmental organizations (NGOs) (nice practices) or funded by Erasmus+ (five practices). Figure 2 (in T1.2) in the good practice catalogue shows that two good practices were financed by private company actions, one project was financed each by a university, the Seventh Framework Program, a ministry of education and science and UNICEF, a ministry of education and the European Regional Development Fund. This could indicate that the funding provided by the European Commission was crucial to efforts in the direction of digital inclusive education. This result also shows that NGO internal initiatives played a major role during the pandemic period and pushed digitization especially internally within organizations. Interestingly, those practices which were funded by Erasmus+ are more likely to cover more than one country, while practices which were initiated by NGOs were/ have been implemented in one country.

The target groups of the collected good practice examples differ between learners with disabilities and their teachers/ trainers/ educators, families as well as employers or other stakeholders. Twelve of the selected good practice examples were implemented at the learner’s level, nine on a methodological level, eight on a social level and four on administrative level (see Figure 12 in T1.2). The main target group of the good practices seems to be learners with disabilities in general. If a specific group of persons with disabilities is targeted, it is mostly persons with intellectual disabilities. Additionally, few practices targeted the group of hard-of-hearing (HOH), blind and partially sighted persons.

About one half of the selected good practices are developed for post-secondary level of education, three for secondary, two for primary and secondary, one for secondary and post-secondary, and three for higher education (digital tutors in Italy, JAMBA in Bulgaria, Quabis in Germany). Within the examples, also practices developed for primary educational level were found, but these were not analysed further as they were beyond the scope of the project (see Figure 10 in T1.2). The practices occur in formal, non-formal and informal settings. Six examples were found in formal and six in informal settings, while eight occurred in a non-formal setting (see Figure 11 in T1.2).

The types of resources differ between seminars, other practices, multimedia, manuals, learning platforms, job-searching platforms, gamification, empirical publications, curricula, content creation and applications (see Figure 5 in T1.2). Some practices, such as “Anton Lernapp” or “Daugavpils Stropu Basic School-Development Center "Support measures for pupils with disabilities in learning Math” even developed or adjusted learning platforms which respond to the specific needs of learners with special educational needs. Some examples also provide manuals or curricula on how inclusive distance learning can be implemented. Curricula are mainly developed for educators and stakeholders, whereas manuals are directed to educators, learners and in some cases their families and supportive social environment. Some of the good practices provided a loan of digital tools (e.g., computers or tablets) for families who could not afford such devices. The provision of hardware was essential for those practices which identified such devices missing. By the same token, borrowing the technical equipment was necessary in order not to lose touch with school or training.

The good practices aim at accessibility, digital skills, social skills and other skills. The frequency of the aims met in the examples does not differ much, as accessibility is met in 15 examples, digital skills in 17 and social skills in 14 of the good practices. Other skills are not the main focus, but some of the examples also improve this categoryof skills (Other) (see Figure 8 in T1.2). Some of the practices target more than one basic aim. One practice (the technology and inclusion training course) meets one basic aim, nine examples meet two basic aims, eight examples target three basic aims, three examples target four basic aims (see Figure 9 in T1.2). Digital skills and accessibility are useful to enter the digital educational platforms and therefore have to be improved for someone to be part of the online learners’ group. Furthermore, digital competencies are offered in trainings to enable persons with disabilities to enter the regular labour market. On the other hand, some good practices which targeted educators specifically focused on improving their digital skills, as they needed to be trained for enabling online learning. It, therefore, seems necessary that educators must also be trained in the area of digital competencies to be able to incorporate digital offerings into teaching.

Apart from digital skills, some of the training programmes focused on other topics. QuABIS, a project that centres on self-representatives, focused on, for instance, education, ethics, research, sociology, and supervision. Some training programmes also focused on cultural techniques - e.g., the Irish pilot study e-Ideas which focuses on digital, social and other skills like communication.

Another common theme of the good practices is enabling digital participation, not only to enhance digital skills but also to be part of the digital society. In times of lockdown, participation in the digital society has above all reduced the danger of isolation.

Two approaches within the selected good practices can be identified: (i) Learners are treated as participants. Someone else - in most cases the educator - decides what they need and should learn. This is the most common approach to VET training. (ii) Learners are acknowledged as self-representatives who learn within a given framework (curriculum) but decide themselves on specific topics. The second approach is rather seldom but would be an innovative way to ensure participation within the educational process and digital setting.

### Gaps and barriers

Information and communication technology (ICT) as well as assistive technology (AT) were underrepresented throughout the selected good practices. Only a few examples focused on improving skills involving ICT and AT. However, those good practices which focused on such issues were offered repeatedly.

Within the good practices, no uniform setting can be identified, the target group seems to be quite heterogeneous concerning types of learners with disabilities, their educators and their families or supporting social environment.

Interestingly, no policy documents for developing inclusive digital education can be found in our search (see Figure 5 in T1.2). It seems that the response of governments to the special educational needs of students with disabilities were neither instant nor appropriate. Manuals or curricula only rarely involved the learners’ perspective and digital competencies in which they need to be trained to participate in the digital society. One good practice - Quabis - showed patterns of a new approach toward curriculum development for learners with disabilities. This approach involves - similarly to participatory research - persons with disabilities in the design process of educational processes and can be defined as participatory curriculum development.

Educators should know about the digital competencies of learners and their needs, but no existing framework is focusing on digital competencies at the learners’ level.

Gaps especially refer to questions such as: how far are digital devices adapted to the needs of learners with disabilities? Are digital devices available for learners? Is the content accessible to learners' needs? How far are trainers prepared to produce motivating digital training materials in the form of interactive lessons with video and sound and how can the intrinsic motivation of students be increased and their desire to learn not only in a learning environment?

The barriers refer to questions such as: to what extent is distance learning useful for certain target groups? Is there adequate psychological and didactic support in curriculum development for learners with disabilities? Is there adequate psychological and didactic support for the learning process itself? To what extent can learners with disabilities be involved in the design of curricula, how can a learner-centred design be ensured and to what extent are learners with disabilities involved in decisions about how learning takes place? How can a choice between several options /forms of teaching and subjects be provided?

## Contributions of DIG-i-READY

Based on the selection of good practices, the contributions of DIG-i-READY should focus on providing middle- and long-term solutions to develop online education in an inclusive environment. Moreover, the project will raise awareness and clearly point out the necessity of inclusion in distance learning and highlight the opportunities which digital education can entail. However, the digital skills of learners with disabilities, their teachers and social environment have to be improved, as well as the attitude towards the use of technology. The opportunities and possibilities which are enabled by technology should be highlighted and the strategy on how this change could take place should be provided. This is exactly what the second part of the project targets, as the outcome will be a handbook for digital readiness in the vocational educational sector. The handbook will respond to the needs of the vocational educational sector which emerged out of the COVID-19 crisis.

The handbook consists of six chapters. The first chapter will be a digital competencies framework of learners’ level and provide a set of learning outcomes which facilitate the design of learning programmes for digital competences. The second chapter will focus on indicators, which enable not only teachers but rather learners and their environment to identify appropriate tools, methodologies and the suitable infrastructure for inclusive digital educational settings. The third chapter focuses on guidelines for a step-by-step instruction for digitization in VET centres but can be applied also in other educational context as it will target school leaders, teachers, learners and all other relevant stakeholders. The tools for this will be provided by chapter four of the handbook, which is built upon the findings of the DIG-i-READY Good Practice Catalogue. Teachers and learners with and without disabilities should be supported in digital education and the tools can be seen as a starter kit on which the involved persons can build on. Chapter five aims to fill the gap of providing findings on how a systematic change can take place. Recommendations for decision-makers on different levels will support a developmental process towards a “new and inclusive normal” in order to facilitate the Digital Readiness of VET centres and schools. The last chapter of the handbook will focus on a local version of the handbook, which will be an adapted, highly usable version. Overall, the project DIG-i-READY can prepare learners, educators, their families and other stakeholders with knowledge on how solutions can be used to be digitally ready and prepared.

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1. A Guide to Identifying and Documenting Best Practices in Family Planning Programmes. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO. [↑](#footnote-ref-1)
2. Good practices at FAO: Experience capitalization for continuous learning. Food and Agriculture Organization of the United Nations (FAO); 2013. <https://www.fao.org/3/ap784e/ap784e.pdf>. [↑](#footnote-ref-2)
3. Not all of the project partner countries have declared the end of the pandemic, therefore we choose to use the present tense. [↑](#footnote-ref-3)