

IEDA

INCLUSIVE EDUCATION: Ensuring participation
of persons with disabilities in non-formal adult
education

2020-1-HR01-KA204-077868

iedaproject.eu

Module 4: Finding and mobilizing resources for implementation of assistive technology

Curriculum on Education on implementation of assistive
technologies in adult education



Module 4: Finding and mobilizing resources for implementation of assistive technology

How to find and mobilize resources

Finding and mobilizing resources for the implementation of assistive technology on both national and international levels can be a multi-faceted process. Here's a step-by-step guide to help you navigate this process:

- 1. Identify Stakeholders:** Identify key stakeholders involved in assistive technology implementation, including government agencies, non-governmental organizations (NGOs), disability advocacy groups, educational institutions, private sector partners, and international organizations.
- 2. Research Funding Sources:**
 - **Government Grants and Programs:** Investigate government departments, ministries, and agencies that allocate funds for assistive technology initiatives. They may have specific grants or programs that support accessibility and inclusion.
 - **Foundations and Charitable Organizations:** Research foundations and organizations that focus on disability rights, education, and technology. They often provide grants for projects aligned with their mission.
 - **International Aid Organizations:** Organizations like the United Nations, World Bank, and UNICEF may offer funding for inclusive education and assistive technology projects in developing countries.
- 3. Develop a Strong Proposal:** Craft a comprehensive proposal outlining the goals, objectives, target audience, expected outcomes, and budget requirements of the assistive technology initiative. Make sure the proposal clearly demonstrates the potential impact of the project on learners with disabilities.
- 4. Build Partnerships:** Collaborate with relevant stakeholders, including local NGOs, disability organizations, educational institutions, and technology companies. Partnerships can provide additional resources, expertise, and a broader network to support the initiative.

5. Engage Government Agencies:

- Advocate for policy changes that promote the inclusion of assistive technology in education and other sectors.
- Collaborate with government agencies responsible for disability affairs or education to secure their support and funding.

6. Leverage International Organizations: Connect with international organizations focused on disability rights and inclusive education. They often provide guidance, technical assistance, and funding for projects that align with their goals.

7. Attend Conferences and Workshops: Participate in conferences, workshops, and seminars related to assistive technology, disability rights, and education. These events provide opportunities to network, learn from experts, and discover potential funding sources.

8. Online Platforms and Grant Databases: Explore online platforms and databases that list grants and funding opportunities. Websites like GrantWatch, GrantGopher, and Grants.gov can help you identify relevant grants.

9. Seek Corporate Sponsorships: Engage with corporations that have a commitment to social responsibility and inclusivity. Many companies offer grants, donations, or in-kind support for projects that align with their values.

10. Crowdfunding and Online Fundraising: Consider using crowdfunding platforms such as Kickstarter, Indiegogo, or GoFundMe to raise funds from a broad audience interested in supporting your cause.

11. Develop a Marketing Strategy: Create a compelling marketing strategy to raise awareness about the initiative. Use social media, press releases, and partnerships to reach a wider audience and attract potential funders.

12. Demonstrate Impact: Regularly communicate the progress and impact of the initiative to your stakeholders and potential funders. Highlight success stories, outcomes, and the positive change brought about by assistive technology implementation.

13. Persistence and Networking: Building relationships, networking, and being persistent in your efforts to secure resources are key factors in successful mobilization.

Remember that the process may vary based on your region, available resources, and specific project goals. If needed, adapt your approach accordingly.

Sharing good practices in different countries

Austria

On the National Level

In Austria, funding possibilities for the inclusion of PwDs in non-formal education are scarce. The limited transfer of knowledge between non-formal adult education providers and the responsible state agencies is problematic. Although Orient Express is a state acknowledged organization in the field of basic education, exchange is limited.

To adhere to the UN Convention on the Rights of Persons with Disabilities, Austria has passed a National Action Plan Disability 2012-2020 that has run out and a follow-up National Action Plan Disability II 2022-2030. Civil Society and Academia is participating in the evaluation of the plans. PwD's rights organizations have demanded a budgetary "inclusion fund" to implement the measures of the Action Plan, so far without any response. Inclusion seems to be a topic that is not on the main agenda of the current government.

On the national level, there are several possibilities to apply for funding for assistive aids/technology. In all cases, an approximate cost calculation must be handed in in advance. Unlike in other EU countries, such as in Scandinavia, the social insurance provider is not necessarily covering (partially) costs for assistive technology for PwDs. The social insurance's highest amount of partial funding for assistive aids is around €1400. There is no centralized financial aid for PwDs, individual decisions are made on the federal level, so the situation can differ greatly from state to state. This makes it very difficult to find out about funding entitlement for PwDs. The process of application for financial support often means long waiting periods and comes with many bureaucratic hurdles. In certain cases, the federal and/or state welfare offices can provide financial assistance. The programs thus regarding mostly aim at productivity increase, work place adjustments, and employability. Also, mostly partial subsidies are possible, always depending on the PwDs salary/income. The Ministry for Social Affairs, Health, Care and Consumer Protection offers a support fund for PwDs in dire social situations due to their disability, specifically regarding assistive measures (e. g. stair lift, communication aid, mobility aid). Otherwise, financial relief measures are possible for PwDs (certain tax relief). Most of their funds are allocated for the adjustment of work space. For private rehabilitation or adjustments, funds such as the Social Fund Vienna can be contacted (only for Viennese inhabitants).

A number of private funds aim at supporting projects or individuals with the financing of assistive technologies. The welfare organization Diakonie and the energy

provider VERBUND specifically aim to support ATs with the VERBUND Empowerment Fund and cooperate with the Austrian Institute for Technology and the advice network LIFEtool. There is also the option of applying for immediate support for families and children. The charity Lebenshilfe Österreich notes an annual price (€5000) for achievements in inclusion work to publicize good practices. 2022, the overall topic was education and culture. Several initiatives facilitating inclusion not only as goal but as a mind-set have been awarded.

On the International Level

Public institutions could apply for funding through the European Social Fund (ESF) in order to increase employability of people with vulnerabilities (the elderly, youth, PwDs, women). Austria was focussing on training, education and social inclusion with their allocation of the ESF monies. However, the ESF+ now is focussing on recovery plan regarding COVID and does not mention PwDs as a target group specifically anymore.

In line with the EU recovery and recovery plan, Austria's national plan includes 32 investments and 27 reforms (the allocation of around €3.46 billion) for digital transition until August 2026. Including investment in future technologies and supporting "upskilling" (Next Generation EU, Recovery and Resilience Facility).

Open-Source/ Low Cost Solutions

Several applications for the assistance of PwDs are available for no or low costs. The free capito App is an App that makes information more accessible with automatic translations into easy language. Capito also provides low-cost workshops and trainings for accessible communication (including production of easy language texts, accessible graphics, and accessible event planning). The iSignIt App is a sign language interpretation aid for health services. The AsTeRICS foundation is working on cost-free digital and analog assistive technologies in cooperation with the FH Technikum Vienna (University of Applied Science). Here, research and student projects have been able to develop individual solutions for PwDs in need of assistance when needed tools have not been developed yet. The browser based software AsTeRIX Grid supports communication for several needs and is especially suitable for first learners, functions with all operating systems and on all smart phones (symbol based, different languages, and different impulses for control). The Non-Profit foundation has also developed the Flip Mouse, a minimal touch control joystick (around €30). These are only examples, there is a long list of available assistive technology applications specifically for school children with disabilities.

Good Practices in Implementation

In Austria, the field of non-formal adult education is quite vast and diverse (it ranges from ceramics classes to state financed language and basic education). The classes Orient Express is providing to women are all official basic education classes (all ESF-funded). Official basic education providers are obliged to make their learning facilities as accessible (physically) as possible. In terms of project management, the auditing agencies expect accountability for how crosscutting themes, such as disability, are addressed.

In line with an intersectional understanding of discrimination, disability mainstreaming is an integral part of our educational work. According to prevalent definitions of disability, learning difficulties are also limitations and hurdles people face in everyday life, in the educational system and the labour market. Many participants of our basic education classes have been affected by decisive educational disadvantages, experiences of violence, trauma (often through experiences of war or flight) or individual cognitive factors impeding concentration and learning. Thus, in the work with our target group, accessibility addresses many levels: From the accessibility of text material suitable for reading beginners (with specific font formats) to the employment of native speakers as colleagues/trainers as well as respecting the individual pace of learning of every student. Accessibility also includes a trauma-sensitive approach to our educational work, e.g. by creating a bright and friendly learning space. Furthermore, our facilities are accessible with a wheelchair.

It is difficult to generalize information about the entire sector of non-formal adult education as it makes a big difference whether classes are state funded or not. For our main focus, literacy classes, best practices ought to be created. Due to the overlapping of lessons in a second language as well as limited digital proficiency, the application of assistive technologies prove difficult in our classes.

National Legislation

There is no legal entitlement on which PwDs can rely on funding for ATs. The Austrian federalism in this case, leads to a higher degree of inequality across the country regarding this. Austria has ratified the UN Convention on the Rights of Persons with Disabilities in 2008. According to the legislation, depending on the funding institution, every educational institution has to be (physically) accessible for all. However, it is not a given that non-formal adult education institutions can receive state funding to be adjusted accessibly.

The European Accessibility Act has to be ratified until June 2025 and drafts about related national legislation submitted to the European Commission until June 28th, 2022. As one of only four EU members, Austria has made the deadline (besides Belgium, Estonia, and Finland).

The Federal Disability Equality Act had been in force since 2006, to prevent discrimination and ensure accessibility for PwDs in mostly governmental administration, economy and labour market. The Council for People with disabilities regards the Act as best practice in the EU. Sign language has been incorporated into the Constitution as official language. The Ministry for Social Affairs offers a guideline to enable the work of the Network for Professional assistance (NEBA). This work supports and implements job coaching, training assistance and employment support for PwDs. In Vienna, a law for equal opportunity ensures a funding of maximum €10.000 for PwDs from the Social Fund Vienna.

Contacts for Support/ Advice

- Association for the Blind (Blinden- und Sehbehindertenverband Österreich): www.blindenverband.at/en
- Austrian Disability Council: www.behindertenrat.at/about-us/
- Early Communication Support Upper Austria (Diakonie): www.diakonie.at/unsere-angebote-und-einrichtungen/fruehe-kommunikations-foerderung-oberoesterreich
- Integration Wien: www.integrationwien.at/de/
- LIFEtool advice network (independently operating advice offices across the country, focussing on motoric and cognitive communication aid): www.lifetool.at/startseite/
- NEBA Network for Professional Assistance: www.neba.at/
- Service Association for Austrian Sign Language: www.oegsbarrierefrei.at/#:~:text=Seit%20seiner%20Gr%C3%BCndung%20im%20Jahr,und%20h%C3%B6renden%20Menschen%20in%20%C3%96sterreich.
- Social Fund Vienna (Fond Soziales Wien): www.fsw.at/
- VOX (Counseling Center for Technical Assistance for the deaf and hard of hearing): www.vox.or.at/beratungscenter-vox-technische-assistenz

Useful Links

- AsTeRIX Foundation: www.asterics-foundation.org/1270-2/
- Capito App: www.capito.eu/en/
- ISignIt App: signit.weebly.com/english.html
- VERBUND Empowerment Fund: www.verbund.com/en-at/about-verbund/responsibility/social-issues/empowerment-funds

Greece

Introduction

Judy Heumann, a disability rights activist, said that "Technology makes things simple and easy for most people, but for people with disabilities it makes things possible." The constant pace of modernisation and upgrading the quality of life in societies requires the adoption of new technologies. In this way, a framework for social inclusion and acceptance of people with disabilities in different aspects of life is created.

Until a few years ago, Greece was not designed in a way that was promising to people with disabilities and only few provisions had been implemented to accommodate them. The Paralympic Games that took place in Athens in 2004 and then the Special Olympics in 2011 gave the impetus for the improvement of services and accessibility. Greece may not yet be an exemplary model of social and educational inclusion of people with disabilities, but with the necessary planning and time as well as supportive programs such as IEDA can provide guidelines for success.

Assistive Technology in Greece

Assistive technology and websites

To begin with, a plethora of websites such as the Greek government site (www.gov.gr) include a supporting assistive technology tool for people with disabilities. This tool allows them to navigate the site with ease and to compromise it to their needs. For example, by clicking to the icon of the tool the user can chose the feature "readout" or they can ,even, enhance the luminosity or the size of the letters. Developers design the menus of websites in such a way to assure accessibility.

Initiatives of assistive technology by different organizations

There are several organizations that implement a variety of actions for people with special needs by applying assistive technology. ELEPAP- Rehabilitation for The Disabled is one of the most prominent organizations which aims at providing equal opportunities to children. Moreover, ELEPAP's program on assistive technology targets children who are unable to communicate verbally or who have difficulty in verbal communication or in learning and playing, to overcome the obstacles and to evolve. The program is conducted individually, in groups or even jointly by various therapists.

The following methods are used:

- Alternative access to a computer environment (computer, iPad, tablet) e.g. using switches, alternative keyboards, mouse, touch screen, eye-tracking technology
- Alternative and augmentative communication for example using speech-generating devices, special keyboard.
- Alternative control of everyday devices

The goal of this program is to highlight the active role of children in everyday activities and it also includes specially trained occupational therapists who keep up to date with the new technological achievements and work in cooperation with speech therapists and special education teachers.

SciFy (Science For You) is a Greek Ngo which is active in the field of innovation and technologies. This non profit organization aims to bring social changes by creating and offering free technological tools, sharing their knowledge and also developing supportive communities by collaborating with research centres, universities, NGOs, companies, end-users. Undoubtedly, assistive technologies are not accessible to everyone because of the high price at which they are marketed. However, there are organisations such as SciFy who create and offer a plethora of assistive technologies for free in order to facilitate the everyday life of people with disabilities and their integration into society. The actions of SciFy have a pioneering nature especially in the field of online game applications for the visually impaired. In their website there is a dedicated page with all of their activities regarding assistive technologies and people with disabilities.

After thorough research, one can find private initiatives of individuals and organisations in the field of assistive technology. Such an example in Greece is the Lilian Voudouri Institute which created the "Lillian Voudouri Assistive Technology Laboratory" and that has gained considerable experience in investigating the impact of disability on the life of children and adults. It has offered alternative treatment, education and skill development to more than 300 people.

[Assistive technology in Greek libraries](#)

Correspondingly, Greek libraries have been taking the initiative to create an inclusive environment for people with disabilities by getting involved in relevant projects. For example, the Macedonia University Library, from 2000, in the context of ACCELERATE project has installed a state-of-the-art workstation for people with visual impairments including personal computer with special software and hardware (2 PCs Pentium 4 with CD-ROM drive and connection to the internet, JAWS (for Windows), Apollo II, speech synthesis external unit, Braille display, software of efficient

enlargement of the Supernova 6 monitor with the screen reader Hal LHT 26,3 392 embodied, Braille software for the conversion of the text to Braille format, the voice composer Orpheus, book scanner and OCR software, Braille printer, CCTV).

The National and Kapodistrian Athens University libraries are equipped with workstations and specialized aids for supporting people with disabilities. Those workstations are designed to provide access to blind students, students with low vision and students with upper limb disabilities not only to the resources of the university libraries but also to the content of the Internet and common office software application. In order to ensure that students with disabilities feel more included, the Kapodistrian University of Athens provides through the Department of e-Accessibility academic textbooks in a variety of accessible digital formats.

Centre for Universal Access & Assistive Technologies

Last but not least, Centre for Universal Access & Assistive Technologies (CUA&AT) is a Center which aims "to support the equal participation and socio-economic integration of people with disabilities and elderly people in the Information Society, by designing products and services accessible and usable by the widest possible end-user population", as it states in its website. The Centre is developing technologies and applications for a variety of domains, such as access to the World Wide Web, text processing, electronic books, interpersonal communications, special education and vocational training, Telecommunications, Health Telematics and wearable computing.

European framework

In the European population aged 16 to 64 years, almost 15 % of women and 14 % of men report either a moderate or severe disability. These percentages show that the European Union's action to create an environment of equal opportunities for all is essential to achieve the social inclusion of people with disabilities.

On 27 of June 2019, the European Accessibility Act was introduced and all Member States have a duration of 3 years to transpose it into their national law by introducing new or already existing national legislation to comply with the Act. As it stated in the European Commission, "the EAA is a step forward in reducing barriers for people with disabilities within the EU: better accessibility of products and services that citizens use every day."

The European Accessibility Act will cover the following products and services:

- computers and operating systems
- ATMs, ticketing and check-in machines
- telephones and smartphones

- TV equipment related to digital television services
- telephony services and related equipment
- audiovisual media services, such as television broadcast and related consumer equipment
- services related to air, bus, rail and waterborne passenger transport
- banking services
- e-books
- e-commerce

Conclusion

Assistive technology can be implemented in every aspect of the everyday life in order to equalize opportunities for people with disabilities. Projects that are aiming to combat the marginalization of people with disabilities are needed so they can feel more included.

Despite the sectors we mentioned above where assistive technology has been implemented, its market in Greece is quite insufficient. There are many reasons to why this problem exists, not only because it is being introduced at a slow pace in the society but also some tools or equipment come at a high price and/ or do not support Greek language. In order to fit the needs of Greek education, software needs to be translated into the Greek language and since this is not happening there is not a high consumer demand.

In conclusion, in order to achieve high levels of social and educational inclusion it is important to constantly upgrading these sectors by implementing assistive technologies.

References

- ELEPAP. Assistive Technology: elepap.gr/en/our-programs/therapeutic-programs/assistive-technology/
- ITE. Centre for Universal Access & Assistive Technologies (CUA&AT).
- www.ics.forth.gr/hci/centre-universal-access-assistive-technologies-cuaat?lang=el
- SCIFY, Assistive Technologies www.scify.gr/site/el/impact-areas/assistive-technologies
- ec.europa.eu/eurostat/documents/3930297/5934086/KS-AW-01-001-EN.PDF/ca44b44f-6fdb-47da-9d7d-2967071bcb9f?version=1.0
- Mundo Madou, Avenue des Arts 7-8, 1210 Brussels, Belgium September 2020, European Accessibility Act Toolkit for transposition www.edf-feph.org/content/uploads/2020/12/final_edf_transposition_toolkit_accessibility_act.pdf

- EUROPEAN ACCESSIBILITY ACT IMPROVING THE ACCESSIBILITY OF PRODUCTS AND SERVICES IN THE SINGLE MARKET
- "Lillian Voudouri Assistive Technology Laboratory" lilianvoudouri.gr/ergastiri-ypostiriktikis-technologias-idryma-koinonikis-ergasias/
- National and Kapodistrian University of Athens. e-Accessibility access.uoa.gr/en/services-2/e-accessibility/

Romania

Funding possibilities on the national level

In Romania, the persons with disabilities can obtain subventions from the National Health Insurance Fund (NHIH) to support them in the implementation of assistive technology. However, very few assistive devices are subsidized by NHIH and this makes the assistive technology prohibitive for most people with disabilities from Romania.

PWDs can also obtain vouchers from EU-funded projects (Human Capital Operational Program, the priority "Jobs for all"). Some projects include activities such as the provision of assistive technologies and devices and access technologies to PWDs receiving information and counselling services, mediation and training. The vouchers can be used exclusively for the acquisition of assistive technology.

However, the employees with disabilities have limited access to subsidized assistive technology and devices and a considerable number of persons with disabilities do not use the assistive devices or technologies they need, often because they cannot afford them. There are two main reasons for this situation:

- not all categories of necessary assistive devices and technologies are included in the basic package of medical devices intended for the recovery of organic or functional deficiencies on an outpatient basis, regulated by Government Decision and detailed by a Joint Order of the Minister for Health and the President of the National Health Insurance House (NHIH);
- the number of manufacturers and distributors of assistive devices and technologies is very low, because there is no national policy that ensures access of persons with disabilities to all the categories of assistive products and technologies, both medical and non-medical.

Good practices in implementation

The project "Facilitating the integration of people with disabilities into the labor market" allow persons with disabilities looking for a job to obtain a voucher of approximatively 5000 euros which can be used for buying assistive devices. The

project is implemented by the National Authority for the Rights of Persons with Disabilities, Children and Adoptions, in partnership with the National Agency for Employment during the period 23.05.2019-23.05.2022. It is required that the devices are included in the recommendations of the of the specialist doctor regarding the type of assistive technologies and devices and access technologies.

The guide "Ghid de utilizare a instrumentelor digitale pentru activitatea didactică on-line" (Guide to using digital tools for online teaching) available on https://www.ccdbn.ro/anunturi/ghid_instrumente_dig.pdf includes the chapter "Digital assistive technologies for students with special educational requirements" aimed to help teachers create inclusive digital educational resources.

National legislation

The Romanian legislation in the field of protection of the rights of persons with disabilities are fundamented on the following major instruments:

- Universal Declaration of Human Rights
- European Convention on Human Rights
- EU Charter of Fundamental Rights
- UN Convention on the Rights of Persons with Disabilities
- Treaty on European Union
- Treaty on the Functioning of the European Union

There is a long list of normative acts that regulate the scope of activity in the field of disability. Among these, the National Strategy for the Rights of Persons with Disabilities " An equitable Romania" 2022-2027 (<http://anpd.gov.ro/strategia2022-2027/download/The%20National%20Strategy%20for%20the%20Rights%20of%20Persons%20with%20Disabilities%20-%20An%20equitable%20Romania,%202022-2027.pdf>) was approved and published on April 2022. The strategy has among its targets an increase in the numbers of PWD to access assistive technologies through non-reimbursable external funds (at least 40 thousand PWDs, by 2027) as well as to increase the list of assistive devices, settled through Single National Health Insurance Fund.

The Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services was included in the Romanian legislation in 2022.

Contact to subject(s) in Romania which can provide support/ advice/ etc.

1. National Authority for the Protection of the Rights of Persons with Disabilities, <http://anpd.gov.ro/> . INFOLINE Assistive technology: +40 751.015.063
2. Romania Association "H Foundation" for Distance Learning of People with Disabilities is a non-governmental, non for profit, apolitical organization with a mission to assure equal chances of education and instruction for disadvantaged (physically, ethnically, socially or geographically) children and adults and for specialists which working with these. Address: Strada Poenaru Bordea 6, SECTOR 4, București, 040093, phone +40 21 337 1019, <http://www.fundatieh.ro/>

Federatia pentru Accesibilizarea Romaniei (FAR) - it's an institution which has many organisations, whose actions are meant to promote the rights of the disabled people. FAR focuses on accessibility achievement on many plans – physical, social, economic, in behalf of the disabled and the ones who suffer from other types of disadvantages/ vulnerabilities + creating equal opportunities for disadvantaged categories of people. <https://far.ngo/>

Slovakia

National aspect

Funding possibilities on the national level

(financing by government, funds, sponsorship opportunities, charities...)

At the Slovak National Level, there are a few opportunities to get support in social inclusion, work and study life, and access to assistive technologies.

The first one is the financing from the government.

Every disabled person could get the funding from the [Slovak Social Ministry](#) up to 8630 euros. The sum depends on the needs and real cost of the assistive technology. However, a person has to meet some criteria in order to get the funding.

The other one is the non-profit organization [Slovak Blind and Partially Sighted Union](#)

They work together with sponsors - mostly big companies and support visually disabled people who need funding.

The Slovak Blind and Partially Sighted Union (UNSS) is a civic association whose mission is the advocacy of rights and activation of people with visual impairment.

The most important activities we could mention – are the provision of social services (social counseling and social rehabilitation), involvement within the legislation process (especially in the field of social legislation), raising awareness about visual impairment, and providing consultations regarding environmental and other barriers, accessibility of information and rights advocacy. Furthermore, social rehabilitation covers training in the area of mobility and orientation, use of the white cane, daily living skills, reading and writing Braille, and the use of optical aids or assistive technology (E.G. PC with a screen reader or magnification software).

Funding possibilities on the international level

[International Council for Education and Rehabilitation of People with Visual Impairment \(ICEVI\).](#)

The international organization for guidance and support.

<http://www.inclusion-europe.eu/financial-assistance-to-people-with-disabilities-compared-across-the-world/>

Just a small article with comparison of the national government in different countries to the people with disabilities.

Open-source/ low-cost solutions

There is no ultra-low-cost refreshable Braille display on the market (a hardware device that turns the content showed on a screen into raised and lowered braille pins). Traditional devices have an average cost of \$4000. However, the emergence of the Orbit Reader (<http://www.orbitresearch.com/product/orbit-reader-20/>) at \$500 has disrupted this market and provided a cheaper and alternative option.

A screen reader is a form of text-to-speech assistive technology (AT) that renders text and image content as speech or braille output. Screen readers are essential to people who are blind, and are useful to people who are visually impaired, illiterate, or have a learning disability. The world's most widely used screen reader for computers is NVDA (Non-Visual Desktop Access) (<https://www.nvaccess.org/>). NVDA is free and open source and supports multiple languages, with support and training widely available. Another common text-to-speech option to access documents either instead of or alongside Braille is to turn a text into an audio file. Apps like RoboBraille, for example, will export files as audio files such as Mp3.

On page [Assistive technology guide: Low cost software](#) for learning you can find a big list of AT with low cost or free for blind and deaf people.

Good practices in implementation

[The Slovak Library for blind people](#) - the library provides comprehensive library and information services to registered users by making a specialized library collection available in Braille, sound recording, relief graphics and electronic form.

Rental services are provided to the user free of charge.

The user can choose from the library's collection menu - more than 7,200 titles of audio books and almost 3,600 titles of braille books.

National legislation

The European Union and its Member States are parties to the [UN Convention on the Rights of Persons with Disabilities](#). Its main message is that people with disabilities are entitled to the full spectrum of human rights and fundamental freedoms without discrimination. All the Slovak legislation is built on these princpls and the document itself.

According to the Constitution of the Slovak Republic – People are free and equal in dignity and rights. Further the Act No. 365/2004 Coll. on Equal treatment in Certain Areas and on Protection against Discrimination, and amending and supplementing

certain acts, as amended (Anti-Discrimination Act) creates a common legal basis for maintaining the principle of equal treatment throughout the legal system of the Slovak Republic.

The main document on a national level on the topic is the National Program for the Development of Living Conditions of Persons with Disabilities for the Years 2021 - 2030 https://www.employment.gov.sk/files/sk/rodina-socialna-pomoc/tazke-zdravotne-postihnutie/kontaktne-miesto-prava-osob-so-zdravotnym-postihnutim/dokumenty-3/nprzpozp-2021_2030.docx

On page [Hlavné kontaktné miesto pre problematiku vykonávania Dohovoru OSN o právach osôb so zdravotným postihnutím](#) you could find the list of relevant laws.

Contact to subject(s) in your countries which can provide support/ advice/ etc.

Central Office of Labour, Social Affairs and Family (*Ústredie práce, sociálnych vecí a rodiny*)

[Department of Compensation Cash Benefits of Severe Disability and Assessment Activities;](#)

Špitálska 8, 812 67, Bratislava

Labour, Social Affairs and Family Office (*Úrad práce, sociálnych vecí a rodiny*):

[Unit of Citizen's Services](#)

[Center of Legal Help](#)



Examples of assistive technologies – both open source/ low-cost solutions as well as professional tools offered by third-party companies

This chapter offers some examples of assistive technology solutions that can be utilized in non-formal adult education for people with disabilities:

1. Screen Readers and Text-to-Speech Software:

- **NVDA (NonVisual Desktop Access):** An open-source screen reader for Windows that provides access to computers for blind and visually impaired users.
- **eSpeak:** A compact open-source speech synthesizer that can convert text into speech, benefiting individuals with reading difficulties or visual impairments.
- **Balabolka:** Balabolka is a free text-to-speech application that can convert text into speech and save it as audio files.

2. Communication Aids:

- **AAC Text Communicator:** Apps like **OpenAAC** allow individuals with communication difficulties to communicate using a device that displays text or symbols and converts them into speech.

3. Accessible Learning Platforms:

- **Moodle:** An open-source learning management system that supports accessibility features and can be customized to meet the needs of learners with disabilities.
- **Open edX:** Another open-source online learning platform that can be made accessible through customization.

4. Alternative Input Devices:

- **Switch Control Software:** Programs like **Xpadder** or **AutoHotkey** can help configure alternative input devices, such as switches or joysticks, for individuals with motor impairments.

5. Magnification and Screen Enhancement:

- **Windows Magnifier** - a screen magnification tool built into the Windows operating system.

6. Accessible Document Formats:

- Creating content in accessible formats like **EPUB** for eBooks or **HTML** for web content ensures that learners with disabilities can access the material using their preferred assistive technologies.

7. Subtitle and Caption Tools:

- **Amara**: An open-source platform for creating and editing subtitles, captions, and translations for videos. This benefits learners who are deaf or hard of hearing.

8. Braille Conversion Software:

- **Liblouis**: An open-source braille translator and back-translator that allows digital content to be converted into braille and vice versa.

9. Augmented and Alternative Communication (AAC) Apps:

- Apps like **Proloquo2Go** or **CoughDrop** provide customizable communication boards for individuals with speech impairments.

10. 3D Printing for Tactile Learning:

- 3D-printed tactile maps, diagrams, or objects can enhance learning experiences for individuals with visual impairments.

11. Collaborative Tools with Accessibility Features:

- Platforms like **Google Workspace** (formerly G Suite) and **Microsoft Office 365** have built-in accessibility features that can benefit learners with disabilities.

12. Accessible Coding Platforms:

- **Scratch**: A visual programming language that can be used by learners with various disabilities to learn coding concepts in an interactive and accessible way.

Remember that the suitability of these solutions depends on the specific needs of the learners and the resources available. Regular training and awareness about using these technologies will also be essential for educators and support staff.