



**ADVANCED LEVEL: Roadmap for
professional development in ICT
accessibility**

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1. ADVANCED LEVEL: Roadmap for professional development in ICT accessibility

Trainer tip: Before starting this module, the trainer can ask each participant to introduce and provide a description of themselves. The trainer should begin the presentations, to set the example for the rest of the group. E.g., “My name is Ursula von der Leyen, I have blonde hair and I am wearing a trouser suit in my office in Brussels, Belgium”.

1.1 Roadmap for professional development

For any organisation – or individual - to succeed with their accessibility efforts, you need a plan. It is rarely a good idea to try to fix everything in one go, as it will probably be a bit overwhelming. A realistic goal could be to be better than yesterday and to use a stepwise approach.

Here are some ideas to support your journey towards better accessibility:

1.1.1 Identify your starting point

To reach your goal, you don't only need a goal, you also need a starting point. So, if accessibility is new to you, you may want to begin with figuring out what your current status is. Does anyone know anything about accessibility? Has anyone done an audit or test? Is the management aware of the regulations? Do you have any internal processes or routines in place? Who is responsible?

1.1.2 Find a friend

In too many organisations, the responsibility for accessibility is placed in the hands of just one person. That is a heavy burden, and it is very difficult to know and understand all aspects of the topic. Also, if the responsible individual would quit, the risk is that much of the knowledge will disappear. Therefore, it is important to find a friend within your organisation and share your knowledge. After a while, you could create a little group

1.1.3 Set your goal

Is the aim of your organisation to comply with the minimum requirements of the accessibility regulations or be the world's most inclusive workplace? Or maybe something in between? That is important to agree on, and make sure the top management is signing off to the goal as well! Any accessibility work needs a budget and commitment from the leadership.

1.1.4 Build internal capacity

External experts are important, but make sure they train your organisation to become more and more independent. The internal capacity is key for the accessibility work to become sustainable.

1.1.5 Include people with disabilities

In your organisation, there are of course people with different abilities. Leveraging on their knowledge and experience will be inspiring for all colleagues. Make sure to walk the talk and include people with their own experiences of (in)accessibility in the process of any accessibility initiative.

Trainer tip: The trainer can ask participants to think of a project or organisation where they would like to improve accessibility. Following the steps mentioned above, they can suggest actions to be carried out to improve the accessibility. These plans do not have to be implemented but are a good way of encouraging participants to think about a strategy and an action plan to apply accessibility measures in a more practical way.

1.2 Getting to know your potential audience

As approximately 15 % of the population has some kind of disability, it is highly probable that the group of people that will undergo the ENTELIS+ training will also contain people with disabilities. A disability may be visible, but the majority of disabilities are not. Therefore, making sure your training methods and tools are accessible is a good starting point. Some of your students will know exactly what they need in terms of adaptations or support, others may not know what possibilities there are, or prefer not to reveal their needs.

During history, different models of how we perceive people with disabilities have been more or less prominent:

- The medical model looks at disability as a sign of an illness
- The charity model views disabled persons as victims deserving pity
- The social model sees disabilities as a socially created problem

In the social model, disability is not an attribute of an individual, but rather a complex collection of conditions, many of which are created by the social environment. This means that society at large has a responsibility to make the environmental modifications necessary for the full participation of persons with disabilities in all areas of social life. From this perspective, equal access for someone with an impairment/disability is a human rights issue of major concern. Society has the obligation to remove barriers by making the physical environment usable, information accessible, laws and policies just and implemented, and attitudes about disability based on acceptance of diversity.

For you as a trainer, this means that persons with and without disabilities have equal rights to participate in an activity together. The educational system has a legal, as well as a moral responsibility to remove barriers, to make the training accessible and to provide reasonable accommodations so that persons with disabilities can fully participate and learn along with their nondisabled peers.

1.3 Universal design

Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability.¹ A common example of universal design can be seen in the dips in the pavement. These are essential for people in wheelchairs but are also used by all, for example, parents with push chairs. Universal design is also being applied to different types of industries such as the design of technology, services and learning.

¹ <http://universaldesign.ie/What-is-Universal-Design/>

1.4 Universal design for learning (UDL)

Trainer tip: The trainer can start off with this or any other short video providing an overview on universal design for learning (UDL).

["UDL at a glance", CAST](#)

The goal of UDL is to use a variety of teaching methods to remove any barriers to learning and give all students equal opportunities to succeed. It's about building in flexibility that can be adjusted for every student's strengths and needs. This approach to teaching doesn't specifically target students who learn and think differently. But it can be especially helpful for people with disabilities, including those who have not been formally diagnosed.

UDL is a framework for how to develop lesson plans and assessments that is based on three main principles:

- **Engagement:** UDL encourages teachers to look for multiple ways to motivate students. Letting students make choices and giving them assignments that feel relevant to their lives are some examples of how teachers can sustain students' interest. Other common strategies include making skill building feel like a game and creating opportunities for students to get up and move around the classroom.
- **Representation:** UDL recommends offering information in more than one format. For example, textbooks are primarily visual. But providing text, audio, video and hands-on learning gives all kids a chance to access the material in whichever way is best suited to their learning strengths
- **Action and expression:** UDL suggests giving kids more than one way to interact with the material and to show what they've learned. For example, students might get to choose between taking a pencil-and-paper test, giving an oral presentation or doing a group project.

Additional reading:

[UDL guidelines](#)

1.5 Additional free tools and resources

Trainer tip: The trainer can highlight the vast number of materials that are available on accessibility. The trainer can try to pinpoint the specific learning needs of the different students and align them with the different materials available. For example, do they require more general knowledge or would they like to be more specific such as a focus on assistive technologies for example.

There are many ways to learn about accessibility and quite some resources are freely available online. There are also plenty of training courses at different levels that costs money, often delivered by accessibility expert companies.

Disclaimer: we trust the organisations behind these courses, but we take no responsibility in the training content they provide. Their inclusion in this training module does not guarantee that the training information is up to date or apt for all target audiences. Furthermore, we take no responsibility for the opinions or views provided in these training materials.

1.5.1 International Association of Accessibility Professionals (IAAP)

The International Association of Accessibility Professionals (IAAP) is a not-for-profit membership-based organisation for individuals and organisations that are focused on accessibility or are in the process of building their accessibility skills and strategies. The objective is to help accessibility professionals develop and advance their careers and to support organisations integrate accessibility into their services, products and infrastructure.

The mission of the International Association of Accessibility Professionals (IAAP), a division of the Global Initiative for Inclusive ICT (G3ict), is to define, promote, improve, and diversify the accessibility profession globally through certification, education, and networking in order to enable the creation of accessible products, content, services, and environments.

IAAP Certifications are indicators of your commitment to the accessibility profession, industry, and community. The IAAP offers the following certifications, each with their own body of knowledge:

- **Certified Professional in Accessibility Core Competencies (CPACC):** the IAAP Certified Professional in Accessibility Core Competencies (CPACC) credential is IAAP's foundation certification, representing broad, cross-disciplinary conceptual knowledge about 1) disabilities, 2) accessibility and universal design, and 3) accessibility-related standards, laws, and management strategies.
- **Web Accessibility Specialist (WAS):** With the adoption of WCAG 2.1 in many countries, there is an increased demand for web developers, designers and other professionals with knowledge of web accessibility standards and guidelines. With this growth comes the need for an objectively verified level of expertise. The Web Accessibility Specialist exam will provide individuals and employers with the ability to assess web accessibility competence.

Additional reading:

[CPACC Body of Knowledge](#)

[WAS Body of Knowledge](#)

[Educational Training Database](#)

1.5.2 International Telecommunication Union (ITU)

The ITU Academy is the main online gateway to ITU's capacity development activities. It brings together under one umbrella a wide range of training activities and knowledge resources in the field of information and communication technologies (ICTs) and digital development.

ITU offers a free of charge self-paced course designed to be accessible for everyone including by persons with disabilities. To access the course, you should

previously register in ITU Academy. The course, estimated to about 8h, provides a holistic knowledge on the topic of ICT accessibility through three modules:

- Enabling communication for all through ICT accessibility
- ICT accessibility policy regulations and. Standards
- Achieving ICT accessibility through public procurement

Additional reading:

[ICT Accessibility: The key to inclusive communication](#)

1.5.3 W3C

The World Wide Web Consortium (W3C) is an international community where Member organisations, a full-time staff, and the public work together to develop Web standards. Led by Web inventor and Director Tim Berners-Lee and CEO Jeffrey Jaffe, W3C's mission is to lead the Web to its full potential.

They offer a course on an introduction to web accessibility. Accessibility is essential for individuals and organisations that want to create high-quality websites and apps – and not exclude people from using their products and services. This course gives you the foundation in accessibility you need to excel in digital professions. It is designed for: developers, designers, content authors, project managers, people with disabilities and others. In this course, you will learn about the international standards for web accessibility from the W3C – including Web Content Accessibility Guidelines (WCAG) and WAI-ARIA for Accessible Rich Internet Applications – and first steps in applying them.

Additional reading:

[An Introduction to Web Accessibility](#)

1.5.4 MOOCAP (an EU-funded project)

MOOCAP is a European project whose name stands for “MOOCs for Accessibility Partnership”. The goal of the project was to provide education on accessible design in ICT.

It created 11 free online courses, four of which were MOOCs. The goal of these courses was to teach users how to create accessible media and content, such as web sites, mobile apps and office documents. In addition, users could learn about how to design products and systems for daily living in order to make them accessible to, understandable by and usable for a wide range of people. The project provided both an introductory course and a few specialised courses. The courses available include:

- Design Innovation: Inclusive Approaches
- Accessible Mobile Apps
- Accessible Web
- User-Centred Design for Accessibility
- User Interface Personalisation
- Assistive Technologies
- Inclusive Learning and Teaching Environments
- Intellectual Disability and Inclusion
- Accessible Documents
- Accessible Gamification

Additional reading:

[Information about the MOOCAP courses](#)

1.5.6 Udacity and Google

Udacity is where lifelong learners come to learn the skills they need, to land the jobs they want, to build the lives they deserve. Their mission is to train the world's workforce in the careers of the future. They partner with leading technology companies such as google to learn how technology is transforming industries and teach the critical tech skills that companies are looking for in their workforce. With their powerful and flexible digital education platform, even the busiest learners can prepare themselves to take on the most in-demand tech roles.

Udacity and google offer a free course on Web Accessibility. In this course you'll get hands-on experience making web applications accessible. You'll understand when and why users need accessibility. Then you'll dive into the "how": making a page work properly with screen readers, and managing input focus (e.g., the highlight you see when tabbing through a form.) You'll understand what "semantics" and "semantic markup" mean for web pages and add ARIA markup to enable navigating the interface with a range of assistive devices. Finally, you'll learn styling techniques that help users with partial vision navigate your pages easily and reliably.

Additional reading:

[Web Accessibility](#)

1.5.7 Georgia Tech

The Georgia Institute of Technology, also known as Georgia Tech, is one of the USA's leading research universities, providing a focused, technologically based education to more than 25,000 undergraduate and graduate students. Georgia Tech has many nationally recognized programmes, all top-ranked by peers and publications alike, and is ranked in the nation's top 10 public universities by U.S. News and World Report. It offers degrees through the Colleges of Architecture, Computing, Engineering, Sciences, the Scheller College of Business, and the Ivan Allen College of Liberal Arts.

They offer a course on Information and Communication Technology (ICT) Accessibility. In this introductory course, learn how to measure an organisation's ICT accessibility and assess the importance of maintaining an inclusive workplace for both employees and customers with disabilities. This six-week course consists of modules detailing some of the primary ICT accessibility obstacles facing organisations today. Each module is taught by a subject matter expert – through content-rich videos, activities, and discussion forums.

Whether you work in the corporate, government or non-profit sector, this course will enable you to identify ICT accessibility issues, analyse specific needs, and evaluate possible solutions. As the world becomes more technology driven, organisations of all sizes and sectors touch ICT accessibility, whether through website design, document creation, or multimedia utilisation.

Additional reading:

[Information and Communication Technology \(ICT\) Accessibility](#)

1.5.8 IWAC (an EU-funded project)

In a new project funded by Erasmus +, Mid Sweden University, Stuttgart Media University and the University of Genoa will join together with Funka and the IAAP to address the lack of teaching on the subject. The project will develop and test a starter-kit for courses in web accessibility. The kit will include both online courses and case study material, as well as guidance and recommendations for how the universities can develop and adapt their own courses. The aim is to provide universities around the EU with practical tips and tools for introducing web accessibility into the curricula of all relevant educational programmes. In addition, the project will encourage the exchange of experiences and lessons learned.

All educational material prepared in the project will be published on the web and will be open for anyone to access. During the project, workshops will be held in Sweden, Germany and Italy. IAAP will also hold a conference in Stockholm in the spring of 2021, where insights, recommendations and good examples will be presented to the public.

Additional reading:

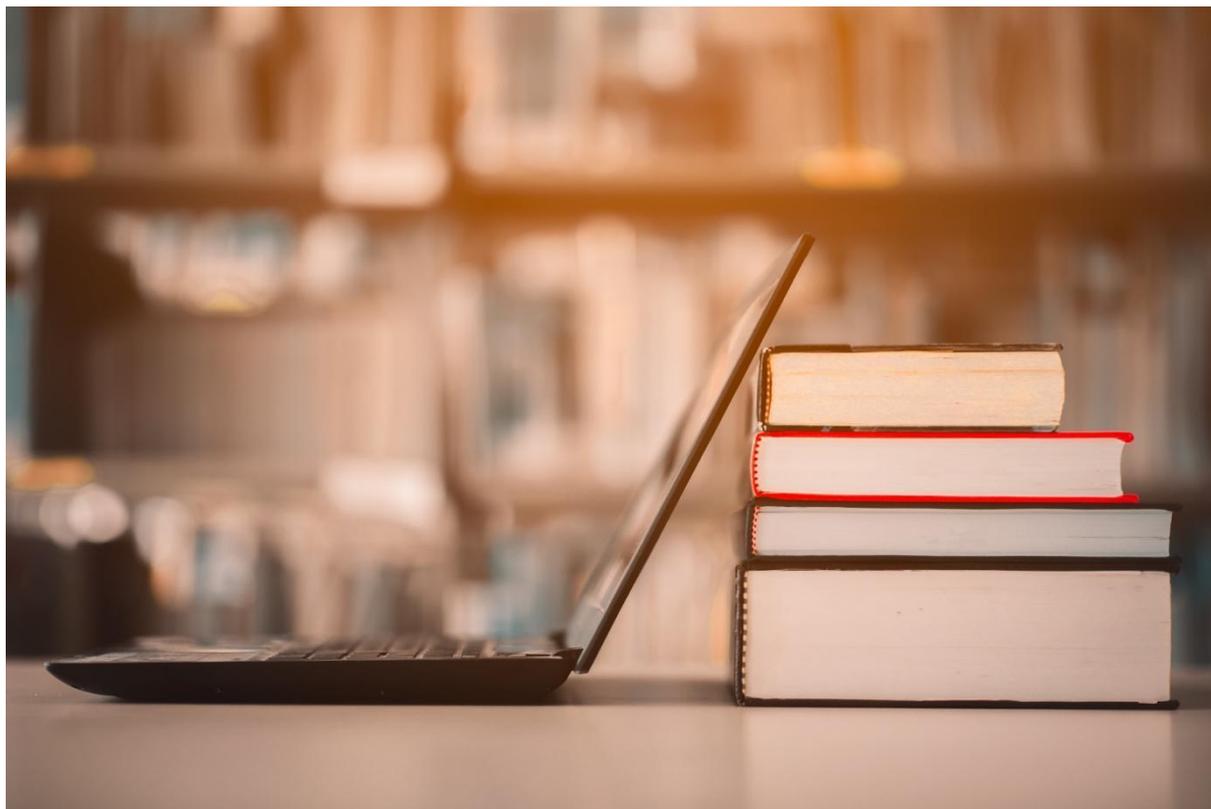
[WACC course content and handbook](#)

1.6 Learning from the target group

People with Disabilities experience inaccessibility every day. They are the natural subject matter experts – a skill set that is often forgotten. The Web Accessibility Directive has substantially increased demand for web accessibility expertise – a competency that remains in precious short supply. At the same time, disabled web users experience inaccessibility every day, yet few lessons are being drawn from these experiences. And many People with Disabilities are unemployed. Wouldn't it be possible to combine these two facts and create something positive?

The Users as experts-project is developing and testing a web accessibility training course at folk high school level. The course will be aimed specifically at persons with disabilities, using their experiences of inaccessibility as a starting point for the development of expertise. Finally, their "user expertise" will be put to the test in real-life assignments provided by public sector bodies.

The project will strengthen the skills and confidence of the participants while also giving public sector website owners new insights. There are two levels of the course; one for participants who strive to be able to work professionally as accessibility experts after the course. The other is focusing on training participants on how to give constructive feedback on web accessibility, thereby supporting public sector website owners in pointing out accessibility problems, at the same time as they increase their digital literacy and raise their level of independence.



1.7 Knowledge sharing and internal processes

Accessibility is not a project; you need to build it into the everyday business. Document everything you do. Make sure that each team knows what it is about, it's not enough to appoint one accessibility ambassador in the organisation. You also need to have the management involved. Build internal competences by sharing knowledge. Start with your close environment; how can your team, your meetings, your workflow be made more accessible?



1.8 Become an ENTELIS+ trainer

Have you enjoyed taking part in the ENTELIS+ training? Would you like to continue learning and help others to understand more about accessibility? Why not become an ENTELIS+ trainer?

In order to become an ENTELIS+ trainer, you will be provided with:

- The appropriate material to teach the course
- A period of teacher shadowing with knowledgeable ENTELIS+ trainers

For more information on how to become an ENTELIS+ trainer, speak to your trainer. We look forward to welcoming you into the ENTELIS+ training community!

Trainer tip: The trainer is the first point of contact for those students wishing to become an ENTELIS+ trainer. Depending on how each pilot site wishes to go about this, the trainer can provide the appropriate information on the next

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steps the participant needs to take to start their journey to become an ENTELIS+ trainer.