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Module 02 - Assistive Technology Policies

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Assistive Technology Policies

Assistive technology is life-changing for people in need. Access to assistive technology is a fundamental human right and the need is increasing fast as populations age globally and the prevalence of noncommunicable diseases rises. However, assistive technology is often disregarded on global health and development agendas, leading to limited and fragmented investment.

Increased awareness, interest, and use of assistive technology (AT) presents substantial opportunities for many citizens to become, or continue being, meaningful participants in society. However, there is a significant shortfall between the need for and provision of AT, and this is patterned by a range of social, demographic, and structural factors. To seize the opportunity that

assistive technology offers, regional, national, and sub-national assistive technology policies are urgently required.

This module outlines some of the key principles that AT policies should address and recognizes that AT policy should be tailored to the realities of the contexts and resources available.

AT policy should be developed as a part of the evolution of related policy across several different sectors and should have clear and direct links to AT as mediators and moderators for achieving the Sustainable Development Goals. The consultation process, development and implementation of policy should be fully inclusive of AT users, and their representative organizations, across the lifespan.

Learning Objectives

1. The ability to recognize and articulate how public policy issues are defined and framed within the context of Assistive Technology
2. The ability to analyze public problems and evaluate policy alternatives against criteria such as equity, efficiency, and effectiveness.
3. An understanding of the Assistive Technology policy areas, problems, and policy alternatives.

International policies, strategies, and action plans on assistive technology

Assistive technology was first introduced in international policies through the Standard Rules on the Equalization of Opportunities for Persons with Disabilities and was further entrenched into international policies with the advent of the Convention on the Rights of Persons with Disabilities (CRPD (Convention for the Rights of Persons with Disabilities)). The Incheon Strategy

“Make the right real” is an example of a strategy that includes the provision of assistive technology as an important means to achieve disability-inclusive development. The World Report on Disability has highlighted the need for action to improve the provision of assistive technology globally, and this has been reiterated in the Global Disability Action Plan 2014–2021. Similarly, the Global Strategy and Action Plan on Ageing and Health 2016–2020, recognizes the vital role of assistive technology.

In the Standard Rules, one of the four rules on preconditions for equal participation requires States to ensure the development and supply of assistive products to assist people with disabilities to increase their level of independence and to exercise their rights. As important measures to achieve the equalization of opportunities, States should ensure the provision of assistive products according to the need. Besides supporting the development, production, distribution and servicing of assistive products, States are to support the dissemination of knowledge about them. States should also recognize that all who need these products should have access to them, which includes financial accessibility. Assistive products should be provided free of charge or at such a low price that people requiring AT, or their families can afford them. Moreover, States should consider requirements of girls and boys concerning the design, durability, and age-appropriateness of assistive products.

In contrast to the general approach of the Standard Rules, the CRPD is more selective in mentioning assistive technology as a measure that States should take to promote, protect, and ensure the full and equal enjoyment of all human rights and fundamental freedoms. However, assistive technology measures are not included – at least not explicitly – in all relevant CRPD articles.

Despite this limitation, the principles of Article 3 on non-discrimination, equality of opportunity, and equality between men and women, as well as Article 5 on elimination of discrimination based on disability, conclude that States are to ensure that all people, irrespective of disability, gender, and age, have access to affordable assistive products.

It is also important to note that accessibility (of which access to assistive technology is a part) is a precondition to the enjoyment of other rights. The CRPD Committee's second General Comment was on Article 9: Accessibility. It stresses the interrelation of this right with other rights and articles (e.g., Articles 9, 19, 21, 28.2a, 26.3). The Comment asserts that "Accessibility" is related to groups, whereas reasonable accommodation is related to individuals. This means that the duty to provide accessibility is an "ex-ante" duty; meaning that it must be provided before the fact of it becoming a problem – States must ensure accessibility, 'up front' as it were.

The recent Report of the Special Rapporteur on the rights of persons with disabilities (2017), while broader than assistive technology, also describes how to provide rights-based support and assistance to persons with disabilities, in consultation with them. The CRPD also indicates that rehabilitation services (including assistive technology) should be provided as close as possible to where people live (Articles 26.1b, 25c). This is important for smaller countries, which may not have assistive technology production capacity. In such situations, other mechanisms need to ensure adequate procurement sources.

Finally, it is important to note that the responsibility of States that have ratified the CRPD to ensure affordable provision of assistive technology is not limited by country borders. Through Article 32 on international cooperation, States commit to both technical and economic cooperation on assistive technology.

Assistive technology policy and international development

It is important to position assistive technology policy within the broader context of international development generally as well as more specific policy innovations, and conventions should be directly relevant to people with a range of impairments, including the aging population, who may benefit from the use of assistive products. The Sustainable Development Goals is a set of seventeen goals, internationally agreed-upon, that will guide international efforts across all countries to target their development efforts to ensure that "nobody is left

behind.” Recently Tebbutt et al. have illustrated how the achievement of each of these seventeen goals can be facilitated through the incorporation of assistive technology, at the population level, when planning to reach these goals.

Assistive products can be conceived as both mediators of social change (i.e., as a mechanism social change works through) and as moderators of that change (as a factor that determines the extent of the change, particularly whether it reaches the more marginalized and vulnerable groups in society).

Within this context a global increase in awareness of the need for quality, affordable, and reliable assistive products is evident. The World Health Organization (WHO) has coordinated a collaborative effort through the Global Collaboration on Assistive Technology (GATE) to maintain Assistive Technology at the forefront of global and sustainable developments. The remit of GATE necessitates that it is relevant to all people who experience impairments in whatever realm and at any age: this includes, for example, people with non-communicable diseases, injury, visual or hearing loss, mental health conditions including dementia and autism, gradual functional decline, or frailty. As such, assistive technology has a key role to play in promoting access to education, employment, justice, health, and wellbeing; as well as to the broader cross-cutting values of promoting social inclusion and participation, independence, and autonomy (or chosen interdependence) and leading a dignified and consequential life.

Assistive technology cuts across all sectors and ages, and it is paramount that policy initiatives recognize and reflect this, rather than seeking to silo it. This presents policy makers with the significant challenge of providing a fully integrated system that is capable of delivering at the population level, while at the same time providing specific assistive technology that matches to the particular needs of individual users (namely the Matching Person and Technology (MPT) Model or the Human Activity Assistive Technology Model).

We are living in a rapidly changing world due to the digital revolution that is not only changing the way people live, learn, produce, and even think; but also changing decision-making processes, the way information is delivered, problems are solved, and policies are developed. This also makes the

distinction between high- and low-tech assistive products increasingly blurred and has the potential to reduce price barriers to high tech solutions. From a systems perspective the digital revolution should be seen as a resource for AT user empowerment and participation in reaching the SDGs, whilst also being careful to avoid the risk of a wider digital and technological divide by not incorporating these opportunities systemically.

Policy gaps

Different types of gaps exist in several areas relevant to policy development in this field. This includes the identification of short and long-term evidence that would be useful for policy making, the use of existing data and information within policy, fostering policy development in an inclusive manner, the evaluation of existing policy according to human rights and social inclusion criteria, the implementation of policy, and its monitoring and evaluation by an appropriate range of stakeholders, especially the consumers and users of such technology. Very often policymakers – including in the health and welfare sectors – are not familiar with disability, impairment, or assistive technology issues, and are, therefore, not aware of some of the policy challenges in this area, including the significant challenge of cross-sectoral working.

In many countries, the first step in creating inclusive policy for assistive technology will be to connect different communities with an interest in assistive technology; to encourage sharing experiences and best practices, and to simply become aware of stakeholders already working in this field – from various international organizations, governments, academics, data experts, standardization bodies and of course civil society organizations. There are very different ways to build this community, and the community will be strongest if a thorough mapping process to establish existing formats, technologies and stakeholders is undertaken.

Stakeholders who are often overlooked in these processes may include (but are not limited to), self-advocates for the independent-living movement, Indigenous peoples in countries where their inclusion is often marginalized, rural people – especially women and girls – in poorly resourced settings; people with

intellectual disabilities for whom assistive technology may be especially beneficial for community living refugees or internally displaced people.

Engaging in policy often requires understanding the triggers for policy change, or renewal. While the CRPD and other international policies may well set the context for a discussion on assistive technology policy; such instruments on their own are rarely sufficient to propel government towards policy work. So, what sort of argument may engage the attention of government and policy makers? Evidence concerning the social, economic and wellbeing benefits, and impact, of assistive technology, may be especially persuasive. The widespread fragmented delivery of services, which are often mainly reactive, with many silos, and often with many specialists in the “supply chain,” is a very costly way to provide a service. Thus, arguments addressing the need for improved efficiency may be relevant. With the increasingly emphasis on person-centeredness, on co-design and on user-led initiatives; it may also be argued that the ethos of the assistive technology sector, is out of kilter with government policy elsewhere, and, therefore, serves to diminish its coherence and overall effectiveness.

It is also crucial not to underestimate the challenges of producing good policy in this domain. For instance, policy has to be across all sectors, in the same way that people live across all sectors. It also needs to consider the whole-life-span approach to people’s lives. These are both difficult for government, requiring cross-ministerial work and for government to commit to long term planning, which may not be expedient for shorter-term political gain. More generally, for governments to have a policy on AT, it has to be made clear that it is all AT i.e., everything from walking sticks to digital health; and this also fits in with holistic and person-centered care and support. However, policy is often most influenced by financial rewards for doing something, or financial penalties (through prosecution or reputational damage) for not doing something. The economic case for assistive technology, therefore, needs to be strengthened and is perhaps one of the most important change factors for improving assistive technology systems. The economic case will be made most emphatically when there is evidence of the effectiveness of assistive technology

at the individual, community, and State/national levels; and so, research, monitoring and evaluation must target these different levels in ways that allows for the findings to be integrated meaningfully.

Empowering people

While it is people who empower people, assistive technology can contribute to creating the conditions where this is possible. The CRPD promotes the rights and perspectives of people to be central to policy development. A critical route to empowerment is the establishment, by States, of mechanisms for DPO (Disabled People's Organizations) engagement in policy development, monitoring, and evaluation. Articles 4–3 of the CRPD obligate the State to actively consult with DPOs in decision-making. DPOs can help orient priorities, provide inputs on what works and what does not, and suggest and provide strategies to reach out to persons with disabilities. This is critical to ensure the view of users is considered and that the assistive technology policy is grounded in a rights-based approach that truly empowers them.

In addition to Articles contained within the CRPD, research suggests that around a third of assistive products that are provided may go unused, providing a powerful pragmatic and economic argument for AT user involvement and training. In other contexts, this perspective, most recently referred to as PPI (“public and patient involvement”) recognizes that public participation enhances the design and delivery of better services. Research also indicates that the greater the extent to which such participation is formalized in established structures, the more satisfactory are the results.

This presents policy makers with an intriguing contradiction. If policy development or reform is to effectively address the needs of those who have been marginalized by mainstream society (and previous policy), then such processes need to be explicitly disruptive – meaning they need to explicitly change the structures that oppress and marginalize. Structures in the process of policy reform need to be established to “institutionalize disruption.” This may mean, for instance, re-imagining systems for the delivery of assistive products, it may mean the development of a new cadre working across a range of

assistive products; it may mean self-assessment for some assistive products. Stronger user involvement in the policy process also presents the opportunity to potentially uproot and transform prevailing power structures that may, by design or default, be perpetuating a lack of access to assistive products.

Progressive bridging of the assistive technology system gap

We base our conceptualization of access on the General Comment of the United Nations Committee on Economic, Social and Cultural Rights (2000), and we then apply this to the assistive technology systems in a country. According to the General Comment a State should have policies and programs that promote the availability (sufficient quantities), accessibility (both physically, economically and in terms of provision of information), acceptability (culturally, socially, gender and age appropriate), adaptability (appropriate to local contexts) and quality (in terms of safety, efficacy and usability and being evidence-based) of assistive products and services. These criteria – known as the “AAAAQ” – should also be adopted with regard to the rights of participation, accountability, and transparency, in their performance. We also supplement this with two additional, and crucial, “A” s for assistive technology. The first additional A – Affordability – is so crucial for this sector that it needs to be unpacked from the concept of Accessibility more generally. Second, many people with functional impairments, particularly (but by no means only) in resource poor contexts, are simply not aware that many impairments that may be alleviated, or overcome, by the use of assistive technology. In fact, this applies not just to potential users but also to health and social care personnel in resource rich and poor areas. Thus, Awareness is the second addition, as a key moderator of access to assistive technology.

The figure below illustrates our understanding of how the real gap between the need for and provision and use of appropriate assistive products should be unpacked and understood in terms of access.

< The Assistive Technology System Gap >

Assistive Products Needed¹

Awareness

Availability

Affordability

Accessibility

Adaptability

Acceptability

Quality

Use

Consistent with the CRPD which promotes “progressive realization” (while all rights may not be achievable immediately, States should be able to show that they are on a path to their realistic achievement), we recognize that policy should also adopt this principle along with and recognition that “domestication” of best practice (as with the CRPD) may play out differently, in different contexts. However, it is clear that disability and access to assistive technology is often heavily gendered; with girls and women often having less opportunity to access it; which may also reflect other inequities regarding wealth, age, ethnicity, or geography (e.g., remote, and rural areas). So, while progressive realization and domestication may result in variations between countries, it is very important that these do not reinforce general practices of discrimination, towards girls, and women, as a particular example.

A systems-thinking perspective also requires taking a long-term view of the Assistive Technology system. Responding to the assistive technology needs of people is not a single step process that finishes as soon as the person has an appropriate solution. Rather, delivering on Assistive Technology involves supporting people over a longer period in their developing new or associated technology needs. The participation of empowered Assistive Technology users in sectors such as education and employment are highly desirable, as well as

their political and cultural participation, but policy makers should be aware that those sectors need to be prepared to welcome the participation of all. At micro-level, this means carefully managing change. At the macro-level, Assistive Technology provision should be seen as a crucial part of wider efforts to build a more inclusive society.

Assistive technology across the life course

In some countries, 46% of people with disabilities are older people (aged 60 or over). The proportion of people with disabilities who are in this older group is likely to increase in most countries, in coming years. This being the case, it will be important for assistive technology policy to adopt a life-course perspective. This should reference to global movement for older people and their work advocating for better services, including assistive technology. Older People's Associations (OPAs) and Disabled People's Organizations (DPO's) could perhaps have greater impact on assistive technology policy and provision by working more closely together; and this is something that can be promoted through the process policy development.

From a life course perspective, we see moments along the course of our lives where we need to access assistive technology, not only for permanent use but also short term; and so, policy needs to cater for these different types of scenarios and needs. The life course perspective also embraces the need for such policy to be cross-sectoral – for instance, across education, employment, and health. Seeing the assistive technology implications of disability, or chronic illness, along the life course, also recognizes that assistive technology research and practice will have to develop a much stronger population science ethos; rather than being siloed in rehabilitation, with another silo in disability, another in education, and so on. This surely is the crux of the policy challenge to social inclusion at the population level.

The economic case for investing in assistive technology

Improved functioning from the use of assistive technology may have wide ranging positive economic impacts on individuals and society. As discussed below, the economic benefits stem from improved health outcomes and quality of life, better education and employment outcomes, and higher productivity. These benefits could translate into a reduction in the health and social care costs associated with impaired functioning. More broadly, the benefits of assistive technology may also extend to a stronger labor supply and industry development, which would benefit the economy as a whole.

Assistive technology has been shown to improve health outcomes and quality of life for people in need, and for care givers. This includes comparative improvements in overall health reported by users of wheelchairs, quality of life and physical health among hearing aids users; and better quality of life and reduced symptoms of depression among nursing home residents who used spectacles. Evidence also shows slower functional decline and higher likelihood of maintaining independence among older people living with a disability who received assistive products and home modification; positive health and social effects from an accessible home environment among people with functional limitation; as well as positive impacts of assistive products on children with physical impairments and their caregivers.

Evidence suggests that improved health outcomes could reduce healthcare and social care costs, because of increased autonomy, reduced dependence on personal assistants and improvement in quality of life through greater control of living spaces through home adaptation, mobility and living aids, and other AT interventions.

Assistive technology also has a significant role to play in keeping people living in their own homes, in their own communities.

The provision of assistive technology could confer positive impacts on the existing and future workforce. The impact could be as direct and immediate as

returning a person to work by providing a prosthetic limb and rehabilitation; or improving the vision of workers by providing corrective lenses. Importantly, assistive technology also helps with laying the foundation for a stronger future workforce through increasing levels of education and better education outcomes. Earlier fitting of hearing aids contributes to better language, academic and social outcomes in children. These are important mediators for building skills for the future workforce.

The cost of retaining an employee who acquires a disability is considerably less than the cost of hiring and training new employees. That translates into less money and time spent hiring employees. Employees with disabilities often exhibit high retention rates, which can translate into financial savings for employers.

The assistive product market is set to greatly expand in the near future, fueled by population growth and increased longevity, as well as advances in technology.

In many countries, domestic markets for assistive products and related industries are relatively new and awaiting further development. Developing local industry could not only serve to meet the local demand at an affordable cost, but also to provide opportunities for job creation through enhancing local technical capability and innovation. Furthermore, like other industries, the benefits would have positive spillover effects to the broader economy along the value chain of the primary (raw materials), secondary (manufacturing) and tertiary (service) sectors. The potential of the sector has been noted by some governments and has been incorporated into their economic development plan.

Another relevant policy issue is that many assistive technology products are viewed by States as medical devices and are subject to rigorous legislative requirements or subject to particular standards (for instance, as approved by the International Standards Organization, ISO). Whilst this may be appropriate in many circumstances, it can be restrictive for access in other contexts, where in particular some lower-tech solutions may be more realistic, more affordable, and more likely to be effectively maintained. Standards may, therefore, need to

be more dimensional than absolute, with of course minimum standards to ensure safety and the prevention of harm to users. Onerous legislative requirements also drive-up cost, time to development and can be off putting to investment by innovators and industry; thus, reducing availability and affordability.

A final and often neglected aspect of assistive technology economics is that many types of assistive products can help increase productivity for those that are not living with a disability – leading to wider application of current technologies and, therefore, increasing economic benefits. Indeed, mainstreaming accessibility and various forms of assistive technology within existing products is a key focus for many of the leading technology companies today.

Why policy and evidence differ.

Assistive Technology policy must, therefore, be evidence-informed, but its fundamental basis must be broader and more inclusive than evidence that accords with strict scientific standards. A variety of stakeholder views, contextual, cultural, resources and systems perspectives must also inform policy; ideally with these perspectives being assessed and synthesized in systematic and transparent ways that also further increases their credibility. While some forms of evidence review, such as realist synthesis, give much more emphasis to contextual and process issues than do conventional systematic reviews for participation to be genuine, there can never, in principle, exist a one-to-one transformation from scientific research to policy: this is neither realistic nor desirable.

Actions to improve access to assistive technology:

Improving access to assistive technology requires a people-centered, assistive technology ecosystem. An overarching policy is crucial across all proposed areas supported by comprehensive data collection and effective financing mechanisms. Effective leadership and governance through national assistive

technology policies ensures an adequate supply of quality, affordable products, and appropriately trained personnel for effective service provision. The following actions are suggested to improve access to assistive technology.



Policy

- Recognize assistive technology as essential health products and services that are an integral component of universal health coverage.
- Develop a National Priority Assistive Products List, based on population need and available resources.
- Identify effective financing mechanisms that adequately address unmet needs and protect assistive technology users from financial hardship.
- Establish standards and regulatory mechanisms that ensure production, procurement and provision of quality assistive products while enabling affordable solutions.
- Strengthen data collection and information management systems to ensure accurate estimation of population need and demand, while monitoring assistive technology provision.
- Establish responsive monitoring and evaluation systems that ensure provision of high-quality, affordable products and services that meet population needs appropriately.
- Stimulate regional and international collaboration in research and innovation.

Products

- Develop standards and technical specifications to guide manufacturing and procurement of assistive products that are fit-for-purpose.
- Increase local manufacturing and assembly capacity where appropriate, while strengthening global and regional procurement mechanisms where suitable.
- Aggregate demand by considering pooled procurement mechanisms to source high-quality assistive products at the most optimal prices.
- Implement a loan or rebate system, including systematic refurbishment and reuse of assistive products.
- Reduce and, if possible, eliminate tariffs and taxes on international and locally produced and procured assistive products

Personnel

- Expand the assistive technology workforce at all levels, especially primary care, to cadres such as nurses, pharmacists, and community health workers. • Train more community-level workforce, especially women, on provision of priority assistive products, through WHO's Training in Assistive Products (TAP) online training modules.
- Foster competency-based accreditation of assistive technology service providers as well as career progression and retention incentives.
- Include people who use assistive technology, their family members, and organizations as a key resource.
- Embrace technology such as virtual assistance, artificial intelligence and 3D printing.

Provision

- Increase the range and geographical coverage of assistive technology service provision, especially at the primary health care level so that everyone can benefit, and services are available closer to the community.
- Develop and strengthen assistive technology referral networks and mechanisms.
- Ensure availability of assistive products at the point of provision in sufficient quantities to meet demand.

- Develop and implement a plan for ensuring that service facilities are physically, cognitively, socially, and culturally appropriate.
- Ensure that provision includes the following key steps: assessment and fitting, user training and follow-up, repairs, and maintenance; and that feedback from service users is an integral component

Summary

Improving access to assistive technology benefits everyone. When those in need are supported in a timely, appropriate, and affordable manner, they can live healthier, more productive, and more participatory lives. Including assistive technology within universal health coverage, and strengthening provision through primary health care, will help to foster healthier populations and future generations that can participate and contribute more fully to education, labor markets and civil society. Investing in access to assistive technology can support health system strengthening by improving outcomes, preventing secondary conditions, and reducing caregiver costs. To improve access to assistive technology, the first step is to bring all related stakeholders together to develop a roadmap with concrete actions across the 5P, a timeline and budget. Importantly, it is essential to involve assistive technology users – people with disabilities, older people, people with chronic conditions and their families – in the assistive technology policymaking and implementation process.

Conclusions

This module demonstrates the complexity involved when generating policy towards sustainable assistive technology provision. States that have ratified the CRPD have reporting obligations to the CRPD Committee, to outline just how they are planning to do this. While the general ethos of the Convention is supportive of assistive technology, it is nonetheless rather vague.

Among other things assistive technology policy should promote ageing from a life course perspective, the need for population level data, reducing

rehabilitation silo-ing, promoting inter-sectoralism and intersectionality, the need for more low-tech assistive technology, universal and environmental access, the institutionalization of disruption, and the scaling of good practices. It should also value evidence-informed as opposed to evidence-based policy.

More work should be done on the development of a Framework to guide and evaluate assistive technology policy. It is important to evaluate – both quantitatively and qualitatively – the extent to which policies, strategies and action plans related to AT, incorporate principles of human rights, and enable equitable access in practice. This calls for analysis of policy “on the books” where it does exist, the process of policy making, its implementation, and the documentation of the lived experiences of persons using AT. Fundamentally, we need to make a leap forward to user-centered systems thinking, crossing sectors, in the same way as people’s lives cross sectors. Without this dramatic change in approach assistive technology may become increasingly siloed, divisive, and inequitable; undermining basic principles of social justice, on which the CRPD, as well as other human rights Conventions and Declarations, are based.

While raising awareness about assistive technology and the broad range of people may be crucially important for generating an in-depth understanding of the issues and need for context specific policy remains a huge challenge. The identification of examples of good practice in terms of assistive technology systems-thinking and its applications might be useful. A Coordinated series of real-life stories and case studies to aid assistive technology champions engage with policy makers might be an extremely useful tool for advocacy. This could feature users, carers, communities, professionals, and policy makers; describing difficulties that are able to be overcome by assistive technology products and systems.

National assistive technology policy should aim to provide a national system with oversight to ensure sustainable, efficient, and effective monitoring, supply, and servicing of assistive technology, which appropriately meet peoples’ ever-changing needs across the life course.

This module has not attempted to be either comprehensive or exhaustive, but rather to highlight some of the key policy challenges for effective national assistive technology systems.

Qatar Policy Landscape

Policy Brief:

The Qatar National e-Accessibility Policy, officially launched by MCIT (Ministry of Communications and Information Technology) in 2011, stands as a pioneering document within the MENA region. It serves as a driving force for the adoption of internationally recognized standards like WCAG (Web Content Accessibility Guidelines) 2.0 and 2.1 across a spectrum of digital platforms, encompassing websites, mobile applications, digital kiosks, public telephones, mobile handsets, and digital content. This policy outlines specific accessibility requisites for web developers and content creators, offering clear guidelines to ensure their products and services are not only inclusive but also adhere to Universal Design Standards.

Furthermore, the policy extends its reach to encompass assistive technology encouraging the development and utilization of technology that can further enhance accessibility, making it easier for people with disabilities to engage with the digital world.

It also encourages the provision of reasonable accommodations, promoting a more accessible and inclusive digital landscape. This means that all public sector organizations employing or providing services to Persons with Disabilities are actively encouraged to provide accommodation in line with the standards outlined in the policy. These accommodations are designed to enhance the way individuals with disabilities interact with technology, thereby promoting a more accessible and inclusive digital ecosystem.

Future Expectations Towards Qatar's Digital Access Landscape

In the coming years, it is expected that Qatar will continue to invest in cutting-edge technologies, innovative policies, and infrastructure improvements to enhance digital access for its citizens. However, it is crucial to ensure that the digital accessibility policy keeps pace with the technological advancements and is adaptable to new technologies, platforms, and devices, ensuring that individuals with disabilities have equal access and usability across different digital environments.

It is worth noting that the ongoing evaluation and monitoring of the policy's implementation will play a vital role in assessing its effectiveness and identifying any further gaps that require attention. By continuously analyzing the impact and outcomes of these improvements, policymakers can refine and strengthen the policy framework, ensuring its responsiveness to the evolving needs of individuals with disabilities.

Learning activities/ Instructional strategies

- Lecture
- Presentations
- Readings
- Interactive Discussions

Assessment Methods

- Concepts maps
- Dynamic questions

- Think-pair-share

Resources and References

1. Khasnabis C, Mirza Z, MacLachlan M. Opening the GATE to inclusion for people with disabilities. *Lancet*. 2015; 386:2229–2230. [[Crossref](#)], [[PubMed](#)], [[Web of Science®](#)], [[Google Scholar](#)]
2. Levitas R, Pantazis C, Fahmy E, et al. The multi-dimensional analysis of social exclusion. Bristol: Bristol Institute for Public Affairs, University of Bristol; 2007. [[Google Scholar](#)]
3. United Nations. Standard Rules on the Equalization of Opportunities for Persons with Disabilities. United Nations; 1994. [[Google Scholar](#)]
4. United Nations. United Nations Convention on the Rights of Persons with Disabilities. United Nations; 2007. [[Google Scholar](#)]
5. World Health Organization and World Bank. World report on disability. Geneva: World Health Organization; 2011. [[Google Scholar](#)]
6. World Health Organization. WHO global disability action plan 2014–2021: better health for all people with disabilities. Geneva: World Health Organization; 2015. [[Google Scholar](#)]
7. World Health Organization. Global strategy and action plan on ageing and health (2016–2020). Geneva: World Health Organization; 2017. [[Google Scholar](#)]
8. Borg J, Larsson S, Östergren PO. The right to assistive technology: for whom, for what, and by whom? *Disabil Soc*. 2011; 26:151–167. [[Taylor & Francis Online](#)], [[Web of Science®](#)], [[Google Scholar](#)]
9. UNDP. Sustainable Development Goals: UNDP; 2016 [cited 2016 Aug 20]. Available from: http://www.undp.org/content/dam/undp/library/corporate/brochure/SDGs_Booklet_Web_En.pdf [[Crossref](#)], [[Google Scholar](#)]

10. Tebbutt E, Brodmann R, Borg J, et al. Assistive products and the sustainable development goals (SDGs). *Global Health*. 2016; 12:79. [[Crossref](#)], [[PubMed](#)], [[Web of Science](#)®], [[Google Scholar](#)]
11. Scherer MJ, Craddock G. Matching person & technology (MPT) assessment process. *Technol Disabil*. 2002; 14:125–131. [[Crossref](#)], [[Google Scholar](#)]
12. Cook AM, Polgar JM. *Cook and Hussey's assistive technologies: principles and practice*. US: Elsevier Health Sciences; 2015. [[Google Scholar](#)]
13. MacLachlan M, Scherer M. Systems thinking for assistive technology: a commentary on the GREAT Summit. *Disability & Rehabilitation: Assistive Technology*. 2018. [[Taylor & Francis Online](#)], [[Google Scholar](#)]
14. Boot FH, Dinsmore J, Khasnabis C, et al. Intellectual disability and assistive technology: opening the GATE wider. *Front Public Health*. 2017; 5:10. [[Crossref](#)], [[PubMed](#)], [[Web of Science](#)®], [[Google Scholar](#)]
15. Owuor J, Larkan F, MacLachlan M. Leaving no-one behind using assistive technology to enhance community living for people with intellectual disability. *Disabil Rehabil Assist Technol*. 2017; 12:426–428. [[Taylor & Francis Online](#)], [[Web of Science](#)®], [[Google Scholar](#)]
16. Gowran RJ, McKay EA, O'Regan B. Sustainable solutions for wheelchair and seating assistive technology provision: presenting a cosmopolitan narrative with rich pictures. *Technol Disabil*. 2014; 26:137–152. [[Crossref](#)], [[Google Scholar](#)]
17. Huss T, MacLachlan M. *Equity, and inclusion in policy processes (EquiPP): a framework to support equity & inclusion in the process of policy development, implementation, and evaluation*. Dublin: Global Health Press; 2016. [[Google Scholar](#)]
18. Sund T. *The Norwegian Model of Assistive Technology Provision*. Presentation at the Global Research, Innovation and Education on Assistive Technology (GREAT) Summit; August; Geneva, Switzerland 2017. [[Google Scholar](#)]

19. Nordic Cooperation on Disability Issues. Provision of assistive technology in the Nordic countries. Vällingby, Sweden: Nordic Cooperation on Disability Issues (NSH); 2007. [\[Google Scholar\]](#)
20. Scholl M, MacLachlan M. Towards the development of a Framework for Supporting National Assistive Technology Policies. Geneva (unpublished report): WHO GATE 2016. [\[Google Scholar\]](#)
21. Borg J, Lindström A, Larsson S. Assistive technology in developing countries: a review from the perspective of the convention on the rights of persons with disabilities. *Prosthet Orthot Int.* 2011; 35:20–29. [\[Crossref\]](#), [\[PubMed\]](#), [\[Web of Science ®\]](#), [\[Google Scholar\]](#)
22. McPherson B. Hearing assistive technologies in developing countries: background, achievements, and challenges. *Disabil Rehabil Assist Technol.* 2014; 9:360–364. [\[Taylor & Francis Online\]](#), [\[Google Scholar\]](#)
23. Bauwens L. “Users First.” Symposium on Assistive Technologies for All; May; Cape Town, South Africa: International Society for Prosthetics and Orthotics (ISPO); 2017. [\[Google Scholar\]](#)
24. World Health Organization. Global priority research agenda for improving access to high-quality affordable assistive technology. Geneva: World Health Organization; 2017. [\[Google Scholar\]](#)

