Accessible and inclusive digital solutions for girls with disabilities

A literature review and recommendations

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Accessible and inclusive digital solutions for girls with disabilities

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Introduction

This brief provides evidence-based insights on the development of digital tools and platforms inclusive of and accessible for girls with disabilities. It explores disability and how it intersects with gender to exacerbate the digital divide for girls with disabilities. The brief explains the concepts of assistive technology, accessibility and digital inclusion. It then describes how careful design can enable tools to be inclusive and accessible for people with disabilities and provides recommendations for creating them with and for girls with disabilities.

Box 1
What is disability?

Disability is part of the human experience as almost everyone will temporarily or permanently experience disability at some point in their life. Disability is not homogenous or static in nature, it has diverse personal characteristics and needs. It reflects the interaction between the features of a person and the features of the context in which they live, including social attitudes, legal and social structures, and both the natural and human-made environment. The Convention on the Rights of Persons with Disabilities considers persons with disabilities to include those who have long-term physical, sensory, intellectual or psychosocial impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others. [1]

Footnotes

1.   United Nations 2006

People with disability represent the largest minority group in the world. Estimations suggest there are more than one billion persons with disabilities globally, most living in low- and middle-income countries (LMICs).[2] Worldwide, nearly 240 million children live with some form of disability.[3] This includes children with difficulties in physical, sensory, cognitive and/or psychosocial functioning.

Children with disabilities face discrimination and stigma in the home, in communities, in schools and when accessing services. They are more likely to fall behind in education, never attend school or drop out, due to barriers such as stigma, lack of trained teachers, and inadequate resources or facilities.[4] For example, lack of accessible toilets and support staff mean girls with disabilities are more likely to miss school when they have their periods. These barriers to participation result in children with disabilities being substantially less likely to have foundational reading and numeracy skills than children without disabilities. Those living in rural areas, and with mothers with low levels of education, have the worst learning outcomes.

Women are more likely to have a disability – in LMICs they comprise up to three-quarters of persons with disability. This higher prevalence of disability among women has been linked to gender-related risk factors, including exposure to violence and harmful practices.[5] Women and girls with disabilities are more likely to face discrimination and exclusion than people without disabilities or men and boys with disabilities. They may face multiple and intersecting barriers to realizing their rights including lack of access to services and resources, widespread discrimination, stereotyping and social stigma. For example, girls with disabilities are less likely than boys with disabilities to receive care and food in the home, healthcare, assistive devices and vocational training.[6]

Footnotes

2.   United Nations Department of Economic and Social Affairs n.d.
3.   UNICEF 2021
4.   UNICEF 2021
5.   UN Women 2017.
6.   UNICEF 2021.

What is the digital inclusion gap for women & girls with disabilities?

Gender inequality in the physical world is replicated in the digital world, as evidenced by the digital divide for women in LMICs.[7] Women, regardless of their disability status, are less likely to have access to the internet than men and they are more likely to borrow or share a mobile phone. If they do own a device, women are more likely to own a simple phone and less likely to own a smartphone than men. This limited access to devices contributes to women using fewer digital services. Data from adolescents (15-19 years) indicates girls are also less likely to use the internet and to own a mobile phone than their male peers.[8] A study, by Girl Effect and Vodafone, found boys to be 1.5 times more likely to own a mobile phone and 1.8 times more likely to own a smartphone than girls.[9]

Key barriers to women's and girls' digital access and use include gender norms, lack of digital literacy, risk of digital harm and affordability.[10] In some settings, mobile phones and the internet are perceived as a challenge to the traditional social order and a risk to women's and girls' reputation or safety. As a result, gatekeepers in the family or community may control or restrict their access to devices. Digital products are also often designed generically for male users and as a result may not be suited to women's and girls' needs. Women and girls are more likely to report difficulties in using digital technology. This gender gap in digital literacy can be attributed to inequalities in education, particularly gender norms which discourage girls and women to study and work in tech, and disparities in device access.

Footnotes

7. Tyers-Chowdhury and Binder 2021; ITU 2019; Alliance for Affordable Internet 2021; EQUALS and United Nations University 2019; GSMA 2021b.
8. UNICEF 2019.
9. Girl Effect and Vodafone 2018.
10. Tyers-Chowdhury and Binder 2021; GSMA 2021b; UNICEF 2019; Girl Effect and Vodafone 2018.

Limitations in digital literacy mean women and girls are more likely to be exposed to digital harm. This includes online harassment, cyberstalking, non-consensual sharing of images or information, and online sexual exploitation and abuse. Fear of these digital risks leads many women and girls to restrict their interactions with technology. Finally, women and girls generally have lower income levels than men and boys and are less likely to be able to independently purchase devices or data.

Persons with disabilities face additional barriers to digital inclusion, including challenges in digital access, accessibility and usability.[11] Digital devices, content and services are often not accessible or easy to use for people with disabilities. There is a lack of digital content and tools relevant for their needs and capabilities. Persons with disabilities may also struggle to access service providers and infrastructure, such as mobile networks and agents, or lack the formal identification required for connections. Affordability is frequently a greater barrier due to lower incomes and disability-related expenses. This can impede the purchase of mobile devices, services such as data plans, or even electricity to charge devices. In addition, people with disabilities generally have fewer opportunities to develop digital knowledge and skills. As a result, they are less likely to understand mobile, its benefits, the accessibility features available and how to keep themselves safe. Risks of mobile device theft, fraud or harm related to data security, privacy and internet use are heightened for persons with disabilities. They may have more difficulty identifying phishing and other scams and safeguarding personal information on their screen.

As a result of these barriers, people with disabilities are less likely to own a smartphone than non-disabled persons.[12] This is despite the potential for smartphones to act as assistive technology and improve functioning for people with disability. Analysis by GSMA indicates that the disability gap for mobile internet widens progressively at each stage of the user journey.[13] For example, in Kenya persons with disabilities are 11% less likely to own a mobile phone than those without disabilities, 36% less likely to be aware of mobile internet and 85% less likely to use it. The disability gap varies significantly by country e.g., in Bangladesh, persons with disabilities are 55% less likely to own a mobile phone than those without disabilities.

Footnotes
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11. United Nations Department of Economic and Social Affairs 2021; GSMA 2022; GSMA 2021a; Botelho 2021.
12. GSMA 2022; GSMA 2021a.
13. GSMA 2022.

Figure 1 **Smartphone ownership in India**

23%
women without
disabilities

5%
women with
disabilities

40%
men without
disabilities

16%
men with disabilities
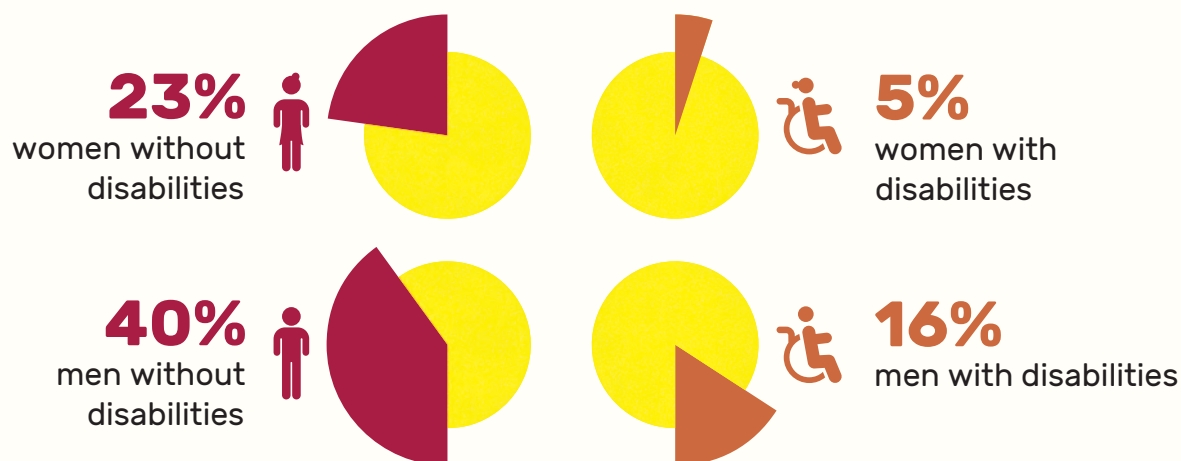
Source: Adapted from GSMA 2020.

Recent research indicates the gender gap is amplified at the intersection with disability.[14] While data is limited, a study
by GSMA, has explored mobile access and use among women with disabilities in seven LMICs. It found people with disabilities generally have lower rates of mobile ownership than those without disability, and women with disabilities are least likely to own a mobile or smartphone. The gender and disability gap in smartphone ownership was greatest in Bangladesh (77%), India (88%) and Pakistan (80%). For example, in India 40% of men without disabilities own a smartphone compared to only 5% of women with disabilities (see Figure 1). Women with disabilities also have the lowest usage of mobile internet – in Bangladesh not a single woman with a disability reported having used mobile internet in the last three months.

The greatest barriers to mobile ownership reported by women with disabilities relate to accessibility and relevance, digital skills, safety and security.[15] Many women
with disabilities reported mobile phones did not offer content, products or services suitable for their needs and capabilities. More than half of women with disabilities surveyed in Pakistan and over two thirds in Uganda did not believe a mobile was relevant for them (see Figure 2).

Footnotes

14. GSMA 2020.
15. GSMA 2020.

Similarly, over half of women with disabilities surveyed in Pakistan, and over a third in Bangladesh and India, reported not knowing how to use a mobile phone. Safety and security concerns over internet use are generally greater for women and this appears to be heightened for women with disabilities.[16] Approximately half of women surveyed in Pakistan and Uganda, and about a third in Bangladesh and India, worried about contact from strangers. Personal safety and information security were also significant concerns for many. In Uganda, 48% of women with disabilities reported worries regarding personal safety and 70% indicated they had concerns about information security.

These findings highlight how persons with disabilities, particularly women and girls, are missing out on the opportunities offered by digital: opportunities for communication and connection with others, and access to information and services. They are also often unaware that mobile phones have potential to act as assistive products and improve their functioning, and that in-built accessibility features can help them use these devices.

Figure 2 **Many women with disabilities don't perceive mobile phone content, products or services to be relevant to their needs and capabilities.**

68%
in Uganda

38%
in Bangladesh

57%
in Pakistan

38%
in India

Source: Adapted from GSMA 2020

Footnotes

16. Tyers-Chowdhury and Binder 2021; GSMA 2020

What is assistive technology?

Assistive technology is an umbrella term for assistive products and their related systems and services.[17] Assistive technology offers the opportunity to improve the functioning, independence and wellbeing of many people with disabilities. It can also enhance their participation and inclusion in all domains of life and reduce the need for formal health and support services, long-term care, and the burden on carers. However, according to the WHO, only one in 10 people in need have access to the technology they require to live empowered, autonomous and independent lives.[18]

Assistive products may be physical or digital. Physical products include wheelchairs, hearing aids, spectacles, continence pads, white canes, or prostheses. Digital products can be memory aids, specialized computer hardware and software, and customized mobile devices. For example, augmentative or alternative communication can be provided by an app on an iPad or tablet, or by using a computer with a "voice" (sometimes called a speech-generating device). Mobile phones, whilst not specifically designed to be assistive technology, can be used as assistive products to help a person with a disability perform a specific task. For example, a person with memory loss may receive reminder messages about medication through their phone.

Smartphones are particularly versatile and can provide multiple assistive products, with the potential to become powerful, customized, and relatively cost-effective tools for people with disabilities.[19] A variety of features and apps are available to assist people with differing impairments.
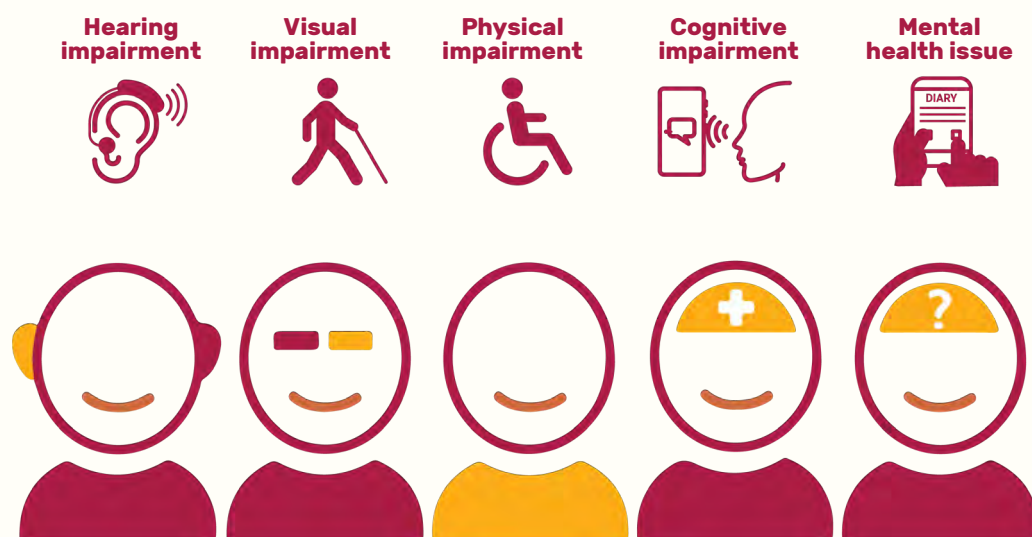
Footnotes

17. World Health Organization 2018; World Health Organization and United Nations Children's Fund (UNICEF) 2022
18. World Health Organisation 2018
19. Barbareschi et al. 2019

For example, for those with hearing impairments there are apps that translate or teach sign language, or transcribe a group call so the person does not have to lip-read.[20] For users with visual impairment, a native screen reader feature available on most smartphones can read aloud what is on the screen; apps using the phone camera can also analyse and read aloud text on a printed page, identify objects and people and/or describe the environment.[21] Apps for people with physical impairments can provide practical information, for example helping to identify accessible places including toilets and parking spots.[22] Apps can also enhance the functionality and efficiency of traditional assistive technology. For example, pairing hearing aids with a smartphone enables phone calls and other audio to be streamed wirelessly; accessibility features can provide notifications for calls, messages or alarms, and adjustment of sound settings e.g., of left and right or treble and bass; and apps can be used to adjust hearing aid setting-specific programmes, help find lost hearing aids, check battery life, or connect with an audiologist.

Figure 3 **Graphic depicting examples of assistive technology for different types of impairment.**

Source: Adapted from Alternative Disability Icons - Disability Positive

Footnotes

20. Inclusive City Maker 2020
21. Gitari 2021; Everyday Sight 2021
22. Inclusive City Maker 2021

What is accessibility?

Accessibility is about giving equal access to everyone. [23]
It refers to ease of use and provision of flexibility to accommodate each user's needs and preferences. [24] For persons with disabilities any place, space, item or service, whether physical or virtual, that is easily approached, reached, entered, exited, interacted with, understood or otherwise used by persons of varying disabilities, is deemed to be accessible. Access to the physical environment, to transportation, to information and communication, including information and communications technologies and systems, and to other facilities and services, is necessary for persons with disabilities to have equal opportunities for participation in society. [25]

Accessible design reduces or eliminates barriers to access or use, making our environment, products and services more inclusive. Accessibility is not only relevant for persons with disabilities, but for everyone to participate equally in society. Digital accessibility includes the accessibility of platforms and documents (called web accessibility) as well as the accessibility features of devices, such as mobile phones.

Footnotes

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23. United Nations 2006
24. United Nations Department of Economic Affairs 2013
25. United Nations 2006

Web accessibility

Web accessibility describes accessibility qualities of applications, websites and electronic documents.[26] High quality digital tools should be designed and developed so they can be used by everyone, including people with disabilities. However, in many instances, platforms are still hard to navigate and understand for those with visual, auditory, motor or cognitive impairments. Such design excludes many people with disabilities from the benefits offered by the digital world.

Web accessibility means that everyone, including people with disabilities, can equally perceive, understand, navigate and interact with websites and tools.[27] Many accessibility requirements provide benefits to a greater segment of users than those with disabilities. For example, higher colour contrast benefits anyone using the platform in particularly bright or dark settings, and captions can assist those in noisy environments. In this way, web accessibility benefits not only the individual but also the owners of platforms and wider society.

The W3C Web Accessibility Initiative provides guidance and resources to help make the web and digital applications accessible to people with disabilities, including those with auditory, cognitive, neurological, physical, speech, and visual impairments.[28] Their Web Content Accessibility Guidelines provide a single shared international standard for web content accessibility, using the principles that content needs to be perceivable, operable, understandable and robust (see Figure 4 and further discussion on page 18). The Web Content Accessibility Guidelines conformance levels, A (basic) and AA (intermediate), ensure content is usable and understandable for most people with or without disabilities. W3C Web Accessibility Initiative also provide a directory of accessibility evaluation tools for web content.

Other resources that may be useful to assess accessibility include:

• Apple Accessibility Inspector,
• Adobe Acrobat tools for accessibility,
• Google Accessibility Guides and Resources, and
• AbilityNet factsheet on creating accessible documents.

Footnotes
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26. W3C Web Accessibility Initiative 2022
27. W3C Web Accessibility Initiative 2022
28. W3C Web Accessibility Initiative n.d.

Figure 4 **Web Content Accessibility Guidelines - Principles for Web Content Accessibility.**

Web content should be perceivable

- Text alternative for non-text contents
- Captions and other alternatives for multimedia
- Create content that can be presented in different ways
- Make it easier for content to be seen and heard e.g., higher colour contrast.

Web content should be operable

- Functionality should be available from a keyboard
- Allow time for users to read and use content
- Avoid content that can cause seizures or physical reactions
- Help users navigate and find content
- Allow for inputs other than from a keyboard.

Web content should be understandable

- Make text readable and easily understood
- Ensure content appears and operates in predictable ways
- Help users avoid and correct mistakes.

Web content should be robust

- Maximize compatability with user tools
- Meet recognized app standards to ensure technology can process content.

Source: Adapted from the Web Content Accessibility Guidelines (WCAG).

Mobile accessibility features

Smartphone operating systems have in-built accessibility features which support users' vision, physical, motor, hearing and learnings needs.[29] These native features enable users to navigate the phone and interact with the digital world with greater ease. For example:

- Users with visual impairment can use the *Magnification* or *Zoom* functions to make screen content larger, or a screen reader (*TalkBack* on Android, *VoiceOver* on iOS) to read screen content aloud. Those with colour vision impairments can use features such as *Colour Filters* or *Differentiate without Colour* (iOS).
- Deaf and hard of hearing users can turn on *Live Captions* to add captions to videos or phone calls or use *Live Transcribe* (Android) to translate speech to text. They can also use sound recognition functions to listen for specific sounds, such as a crying baby or doorbell, and send a screen notification when they occur.
- Users with limited mobility can use *Camera Switches* to navigate Android phones with six facial gestures or customize touch sensitivity of the screen to suit the user. They can also use dictation to compose messages or give instructions to the phone, for example, to open an app.
- Users with cognitive and learning impairments can use a simple reading view which increases text size and removes images and other distracting elements. They can also use text prediction to compose messages or notes.

Even lower-cost smart feature phones (which generally have keyboards, non-touch screens and a limited range of apps) offer a basic suite of accessibility features such as larger text, screen reading and captions.[30]

These in-built features can significantly increase mobile phone use by persons with disabilities as they allow customization of the digital interface to meet users' individual needs. It is reported that when people with hearing or visual impairments understand how to use smartphone accessibility features, they use the mobile internet more than users without disabilities.[31]

Footnotes
29. Apple n.d.; Google n.d.
30. KaiOS n.d.
31. James 2020.

Figure 5 Examples of icons for mobile accessibility features

iOS

Voiceover
A screen reader that allows the use of interface without having to see the screen.

Audio Descriptions
Detailed audio descriptions of visual scene.

Spoken Content
Read selected text from app out loud in over 60 languages.

Voice Control
Users can navigate app's interface using their voice.

Android

Magnification
Zoom or magnify to see Android device's screen better.

Switch Access
Interact with device using one or more switches instead of the touchscreen.

Live Caption
Live Caption automatically captions speech on device.

Source: Apple Developer Accessibility Documentation and Android 13

What is inclusive design?

Inclusive design is the design of products and services that are accessible to, and usable by, as many people as reasonably possible.[32] It emphasizes the importance of understanding user diversity, including capabilities, needs and aspirations, when making design decisions. Generally, the design of products and services has not been inclusive. Instead, designers aim to meet the needs of 80% of the population and ignore the 'more difficult' 20% (see Figure 6).[33]

Figure 6 **Graphic illustrating how design for the 'average' person excludes 20% of people who either cannot use the design or find it difficult to use.**

Design works for central 80%

Design difficult to use

Can't use the design
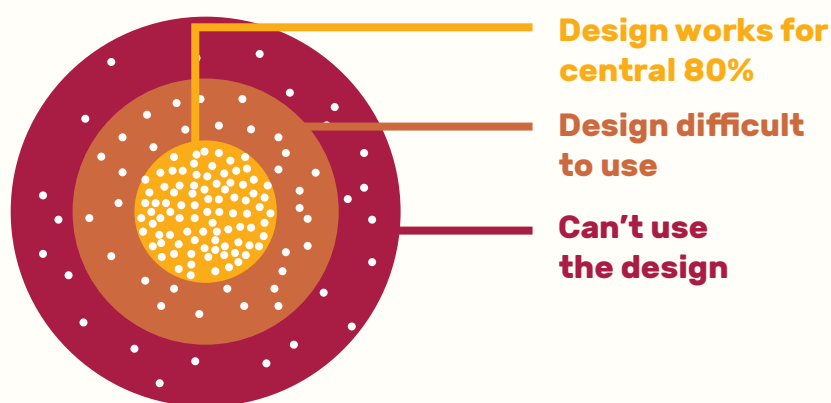
Source: Adapted from the Inclusive Design Research Centre

Footnotes

32. University of Cambridge n.d.
33. Treviranus 2019

Inclusive design is aligned with universal design; the design of products, environments, programs and services so they are usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. However, while universal design seeks a single solution for the widest possible range of users, inclusive design focuses on reaching more people who suffer from exclusion, by exploring different solutions for different groups, rather than a one size fits all approach.[34]

Inclusive design is human-centred; drawing on the full range of human diversity, it focuses on including and learning from people with a range of perspectives.[35] In doing so, it seeks to advance social inclusion by addressing issues and biases that may raise barriers to participation including:

- gender, gender identity and sexual orientation,
- race and ethnicity or indigenous status,
- education and economic situation,
- tech literacy and skills,
- access to hardware, software and connectivity,
- geographic location, culture and language,
- age (including older and younger people), and
- disability.[36]

Inclusive design aligns with the philosophy of "nothing about us without us", a motto at the heart of the global disability movement, by including persons with disabilities and Organizations of Persons with Disabilities from the very start of the design process. Organizations of Persons with Disabilities are organizations or associations which are led, directed, and governed by persons with disabilities, and committed to the Convention of Rights of Persons with Disabilities.

Tools available to support inclusive design include:

- Microsoft toolkit
- University of Cambridge Design Toolkit
- Centre for Inclusive Design guides and tools[37]

Footnotes
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34. University of Cambridge n.d.; Gupta 2020
35. Shum et al. n.d.
36. United Nations 2016; Shum et al. n.d.
37. Microsoft n.d.; University of Cambridge n.d.; Centre for Inclusive Design n.d.

Developing inclusive and accessible digital platforms

An effective inclusive design process will deliver a product with an accessible design. Inclusive design is the method, while accessibility attributes are a result. In accordance with the Web Content Accessibility Guidelines, accessible design features should include:

- **Clear and simple layout** – menus and displays are simple and easy to follow, and each section has a clear heading and subheadings.
- **Logical order** - ensure the path the user takes (user flow) makes sense.
- **Easy to read text** - plain language in a readable font that can be resized.
- **Flexible display** - can be used with a variety of screen sizes and views (portrait versus landscape).
- **Good colour contrast** - content is easily distinguishable and visible under different light levels.
- **Alternative formats** - content has different display options (text/audio/video).
- **Descriptions** for images, subtitles and/or transcripts for videos, and descriptive buttons, links and headings.
- **User customization** - to meet a user's needs e.g., magnify text; change contrast, colours or background; keyboard or touchscreen functionality.
- **Compatibility** with in-built mobile accessibility features, such as screen readers.[38]

There are many examples of digital products which have incorporated these features in their design (or re-design). UNICEF has developed a series of child-friendly and inclusive apps to support children and their families.[39] For example Leeloo, an app that helps non-verbal children communicate with their carers, teachers and friends, has been assessed as accessible for those with motor, cognitive, vision or hearing impairments.

Footnotes

38. W3C Web Accessibility Initiative n.d.; Home Office n.d.
39. UNICEF n.d.

Some websites, such as the accessibility solution provider Userway, include a widget to customize the display based on user needs, with accessibility features such as screen reader, keyboard navigation, voice commands, colour adjustments, text magnification, image descriptions and easy read fonts.[40]

Figure 7   Infographic illustrating accessible design features for digital platforms.

Write in plain language.

Publish all information on web pages.

Use subtitles or provide transcripts for videos.

Use a combination of colour, shapes and text.

Use a linear logical layout.

Use simple sentences and bullets.

Use good colour contrast and readable font size.

Make buttons descriptive.

Source: Adapted from Designing for accessibility, Home Office.

Footnotes

40. Headspace n.d.; Eleken 2021

Evidence-based recommendations

for creating digital tools inclusive of and accessible for girls with disabilities

Girls with disabilities can be challenging to reach with digital tools as they face additional barriers to access and use of technology. Gender norms, lack of digital literacy, online safety and security concerns, accessibility and usability challenges, and lack of relevance and affordability all limit digital access and use for girls with disabilities. However, careful planning and implementation can overcome many barriers.

Girls with disabilities must be included in the design and iteration process. Inclusive design is key to ensuring digital development is relevant and accessible for girls with disabilities. Consultations with girls with disabilities are an opportunity to better understand their lived experiences, what they need and want from a digital tool and their digital challenges. These meetings can also test the usability of the platform and the relevance of content.

It is important to engage with the caregivers of girls with disabilities and disability stakeholders. Undertake research to understand the local disability ecosystem and map stakeholders. This may include schools and organizations supporting people with disabilities, particularly children. Such organizations have vital capacity and influence in the disability community. They can be valuable partners and create awareness of the benefits and use of a digital tool among girls with disabilities and their parents. As parents and caregivers frequently act as gatekeepers in girls' use of digital devices, and in some instances may provide technical support, their engagement and understanding of the value of digital for girls is important for girls' access and participation. These stakeholders are likely to be vital in facilitating access to the girls with disabilities who will need to be consulted, in line with inclusive design principles.

Carefully plan consultations to ensure they are comfortable safe, empowering and respectful for girls with disabilities.

It is important that inclusion of girls with disabilities is not tokenistic and that they are meaningfully engaged.[41] Facilitators must use positive terminology that does not perpetuate disability stigma and stereotypes, as well as negative gender stereotyping. They must understand and address myths about persons with disabilities if they arise, for example, beliefs that girls and women with disabilities are asexual and do not menstruate.[42] Be aware that girls with disabilities experience heightened rates of bullying and harassment by their peers, based on their disability and gender, so it will be important to monitor group dynamics and ensure they are treated respectfully by others.[43] Online safety is also a key concern for girls and their parents, so detailed information about safeguarding measures should be provided when obtaining informed consent from both girls and their caregivers. Employing only women facilitators for consultations can increase parental comfort about girls' safety. It can also foster more candid and relaxed discussions, particularly if content is sensitive, such as with menstruation or sexuality. Furthermore, it provides an opportunity to expose girls to women role models working in tech, an area often considered a male domain. Facilitators already known to girls, such as teachers or leaders from organizations of/for persons with disabilities, may make girls feel even more comfortable.

Ensure diversity within disability is represented and that consultations are inclusive and accessible for all.

Disabilities are not homogenous, so include girls with a variety of impairments. Ask participants for their requirements to take part and tailor consultation approaches and settings to meet their needs. For example, a sign language interpreter may be needed for girls with hearing impairments. Venue selection should assess accessibility for girls with physical and/or visual disabilities and consider whether transport assistance and/or access to reasonable and accessible accommodation is required. If materials or platforms include images or avatars of girls, ensure there is representation of girls with a range of disabilities.

Digital platforms must also be accessible and relevant for girls with disabilities.

Seek advice from those with technical expertise in content for people with disabilities e.g., representatives from organizations of persone with disabilities. For example, if creating content on menstrual health and hygiene, it is important to address the additional barriers faced by girls with disabilities.

Footnotes

41. United Nations 2021
42. UNICEF n.d.; Hameed et al. 2020
43. UNGEI and Leonard Cheshire 2021

Use consultations to test content and to identify additional topics relevant for girls with different impairments. Also, assess any digital platforms against the Web Content Accessibility Guidelines to ensure the tool is accessible and the content is operable, usable, understandable and robust for girls with disabilities. Accessibility is not only important for girls with disabilities but can also make platforms easier to use for a wider range of users. For example, easy to read text and alternative media are important not only for girls with intellectual impairments but also for girls with lower levels of literacy.

Invest in digital skills education for girls with disabilities.
Look for opportunities to support digital literacy programs for women and children with disabilities, particularly girls. These initiatives will not only empower potential users with the skills to use digital tools but will also provide an opportunity to raise awareness and increase use of digital platforms. The GSMA Mobile Internet Skills Training Toolkit includes a module on accessibility features and may be a useful resource for trainers working with girls with disabilities or their parents. Whilst designed for mobile operators, this toolkit can be used by any organization seeking to improve digital confidence and use of accessibility features for people with disabilities.

Developing digital tools to reach girls with disabilities requires careful design and deployment
to overcome the significant barriers they face in accessing and using platforms. Since disability reflects the interaction between the features of a person and their setting, conscientious development can effectively reduce or remove barriers to participation in the digital realm and empower girls with connection and information.

N.B. Considerable efforts have been made to make this document accessible. However, more work is needed to make publications accessible for all people, regardless of disability. With this in mind, we will continue to seek further opportunities to learn and evolve the accessibility of publications.

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