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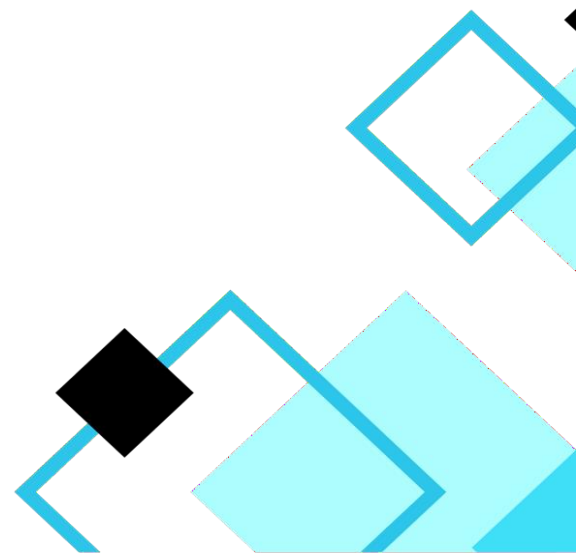
**Project acronym:** NIAGARA

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## **MODULE 4: ASSISTIVE TECHNOLOGIES IN LIBRARIES: ENHANCING ACCESSIBILITY AND INCLUSION**



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## **Introduction**

This Assistive Technology module is meant to empower library professionals with the knowledge and skills they need to provide inclusive and accessible services for patrons with disabilities. Participants will take a thorough look at various assistive technologies, including those for visual, hearing, motor, and cognitive support, allowing them to understand how these tools can enhance the user experience and promote equal access to information. By the end of the module, library professionals will be well-prepared to assess the needs of patrons with disabilities, choose and implement the right assistive technologies, and offer effective support and training to both patrons and staff, ultimately creating a more inclusive and welcoming library space.

## **Learning Objectives**

The overall learning objectives for this module are:

- Learn about the definition and various types of assistive technologies (AT) and how they contribute to making libraries more accessible.
- Explore the different categories of assistive technologies available!
- Get acquainted with tools like screen readers, magnification software, and adaptive input devices.

## **PRE-Quiz**

Take a look at this 5-question pre-quiz focused on Assistive Technologies in Libraries: Enhancing Accessibility and Inclusion:

1. What's the primary aim of assistive technologies in libraries?
  - a) To enrich the overall experience for all users
  - b) To provide equal access to information for patrons with disabilities
  - c) To improve library circulation stats
  - d) To minimize library expenses
2. Which of the following is an example of a visual assistive technology?
  - a) Hearing loop
  - b) Screen reader
  - c) Adaptive input device
  - d) Captioning software
3. What is the function of magnification software in libraries?
  - a) To convert digital text into synthesized speech
  - b) To enlarge digital text and images
  - c) To provide sign language interpretation
  - d) To enhance audio quality
4. Which of the following assistive technologies is designed to assist individuals with physical disabilities?
  - a) Text-to-speech software
  - b) Adaptive input device



- c) Captioning software
- d) Mind mapping tool

5. What is the benefit of providing assistive technologies in libraries?
- a) Enhanced user experience for patrons with disabilities
  - b) Increased library circulation statistics
  - c) Reduced library costs
  - d) All of the above

### **Understanding Assistive Technologies**

Assistive technologies (AT) include a variety of devices, software, and tools designed to assist individuals with disabilities in accessing information, communicating, and navigating their surroundings. Within libraries, these technologies are key to enhancing accessibility and inclusion, empowering patrons with disabilities to take full advantage of library services and programmes. There are different types of assistive technologies, such as those for visual, hearing, motor, and cognitive support, each aimed at addressing particular needs and challenges.

### **Visual Assistive Technologies**

Visual assistive technologies are crafted to help those with visual impairments, such as blindness, low vision, and color blindness. Some common examples include screen readers, magnification software, and braille displays. Screen readers like JAWS and VoiceOver transform digital text into spoken words or braille, allowing individuals with visual challenges to engage with digital content. On the other hand, magnification software, such as ZoomText, enlarges text and images, making it much easier for those with low vision to read and navigate online.

### **Hearing Assistive Technologies**

Hearing assistive technologies serve a similar purpose for individuals with hearing impairments, including those who are deaf or hard of hearing. Examples in this category include hearing loops, captioning software, and sign language interpretation tools. Hearing loops work by using electromagnetic induction to send sound signals straight to hearing aids, which helps cut down on background noise and enhances sound clarity. Meanwhile, captioning software offers visual text for audio and video content, making it possible for those with hearing impairments to access and comprehend multimedia resources.

### **Motor Assistive Technologies**

Motor assistive technologies aim to provide support for individuals with physical disabilities, particularly those who struggle with mobility and dexterity. There are several types of these technologies, including adaptive input devices, mouth-operated mice, and switch-activated devices. Adaptive input devices, such as keyboard-only navigation and on-screen keyboards, help people with physical disabilities interact with digital content. Additionally, mouth-operated mice and switch-activated devices offer



alternative ways for individuals with severe physical disabilities to engage with technology.

### **Cognitive Assistive Technologies**

Cognitive assistive technologies aim to support those with cognitive impairments, including learning disabilities and memory challenges. Some popular examples are text-to-speech software, mind mapping tools, and various organization and productivity programmes. For instance, text-to-speech software like NaturalReader can convert written text into spoken words, which is incredibly helpful for individuals with reading disabilities, allowing them to engage with written content more easily. Additionally, mind mapping tools such as MindView offer a visual way to organize and connect ideas, making it simpler for those with cognitive impairments to plan and structure their tasks.

### **Why Assistive Technologies Matter in Libraries**

Assistive technologies are incredibly important for boosting the accessibility of library resources and services. By providing these tools, libraries can ensure that patrons with disabilities have equal opportunities to access information, education, and recreational resources. These technologies not only improve the overall experience for users but also foster greater independence, confidence, and autonomy for individuals with disabilities. Moreover, they assist libraries in adhering to disability laws and regulations in your countries as well as best practice internationally.

### **Implementing Assistive Technologies in Libraries**

Bringing assistive technologies into libraries involves careful planning, training, and support. Libraries should start by assessing the needs of their patrons with disabilities and choosing assistive technologies that align with those needs. It's equally important to offer training and support for library staff, so they can become familiar with these technologies and provide the best assistance to patrons. Additionally, libraries need to make sure that assistive technologies are woven into their services and programmes, allowing for easy access to resources and services for everyone.

### **Conclusion**

assistive technologies are key to advancing accessibility and inclusion in libraries. By understanding the various types of assistive technologies and how they can be applied, libraries can effectively assist patrons with disabilities, improving their overall experience and ensuring equal access to information. By integrating these technologies, libraries can highlight their commitment to accessibility and inclusion, making sure that all patrons have the chance to fully participate in library services and programmes.



This is a 5-question post-quiz and their answers focused on Assistive Technologies in Libraries: Enhancing Accessibility and Inclusion.

1. What's the primary aim of assistive technologies in libraries?

- a) To enrich the overall experience for all users
- b) To provide equal access to information for patrons with disabilities
- c) To improve library circulation stats
- d) To minimize library expenses

**Answer: b) To provide equal access to information for patrons with disabilities**

2. Which of the following is an example of a visual assistive technology?

- a) Hearing loop
- b) Screen reader
- c) Adaptive input device
- d) Captioning software

**Answer: b) Screen reader**

3. What is the function of magnification software in libraries?

- a) To convert digital text into synthesized speech
- b) To enlarge digital text and images
- c) To provide sign language interpretation
- d) To enhance audio quality

**Answer: b) To enlarge digital text and images**

4. Which of the following assistive technologies is designed to assist individuals with physical disabilities?

- a) Text-to-speech software
- b) Adaptive input device
- c) Captioning software
- d) Mind mapping tool

**Answer: b) Adaptive input device**

5. What is the benefit of providing assistive technologies in libraries?

- a) Enhanced user experience for patrons with disabilities
- b) Increased library circulation statistics
- c) Reduced library costs
- d) All of the above

**Answer: a) Enhanced user experience for patrons with disabilities**

## References

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## **Assistive Technologies in Libraries**

**NIAGARA**

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Inclusiveness of Academic Libraries: the Case of Assistive and Adaptive Technologies

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