

Digital Literacy Skills for Students With Visual and Hearing Impairment In Public Universities in Kenya

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Introduction

- ❖ Digital literacy is a foundational skill in the 21st century as it empowers individuals to access information, communicate, and adapt to the rapidly evolving digital landscape.
- ❖ Ability to use and navigate digital technologies, information, and communication tools effectively for all students including those living with disabilities, empowers them to expand their digital literacy and adaptability.
- ❖ A vast amount of information available on the internet and online learning platforms, webinars, and other e-learning opportunities that facilitate continuous skill development especially for students in higher learning, can only be achieved through digital literacy skills.

Problem of the statement

- ❖ Public universities in Kenya have established disability mainstreaming committees to address the social, cultural, and economic disadvantages that students with disabilities face during their learning period and even beyond.
- ❖ Provision of assistive devices and other accessible technology necessary for learning and development is a good step towards achieving an inclusive educational environment for the visually and hearing-impaired students .
- ❖ However these technologies need to include clearly stated information access procedures and mainly how they can be used to ensure full participation of students with visual and hearing impairments in accessing information and this can be achieved through digital literacy training.

Aim of the Study

The aim of this study was to determine the levels of digital literacy and information access among students with visual and hearing impairments with the intention of providing insights on how to improve digital accessibility to ensure equal easy access to online educational materials and resources enhancing learning experiences of these students.

Study objectives

- ❖ To assess the existing digital literacy status among the visually and hearing-impaired students in public universities in Kenya.
- ❖ To determine information access infrastructure for supporting visually and hearing-impaired student in public universities in Kenya.
- ❖ To propose valuable insights for enhancing digital literacy for students with visual and hearing impairments in public universities in Kenya.

Literature Review

- ❖ Definition of Literacy by Dupuis, (1997), literacy is beyond embracing the basic abilities of reading and writing and now embodies the general ability to understand and perform functions successfully
- ❖ Digital literacy by Paul Gilster (1997), the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers.
- ❖ Digital literacy for the Visual and Hearing impaired students
- ❖ Digital Literacy skills in Library and Information Access
- ❖ Universal Design for Learning (UDL) and Digital Literacy skills

Research Methods

- ❖ The study employed mixed research design
- ❖ The study targeted 35 public universities in Kenya from which five universities were selected by using convenience sampling method due to time constraints
- ❖ Purposive sampling technique was used to sample the key informers from the five universities. These included a total of 32 respondents owing to their few numbers.
- ❖ Data and information was collected using questionnaires that were administered through google doc.

Continuation of Research Methods

- ❖ Data was collected using open and closed-ended questionnaires that were distributed using google forms.
- ❖ Descriptive statistics was used to analyze the quantitative data resulting from the closed ended questionnaires.
- ❖ The content analysis employed Microsoft Excel and SPSS data analysis tool to analyze open- ended questionnaires.
- ❖ Statistical tool was used to analyze and describe data, and presented through visualization techniques such as tables, charts, and graphs.

Key Findings

- ❖ Students with visual and hearing impairments rarely request for assistance from the library staff in accessing digital information.
- ❖ There is a lack of awareness by the students on available support services or resources in libraries.
- ❖ Most public universities in Kenya are yet to hire sign language interpreters.
- ❖ There is a rising intake of students with visual and hearing impairments in Kenyan public universities
- ❖ The specific digital literacy skills that will enable the library staff to handle assistive technologies and digital information access for students with visual and hearing impairments were lacking

Recommendations

- ❖ Establishment and reviewing of policies in Kenyan public Universities to optimize on addressing the issue of ICT, assistive technologies and digital literacy for students with visual and hearing impairments
- ❖ Establishment of library dedicated sections for the visually and hearing-impaired students.
- ❖ Constant training and or hiring of staff that carry the specific skills on digital access for the students with visual and hearing impairments as technology keeps advancing
- ❖ Marketing and advocacy of library services to the general student's population and also specifically to the students living with disabilities

Conclusion

- ❖ Majority public universities in Kenya have made significant steps in ensuring there is availability of digital information resources and basic assistive technologies for students with visual and hearing impairments.
- ❖ However to keep in consistency with the universal design for learning, public University libraries should be fully equipped to offer digital literacy training as part of their literacy programs especially to the visually and hearing-impaired students.

End

Disability only becomes a tragedy when society fails to provide the things we need to lead our lives – job opportunities or barrier-free buildings, for example."

Judy Heumann