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## **Abstract**

Information and Communication Technology (ICT) is a central aspect of modern life. Engagement with some educational, employment and social opportunities is dependent upon being able to make use of computers and the internet. For Disabled People especially those with hearing impairment, these opportunities can be particularly important. Learners with hearing impairment are given less attention in the world of technology. Most of the teachers who teach people with hearing impairment are not well informed on how to use computer and computer related accessories and peripherals. This is why integrating ICT with education for people with hearing impairment is always a challenge in most schools in Kenya. The study aims at enhancing the learning understandability of learners with hearing impairment using ICT. There are many people who are disabled but this study only focused on learners with hearing impairment in Kenya. This framework is mainly developed for deaf learners and educators of deaf learners. The framework was developed using Assistive technology. Two key categories of Assistive technology were used: KSL gesture recognition system and KSL computer aided learning and training tool.

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### **Index Terms**

Computer Science

Information Systems

### **Keywords**

Disabled, Assistive technology, hearing Impairment, ICT in Education, Understandability.