ICT aided skill enhancement for moderately hearing-impaired youth

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Hearing impairment is a prominent sensory disability in the world. Baker et. al (2017) state that hearing- impaired persons account for over 5% from the world's population. Though moderately hearing-impaired youth have good eyesight, they have difficulty in reading and writing text-based content due to their inadequate hearing. The inadequate hearing negatively affects their education and makes them low literate and unemployed in the society. If hearing-impaired youth are literate in ICT, more employment opportunities will be available for them in the industry such as graphic designers, computer hardware technicians, etc. Current study focusses on the development of e-learning materials for hearing impaired youth to improve their ICT literacy and competency in order to enhance their employability. We also attempt to identify a suitable methodology to develop e-learning materials targeting moderately hearing-impaired youth to provide ICT literacy skills. The aim of the research addresses the ICT related vocational training of moderately hearing-impaired youth through the development of ICT literacy skills. The research objectives are to identify learning theory, to determine a content development model, to design interactive e-learning material and to assess the applicability of the designed interactive e-learning material to provide ICT literacy for moderate hearing-impaired youth in ICT related vocational training. Based on the literature survey, Constructivism has been identified as a learning theory and the Learnativity content development model as a suitable content development model to provide ICT literacy for moderately hearing-impaired youth. Web based interactive e-learning material has been designed by incorporating text, graphics and audio to suit the requirements of the moderately hearing-impaired youth. A simple quiz is provided at the end of the interactive e-learning material to measure the participants understanding on the provided learning content. The sample participants will be selected using the random sampling technique to test the designed interactive e-learning material. Data will be gathered from the observations, questionnaires and interviews. Participants' feedback on their interactive e-learning experience is collected using the questionnaire and the interviews. Collected data will be analyzed using a statistical package. Results obtained after analyzing the data will be used to determine the applicability of the interactive e-learning material to provide ICT literacy for moderately hearing-impaired youth. Providing e-learning opportunities to be literate in ICT for moderately hearing-impaired youth is vital because the general education and vocational training of hearing-impaired learners has been drastically affected by the pandemic and the economic crisis of the world.

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