Chapter 8
ICT Skills Training for the Deaf to Enhance Employment Prospects

Cosmas Boniface Mnyanyi
The Open University of Tanzania, Tanzania

ABSTRACT

The chapter is on ICT skills training for the deaf to enhance employability prospects to improve social-economic development. Deaf employment is a global issue. ICT skills training might reduce the challenge. Little is known about ICT skills training for the deaf. The author interviewed 5 parents and 15 ICT skills training for the deaf graduates at the Open University of Tanzania. Data were collected using an interview guide with support from an experienced sign language interpreter. Findings indicated that ICT skills training increased participation in learning, employment, networking, and social inclusion. However, they faced challenges related to community perception, resources availability, affordability, connectivity, funding, and availability of ICT skills training opportunities that met their special learning needs. Based on the results, people with disabilities have to learn ICT skills that meet their unique special needs to reduce the negative effects of the impact of disruptive technologies and employability in the 4th Industrial Revolution.

INTRODUCTION

Deaf employment is a global issue due to shortages of training opportunities that respond to their needs, including ICT skills training. Delayed, creation of ICT skills training for the deaf increases negative impact of the disruptive technologies on the socio-economic development (Melnyk, et al., 2019; Sineviciene, et al., 2021). With the implementation of inclusive education, it is not yet known how educators including the teachers can facilitate ICT skills training for the deaf to enhance their employability status in the 4th industrial revolution characterised by use of technology. In many cases people who are deaf use sign language interpreters and thus likely to increase burden to employers and reduce chances for employment. With ICT skills, a person who is deaf can communicate directly using ICT tools. The

DOI: 10.4018/978-1-6684-6873-9.ch008

paper contributes to Sustainable Development Goals (SDGs) 4 (quality education),8 (on decent work and economic growth), 9 (on industry, innovation and infrastructure), 10 (on reducing inequalities), and 17 (on partnerships for the goals). The paper also contributes to innovation toward ICT skills training Policy or practice implications including setting up ICT skill training centres for the deaf to improve their chances of accessing lifelong learning opportunities for increasing employability chances.

The Open University of Tanzania started ICT skills training for the deaf in 2015 with a view to create opportunities for ICT skills training and improve access to on line job-seeking skills. Persons who are deaf face challenges related to communication as they use sign language and less opportunities are availed to learning sign language. With inclusion, we find a need to create inclusive social and working environment for all.

The chapter addresses importance of enhancing ICT skills training opportunities for enhancing employment prospects for the deaf to prepare them for the fourth industrial revolution responding to questions: what is the status on the availability of ICT skills training for the deaf? What are the strategies used to facilitate ICT skills training for deaf for enhancing their employability status? What are the status of availability of *ICT infrastructure* to facilitate ICT skills training for the deaf?

BACKGROUND

Information, communication, and technology (ICT) skills training for the deaf people with disabilities is important for realizing employment, job creation and contributing to personal and national development (Ajrun, 2021; Enkhtsogt & Kim, 2018; Ngonyani & Mnyanyi, 2021; Thompson, 2018; Ullmann, et al., 2018). Delayed, creation of ICT skills training to persons who are deaf increases negative impact of the disruptive technologies on the socio-economic development related to personal freedom, reduced employment chances, loss of jobs, reduced participation in digital economy, increased illiteracy and reduced creativity in social network (Melnyk, et al., 2019; Muza & Debnath, 2021; Sineviciene, et al., 2021). According to WHO projections, approximately 2.5 billion individuals will have hearing loss by the year 2050, at least 700million of them would need rehabilitation services (WHO, 2021). Furthermore, the World Federation of the Deaf (WFD), an international non-governmental organization in 2013 estimated around 72 million deaf persons and that More than 80 percent of these 72 million people, resided in developing nations, where the government frequently has little knowledge of their needs. It is estimated that the number of people with disabilities is on the increase, accounting for about 15% of the population, indicating a need to have in place systems that support disability inclusion (World Health Organisation [WHO], 2011; WHO, 2018; Thomson, 2018).

Globally there are efforts to ensure accessibility to ICT technology for persons with disabilities like the emergency of artificial intelligence and development of applications that enable persons with disabilities to use technology (Borg & Larsson, 2011; Raja, 2016; Bjelčić & Švelec, 2019). Little is known about how deaf people access ICT skills training in Tanzania. It is unknown how teachers can facilitate ICT skill training and modify available ICT curricular to meet the needs of people with disabilities in the implementation of inclusive education in schools (Ngonyani & Mnyanyi, 2021). Nurturing ICT skills training for the deaf require adaptations in the curricular so it is made accessible. With the widespread use of ICT worldwide, there is a need to ensure everybody has an opportunity to learn and use it to improve their capability to participate in the global economy. Drawing on resource-based and dynamic