

Introducing a Course on Open Educational Resources (OER) during COVID-19 to Empower Women Learners with Visual Impairment- Perceptions, Practices, and Potentials

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Abstract

This paper reflects on the potential of introducing an OER course to empower visually impaired female learners in Karachi, Pakistan, during COVID-19. Through a participatory action research approach, twenty female learners completed an adapted course titled 'Understanding Open Educational Resources', offered by the Commonwealth of Learning. For a hands-on experience, they later participated in various collaborative activities. Data was gathered through audio surveys, focus groups, and interviews, and analyzed thematically. Overall, the course empowered participants and shifted their dependencies to independencies. Participants were engaged in communities of practices, and took ownership to search, filter, and create/adapt open learning resources. The course has opened up new avenues for them to benefit their community members in innovative ways. It is proposed to introduce OER in national education policy to ensure educational accessibility among the disadvantaged population.

Keywords: Open Educational Resources, Empowerment, Visual Impaired Learners, Equity and Inclusion, Resilience

Introduction

Pakistan's education system has been facing multifarious challenges, including inequalities and disparities for decades. COVID-19 pandemic has additionally disrupted the education system. Despite weak online learning infrastructure, limited resources, and a lack of teachers' and learners' preparedness for digital literacy and conscious networking, educational institutions were compelled to shift from in-person to online/remote learning. This transition has resulted in inequitable educational access, particularly among the learners belonging to disadvantaged communities.

Learners with disabilities have always been marginalized from equitable educational opportunities due to stigma, discrimination, prejudices, and weak policies interventions. In recent times, COVID-19 has added more affliction to marginalized disabled populations, making educational diversity and equity more regressive than progressive for them.

A few studies have identified extreme educational vulnerabilities, fragilities, exclusion, and inequalities faced by learners with disabilities during COVID-19 (Jones et al., 2021; UNICEF & UNESCO, 2021; UNESCO, 2021; World Bank Group, 2021). In some countries, like Saudi Arabia, full educational exclusion of hard-to-hear children is chronicled (Madhesh, 2021). In their paper, Shakespeare et al. (2021) shared an example of young people with disabilities, who struggled to access online educational materials during the closure of the school in Uganda because of a lack of access to assistive technology, and lack of availability of online resources in an accessible format.

United Nations Human Rights (2020) stated, "To reduce the impact of disruption in education [during COVID-19], some states are adopting remote learning practices. In these cases, however, students with disabilities are facing barriers on account of the absence of required equipment, access to the internet, accessible materials, and support necessary to permit them to follow online school programs. As a result, many students with disabilities are being left behind, particularly students with intellectual disabilities".

One of the survey reviews reported, "lack of access to the network/WiFi, lack of access to course exams or assessments, and difficulty with communication to instructors" (Sutton, 2020, p.8) as major challenges faced by higher education learners with disabilities during COVID-19. UNESCO (2021) highlighted, "The digital divide in

learners' access to equipment, electricity, the internet and teacher quality is deepening the learning divide in every country – especially for learners with disabilities, who often face the additional barrier of inaccessible learning content” (p.5). Educational exclusion during COVID-19 has demonstrated a more catastrophic experience for disabled females, living in a patriarchal society.

Inadequate online learning interventions have resulted in social isolation, mental stress, and educational exclusion among Pakistani young school-going learners with disabilities (Nasir & Hameed, 2021). One of the national reports confirmed, “No special schemes were introduced by the government to ensure the continuity of education for children with disabilities, even though the Education Response Plan does mention the need for developing content and resources for children with special needs. This neglect makes 88% of children with disabilities (5–16 years old) vulnerable to discontinuity of educational activities” (Agha et al., 2020, p.28). The policy intervention, recently proposed by the Higher Education Commission in Pakistan, to support the education of persons with disabilities has also failed to address their online learning needs during COVID-19¹.

To build educational resilience, promote equity and inclusion, and empower persons with disabilities, innovative low-cost digital strategies seem a pertinent route. OER is a potential tool to empower disadvantaged groups. Asha Kanwar (as cited in Commonwealth of Learning, 2017) expressed, “OER support the notion of knowledge as a social product and education for all as a human right... [It has] the potential of putting a book in the hands of every learner”. The General Conference of UNESCO (2019) recognizes the significance of OER in building inclusive knowledge societies via equitable, inclusive, and open dissemination of teaching and learning resources.

OER offers low-cost or free learning resources and encourages individuals to participate in communities of practice. An array of literature considers OER as a panacea to educational quality, affordability, sustainability, and accessibility challenges (Kurelovic, 2016; McGreal, 2017; Ossiannilsson et al., 2020; OECD, 2007).

OER offers great potential to facilitate the educational needs of persons with disabilities. For example, it increases the accessibility of free or low-cost resources and empowers them to recreate/adopt open resources (Navarrete & Lujan-Mora, 2015; UNESCO, 2019; Zhang et al., 2020). Considering OER as a viable solution, however, greatly relies on digital skills and literacy, accessibility to the internet and resources, and ownership at the bare minimum.

Persons with disabilities are likely to face challenges in using and adapting OER due to lack of awareness, training in the use of OER, and modalities constraints (Moon & Park, 2021). OER also poses significant financial, institutional, and technological risks to quality knowledge, pedagogy, resources accessibility, adoption, and usability (Abri & Dabbagh, 2018; Hylén, n.d.; Luo et al., 2020; Schultz & Azadbakht, 2021).

Research studies that confirm the potential use of OER in the Pakistani context are not much documented (Hussain et al., 2013; Majeed, 2018; Shams et al., 2020). Working with persons with disabilities for more than a decade, I identify OER as a tool of empowerment for persons with disabilities. It can make them more independent in making educational choices, and make them independent in the educational process through collaboration. Awareness of OER is beneficial for the visually impaired, as it can allow them to gather, filter, and create learning resources to widely disseminate quality educational resources at low or no cost. Introducing OER can support their learning needs, and engage them in innovative, collaborative, and accessible educational practices.

Objective

My research explores the use of OER by persons with visual impairment. It also looks at the potential of introducing an adapted course on OER towards empowering visually impaired female learners during COVID-19.

Research Design

I have adopted a single case study-bound participatory action research (PAR) approach. It involves the researcher and participants to understand the challenges and suggest possible solutions collectively (Coghlan & Brydon-Miller, 2014; Kindon et al., 2007). In this research, I served as a facilitator, whereas, participants served as co-facilitators.

¹ See <https://hec.gov.pk/english/services/universities/pages/policy.aspx>

Twenty visually impaired female learners were selected from one of the institutions offering vocational training to disabled youth in Karachi, Pakistan.

I initially carried out focus group discussions to find the awareness and perceptions of participants about OER. It was followed by the desk review via a protocol-driven approach using the PICO search framework. Finally, I adapted and introduced a course titled Understanding Open Educational Resources offered by the Commonwealth of Learning. To find the potential of OER, participants were later engaged in different activities. Data was gathered through audio surveys, focus groups, and interviews. Data were evaluated using narrative analysis. My research followed the BERA Ethical Guidelines for Educational Research and the National Disability Authority (2009) disability research ethics guidelines.

Findings and Discussion

During the focus group, participants expressed that they have encountered difficulties during the transition to online education due to a lack of preparedness and limited resources. They expressed that due to the unavailability of learning resources on a wide range of topics, they often feel excluded from acquiring diverse knowledge, and lack participation in the learning process.

Also, lack of online learning resources in different accessible formats brings more challenges to the forefront for them. It was discovered that participants were not familiar with the concept of OER. They considered all the online available learning resources and materials as OER. When discussing its potential to support their learning needs, they showed a willingness to learn about OER for improving learning practices. All the participants had a personal mobile phone with internet access.

Through PICO, 183 studies were selected. 12 research studies and reports were shortlisted about the subject matter. Very limited research studies explored the use of OER by persons with visual impairment. From desk review, it was identified that the availability of the online OER in different accessible formats and languages is limited to cater to the needs of visually impaired learners. In addition to lack of awareness, some assistive technologies have barricaded accessing and adapting OER.

For this study, I adapted the course titled Understanding Open Educational Resources offered by the Commonwealth of Learning. The course was supplemented with a few individual and collaborative activities, that I designed with the help of my mentors and visually impaired volunteer teachers.

I first completed the course and then translated the available transcript into a regional language. The course content was not changed, however, one of the mentors suggested reducing content. We, therefore, did not include the history of the open movement, and components of an institutional policy. All the available quizzes were gathered and used during the oral quiz. We then chose varieties of low-cost technologies and platforms for the online activities like JAWS, Applian, NVDA, WhatsApp, mobile recorder, google docs, google Forms, and OERCommons. I filtered the selected technologies and the activities with the support of a few visually impaired volunteer teachers.

After all the preparation, I delivered the same course in bilingual mode (Urdu and English) to the participants from the 1st of June to the 15th of June 2021 (twice a week; total duration of 16 hours). During training, participants were familiarized with topics like OER and its types, CC licensures, online search strategies and techniques, and criteria for evaluating OER. There were four units, each comprised of theory (30%) and practical (70%) components. Customized individual activities were performed using google docs, and a mobile recorder, whereas, for group activities, WhatsApp closed group was formed.

The course not only familiarized participants with the concept of OER but also engaged them in communities of practice. One of the participants expressed,

“OER has ensured our educational inclusion and representation in a global learning community. I learned how to write and translate open educational content, and publish it via open platforms. I always wanted to document my knowledge in the form of stories. We got the opportunity to share our stories, which was later compiled in the form of the short e-story book”.

They enjoyed participating in individual and collaborative activities like searching, collecting, and localizing CC-licensed audios, videos, and reading resources. It boosted their morale and also supported their well-being. One of the participants acknowledged his excitement,

“We felt like a home environment in WhatsApp closed groups. We not only learned, shared open resources, gave feedback to one another, but the group also supported our mental well-being”.

Another participant said,

“At the beginning of the course, I was a bit hesitant. But gradually, I realized the blessings of OER. During the searching activity, I realized that much educational content is not available in accessible formats. Also, we could not find the resources written by visually impaired persons. After this course, I feel empowered! I plan to start my own audiobook publishing house someday”.

The success of the course was measured by the final project. Participants gathered, adapted, and created OERs on mental health in different accessible formats. They recorded videos with peers and others on mental health awareness and compiled stories, tips, and activities on positive well-being. One of the participants said,

“Participating in group activities has opened up new ideas to support my community members' mental well-being in innovative ways”.

Participants presented their final work in a mini-symposium in digital poster format. A few students felt trouble designing a poster. They were offered additional support by their fellows. One of the participants shared,

“The poster presentation improved my presentation and poster designing skills. I published a digital poster under Creative Commons license, and will continue this practice in the future”.

During the entire process, participants were actively engaged and suggested improvements in the course content, formats, and activities. Participants now desire to diffuse their learning to other visually impaired and intend to localize and design more accessible skill-focused open courses for their community.

Conclusion

OER has the potential to address the educational needs of learners with disabilities. However, policymakers must realize the benefits and introduce OER in national education policy. There is a need to develop an open repository of resources in accessible formats for persons with disabilities. In addition, this research study must be carried out on large scale to cater learning needs of all disabilities across Pakistan, and the world.

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