

## Investigating Employability - Sustainable Development Nexus in Open-Distance Learning

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### Abstract

Employability in higher education is recognised as a crucial aspect of enhancing human capital. The market-oriented values compel universities to play a crucial role in contributing to a knowledge-driven economy by developing graduate employability. Open Distance Learning (ODL) contributes to the realisation of quality and affordable education and promotes graduate employability by providing needs-based skills required by the contemporary labour market. Against this backdrop this review study aims to understand critical and explorative concepts of employability and sustainable development in an ODL university. The study comprehensively reviewed the literature sourced from ERIC, Google Scholar and Scopus databases from 2013-2023. Insights from the reviewed literature, revealed the following themes: employability in open distance learning context, education for sustainable development, linking employability to sustainability in ODL and critical issues in ODL. The findings suggest that the contribution of universities should go beyond teaching disciplinary content and should enhance graduate employability considering a diverse cohort of students. The review contributes to the field of higher education by articulating that strengthening the competencies of graduates produced in ODL provides actionable knowledge relevant to promoting student development and solving complex-socio-economic challenges related to sustainable development. The review provides critical insights into improving employability and sustainability in ODL.

**Keywords:** Open distance learning, graduate employability, sustainable development

## ***Introduction***

Globally universities strive to enhance graduate employability due to an influence of the excessive demands for work ready graduates by the labour market. Labour market changes have compelled universities to produce employable graduates possessing critical competencies relevant for the workplace (Holtzhausen, 2012). Employability is regarded as the ability to move self-sufficiently with the work environment to achieve potential by means of sustainable development (Holtzhausen, 2012). University response to developing graduate employability has centred on providing opportunities to develop employability skills by embedding them into the curriculum (Holtzhausen, 2012). Graduate unemployment has skyrocketed in developing countries, for instance high unemployment rates remain high in Botswana especially for university graduates (Pheko & Molefhe, 2017). The pressure on graduate employment is acute in developing and poorer countries which is exacerbated by the need to re-examine curricula to support graduateness (Tait, 2018).

ODL has the potential to widen-access and facilitate increased higher education participation. ODL involves planned learning that requires a defined system of delivery, teaching techniques, modes of communication and structured administration and management (Isaacs & Mohee, 2020). According to Mphahlele and Makokotlela (2020) ODL is conceptualised as a learning environment that breaks the barriers that limit students to access higher education such as location and distance from university financial pressures and social problems. Learner interactions, instructors, content and the medium of instruction are essential elements that characterise distance education, thus an interplay of these aspects determine the value of distance learning (Ustati & Hassan, 2013). ODL is offered as a complement to the conventional learning to meet the educational needs. In response to the expansion and equitable access to quality learning opportunities, resources and qualifications to the youth and adults in Southern Africa ODL has been incepted to allow them to further their studies (Isaacs & Mohee, 2020). As such, ODL plays a critical role in educational development of black people who suffered the consequences of apartheid policies that denied them to access higher education (Nubane-Mokiwa & Letseka, 2015).

ODL plays a critical role in education especially for national and sustainable development. ODL advances the achievement of the Sustainable Development Goal 4 on education which prioritises the acquisition of foundational and higher order skills. Distance education remains to be at the forefront of using technology in teaching and learning with open universities in a prime position to rethink pedagogy (Tait, 2018). The distance learning landscape consists of dynamics that limit graduate employability development. For instance, there are limited workshops that target enhancement of employability skills, lack of access to internet resources, and the lack of face-to-face interactions. Given the ODL's unique characteristics, some challenges are prevalent concerning exposing students to some of the employability skills (Shuttleworth, 2012). Studies have noted a mismatch of useful skills obtained by graduates through higher education institutions which is evident upon graduation (Calonge & Shah, 2016; Pheko & Molefhe, 2017). It is against the background of the articulate existing challenges that this study aims to investigate the practices that prioritise graduate employability and sustainability in ODL.

## ***Methodology***

This study employed a comprehensive literature review approach to explore trends in employability and sustainable development in ODL. It assessed the implications of the pedagogical practices adopted in ODL and how they influence graduate employability. An extensive literature search was conducted from the academic databases namely Scopus, ERIC, and Google scholar from 2013-2023. The search key terms that were used include "graduate employability", "open distance learning" "sustainable development". This search strategy was guided by an inclusion and exclusion criteria, resulting in the selection of 34 articles that were analysed in-depth. Articles that focused on employability and sustainability practices in ODL were included while articles with a study context not specific to ODL were excluded. The analysis involved screening the abstracts, reading full papers and categorising the content according to the emerging themes.

## ***Findings***

### ***Employability in an ODL context***

Employability development occurs through learning curriculum content and partaking in extra curricula activities. Results emphasised the need to integrate employability skills into the curriculum of ODL institutions to assist the university to achieve the goal of producing work ready graduates (Ifeoma, 2019). In one study the learners perceived that the modality of course delivery and structure have enhanced their soft and digital skills which will be useful in seeking employment (Panigrahi, 2021). As such, academics need to adapt curriculum to the labour market demands by integrating subject-related and transferable skills and competencies (Behle, 2021).

Academics, students and industry partners play a critical role in developing graduate employability Mentz, Schoeman and Look (2019), however the responsibility of students remains paramount (Botha & Dykes, 2019).

Essentially, employers should be involved in curriculum design to improve graduate attributes that enhance employability (Bukaliya & Mubika, 2014) and to align the degree programmes with the labour market requirements to minimise the skills mismatch (Mafumbate, Gondo & Mutekwe, 2014). A study by Ofosu (2023) revealed that distance education graduates are employable and possess employability skills, however the university should strengthen collaborations with the industry to improve curriculum design to deliver work ready graduates. Training provided to distance learners enhanced the acquisition of skills and knowledge aiming to improve employability for UAb graduates (Abrantes, et al, 2022).

Employers hold varied perceptions regarding employability of ODL graduates. Employers emphasised the need to foster employability skills such as problem solving and critical thinking in the curriculum (Miglani et al, 2018). Employers who had prior experience with ODL graduates either at industrial training level, teaching internship or as employees, had positive perceptions about these graduates and are ready to employ them (Falode, Ogunje, Chukwuemeka & Bello, 2021). Shuttleworth et al, (2013) claim that in general ODL as provided by Unisa meets and exceeds the responding students' expectations regarding the enhancement of their employability skills. Conversely, one study, Alpaslan (2019) found out that a disconnection between theory and practice is a contributing factor for the unpreparedness of social work graduates to begin practice, thus introducing a community service programme will be useful to empower them to become fit for practice. While another study argued that the chemistry department should blend the technical and soft skills to enhance the requisite graduate attributes (Tafesse & Mphahlele, 2018).

Exposure to the workplace is a great approach of developing employability and allows critical reflection in students. Nenzhelele (2014) argues that experiential learning influence employability to a greater extent. For instance, Unisa support graduate employability and exposure to employment opportunities during studies (Archer & Chetty, 2013). In another example ZOU ensures that every student goes on industrial attachment in line with their study programme to gain hands-on experience except for courses such as Chemistry, Biology and Mathematics (Mutambanengwe & Dambudzo, 2019). A such, exposure to practical experience during studies has a great potential of enhancing students' employability (Enwerem & Enwerem, 2021). Falode, Ogunje, Chukwuemeka and Bello (2021) found out that employers are more concerned about the generic skills in which the graduates could be able to showcase in the workplace than the earned qualifications, certifications and the type of institutions attended.

The finds revealed that ODL learners possessing a strong sense of self-directedness were more confident in their employability attributes and positive about career self-management and career resilience (Botha, Coetzee & Coetzee, 2015). A study by Lim et al, (2015) has shown that ODL programmes by OUM have been successful in producing graduates who meet the expectations of their employers regarding employability competencies. The most disadvantaged students accessing HE through part-time distance learning understands the value of employability skills, but on their own (highly contextualised) terms (Butcher & Rose-Adams, 2015). However, Delaney and Farren (2016) argue that little attention is paid to how those already in employment transition into graduate employment, and build a graduate identity, because of completing a degree on a part-time/distance basis.

### ***Education for sustainable development***

Education for sustainable development outcomes are often described as outcomes and that being the case graduates need to have the values, attitudes, emotions and desire for influencing their behaviour to become environmentally responsible (Shepard & Dulgar, 2015). Open distance learning is considered a significant contributor to attaining SDG 4 focusing on quality, inclusive and equitable education. A study by Osikomaiya (2020) emphasises that SDG 4 can be achieved with adequate provision of training through ODL to in-service teachers. Zhu and Chikwa (2007) assert that ODL plays an essential role in shaping sustainable development for emerging economies.

Efforts towards innovation in the ODL system should be improved to facilitate sustainable development through quality education (Mondal & Chatterjee, 2023). For instance, Uma and Sinhamahapatra (2013) assert that an educational programme on gender, agriculture and sustainable development in ODL mode has significant academic importance in building the capacities of all graduates in general and agriculture students in particular. Orlova et al (2021) revealed that the development of practical skills such as teamwork, communication skills, and critical thinking in the ESD sphere is encouraged. A study by Mawonde and Togo (2021) revealed that few students were involved in some campus SDGs-related practices and in off-campus SDG projects because the geographical distribution of ODeL students was identified as the major barrier to student involvement in SDGs. Chiome (2013) argues that the suppressed voices of quality in ODL are working as sustainable development inhibitors.

### ***Linking employability to sustainability in ODL***

The discourse of sustainability and sustainable development have taken precedence in higher education. In one study Pretorius, et al (2021) illustrate how Work Integrated Learning (WIL) can be incorporated in ODeL to prepare students for employment in skills-based sectors with a sustainability focus, as conservation. Central to education for sustainability is a quest for affective learning outcomes of values, attitudes and behaviours that shape learners to become independent critical thinkers (Shepard, 2007). Winfield and Ndlovu (2019) argue that explicitly linking employability to sustainability and embedding these aspects into curriculum is crucial to students, institutions, employers and society. ODL students gain significantly from incorporation of WIL in curricula, which upgrades their learning experience from theoretical only, to a level exposing them to direct engagement with sustainability issues (Nyoni, 2022). The advantages in terms of graduateness and employability are important considerations to incorporate WIL and/or aspects Education for sustainability (EfS) in curricula (Wilson & Pretorius, 2017). This approach also has the potential to assist institutions to achieve the mission of delivering SDGs. This contributes to fostering employability and sustainability skills among students. The experience gained suggests that students exposed to Inquiry based learning (IBL) are equipped better for workplace demands, also in terms of sustainability issues, than would otherwise be the case (Pretorius, 2016).

It remains critical that employability and sustainability should be incorporated into the curriculum to enhance the learning outcomes across all levels. As such, it is valuable to explicitly link the learning activities to the SDGs to allow students to develop capabilities that would empower them to be meet the complexities of the contemporary workplace as well as being globally active citizens. Tamrat (2022) noted a limited level of commitment by the college toward addressing issues of sustainability and the difficulties of engagement through ODL which may not be always amenable to incorporating the components of HEfSD

### ***Critical issues in ODL***

Barriers related to accessing distance learning education exist. In African contexts, ODL is challenged by the issue of acceptance and recognition given that people are used to campus learning and therefore view ODL as a second best (Dipholo & France, 2018). Limiting factors include lack of internet, resource materials strategic frameworks and relevant infrastructure. Ngakane and Madlela (2022) revealed that ODL institutions face challenges such as lack of internet accessibility, poor connectivity and lack of digital gadgets particularly for students from disadvantaged communities, expensive data bundles and absence of adequate policies guiding ODL practices. Funding remains a critical challenge concerning upgrading of information communication and technology infrastructure, programme development and accreditation and staff capacity building.

Developing countries often adopt pedagogical models and perspectives considered as best practices in education, however these models are inherited and not a fit for purpose given that they were designed for highly distinct macro contexts (Herdia, Carvalho & Viera, 2019). Therefore, it is essential for institutions to adapt these models to the contextual realities to advance in the provision of quality and relevant ODL programmes. Dipholo and France (2018) argue that the distance learning provision at the University of Botswana since 1991 lacked a clear strategy for institutionalising it as integral to the university's core business. As such, it has remained neglected particularly the management nature which compromises its quality. Oladokun (2016) argues that in Botswana there seems to be a lack of quality library and information services to enhance distance learners' motivation, learning process and success. Accessing appropriate library and information services could reduce the effect of distance and isolation often experienced by learners (Oladokun, 2016).

There is a lack of standardised criteria to measure the quality of support services provided. For example, Kgabo (2021) conducted a study to explore the challenges experienced by lecturers in an ODL institution and established that lecturers are not inducted on their core functions hence the shortcoming in delivery of support services. Zongozzi (2020) explored the barriers towards accessible quality for higher education for students with disabilities (SwDs) in an ODL institution and found out that lack of awareness, procedures of identifying SwDs, inaccessible learning materials and lack of capacity by lecturers to support SwDs are the major factors that hinder the provision of quality higher education for them. E-learning innovations in higher education institutions are increasingly adopted to address the evolving educational demands. Mbatha and Naidoo (2010) investigated the use of e-learning resources by communication science students at UNISA concerning how they provide a seamless learning experience to bridge the transactional distance in an ODL context and discovered that e-learning facilitates and open avenues for effective teaching and learning. However, Tladi and Leya (2019) assert that e-learning development is challenged by allowing technology to drive the learning programmes rather than programmes driving the technology, serving the enabler role.

### **Discussion**

Aligned to the neoliberal policies, the analysis signals that the contribution of universities should go beyond teaching disciplinary content but rather enhance graduate employability by focusing on work readiness. This calls for graduates to develop generic and technical skills which are relevant for the contemporary labour market. Individual employability encapsulates the knowledge, attitudes and skills possessed by an individual and how they utilise them as asserts when they are in specific contexts such as the labour market (Holtzhausen, 2012). One gap identified from the literature is the need to incorporate an account of specific practices that might allow open universities to promote alternative strategies to strengthen employability and sustainability. The analysis has shown that students, universities and the employers play a critical role in employability development particularly through experiential learning initiatives. Pheko and Molefhe (2017) argue that employability is a joint responsibility of key players in the labour market, including universities, employers, incumbent and potential employees.

Research has indicated that education for sustainable development foregrounds sustainability as a practice that strives for the quest for affective learning outcomes of values, attitudes and behaviours that allows graduates to become socially and environmentally responsible. Universities continue to strive to improve the quality of life, care for the natural environment and prepare graduates for the workplace via research-based practices. Education for sustainable development has significantly improved due to the drive to open higher education as led by open universities globally (Tait, 2018). Education for sustainable development bridges the gap between the traditional and contemporary era that receives global acceptance and global reach (Nanjunaswamy, et al, 2021). In light of this the political, technological, economic and socio-cultural factors contributes to the development of ODL (Zhu & Chikwa, 2007).

The higher education context is evolving rapidly which makes it crucial to link employability to sustainability. Engaging in real work experiences can allow students to implement multiple dimensions of sustainability in professional contexts. Evidence suggests that ODL institutions engage sustainability practices through various initiatives to advance sustainable development. In this regard, higher education plays a key role in advancing SDGs world-wide, through teaching, research and campus initiatives (McCowan, 2023). According to Hajdukiewicz and Pera (2020) education is critical in achieving sustainability and this remains unquestionable given that people need to learn new skills as well as adapt to values that contribute to sustainable development. Crucially, distance learning education should be able to develop an employability and sustainability conscious mindset amongst ODL graduates. McCowan (2023) argues that sustainable development can play a generative role in institutions by drawing their attention societal commitment and the public good.

Based on the social and structural inequalities there are noticeable barriers limiting the advancement of ODL. These include the lack of funding, poor internet connectivity, qualified staff and technology infrastructure as the most critical issues affecting ODL. These barriers might limit the development of employability and sustainability skills at institutional and individual levels. Considering this, provisions of ODL infrastructure are inadequate in Botswana especially for learners in rural areas and low-income families (Isaacs & Mohee, 2020).

## Conclusion

This study explored the role of advancing graduate employability and sustainability in an ODL context. The role of ODL is certainly relevant and important to enhance employability and sustainability skills thus preparing graduates for the labour market. The findings have revealed that ODL institutions have developed teaching modalities and pedagogies aiming at enhancing employability and sustainability. ODL institutions ought to embrace employability and sustainability by allocating adequate resources to strengthen skills in these areas thus ensuring that graduates are work ready. A collective effort from academics and industry is required to develop the measures for employability and sustainability in ODL. As such it is worth institutionalising this agenda into university strategies to guide the policies and practices as well as prioritising it on curricula.

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