



Access to Education Through ODEL: Evaluating the Paradox of Inclusion and Exclusion among Marginalised Women and Subalterns

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Abstract: *The study delves into the paradox of inclusion and exclusion in Open and Distance e-Learning (ODEL) for marginalized women and subalterns. Grounded in Social Inclusion Theory, it sought to illuminate the myriad challenges these groups face in accessing ODEL. The research underscores the vital importance of addressing social, economic, and cultural barriers that hinder inclusivity in educational opportunities. Utilizing qualitative methods, the study involved in-depth interviews with 20 women selected through purposive and snowball sampling techniques. Content analysis was also performed on admission records and registration statistics of active students and dropouts. The thematic analysis employed revealed various significant barriers to participation in ODEL. Key challenges identified included limited access to technology and socio-economic constraints. Lack of supportive services that restrict the ability to engage in ODEL, such as mentorship and technical assistance, further exacerbates the exclusion of marginalized populations. Despite these obstacles, the research highlights the transformative potential of ODEL to expand educational access for disadvantaged groups if only these obstacles could be addressed. However, the study fully acknowledges the persistent challenges marginalised groups face in ODEL. Recommendations offered by the study focus on strategic interventions to enhance inclusivity in ODEL programmes, ensuring fulfillment of Sustainable Development Goals 4 (Quality Education), 5 (Gender Equality), and 10 (reduced inequality). By shedding light on the real and lived experiences of marginalized women in the context of ODEL, this research provides actionable insights for policymakers, educators, and practitioners. The aim is to foster the creation of more equitable ODEL programmes that contribute to a fairer educational landscape, ultimately empowering subaltern voices and facilitating their access to quality education. This inclusive approach is essential for promoting social justice and equality in educational opportunities for all.*

Keywords: *Open and Distance e-Learning (ODEL), sustainable development, marginalized women, subalterns, social inclusion, equity in education.*

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1. Introduction

Education is universally acknowledged as a powerful tool and a key driver of development, economic growth, and social progress, yielding substantial benefits for both individuals and society. This recognition places education centrally within the United Nations

Sustainable Development Goals (SDGs), specifically SDG 4, which serves as an urgent call to action to end poverty and reduce inequality (Dzvimbo et al., 2022). In Zimbabwe, this global mandate is localized through the Education 5.0 policy, which shifts the academic focus toward innovation and industrialization to drive national growth (RSIS International, 2025). Consequently, ensuring inclusive and equitable quality education and

promoting lifelong learning opportunities for all remains a critical global and national imperative (Adipat & Chotikapanich, 2022).

The Open, Distance, and e-Learning (ODEL) model has emerged as a revolutionary approach to dismantling geographical and temporal barriers. By allowing students to learn at their own pace, ODEL opens opportunities to previously excluded "subaltern" groups, those marginalized by power structures and geography. In Zimbabwe, ODEL has been instrumental in reaching those denied access to traditional education, such as women managing household responsibilities or residing in remote areas (Yu et al., 2025). The establishment of the Zimbabwe Open University (ZOU) was a direct response to this need, providing an alternative route for disadvantaged groups and facilitating the "massification" of higher education without the need for physical expansion (ERIC, n.d.; ZJBEM, 2024).

Historically, women and girls in Zimbabwe have encountered significant socio-cultural obstacles, where traditional norms often prioritized male education (Afrobarometer, 2025). While recent data suggests near-parity in primary and secondary completion, a significant gap remains at the tertiary level, where women are less likely than men to hold a degree (18% vs. 25%) (Afrobarometer, 2025). ODEL was designed to bridge this gap by providing flexibility to study while working; however, a concerning paradox is emerging. While the model is hailed for inclusivity, current research indicates that the heavy reliance on technology is creating a "second level" digital divide (Mashapure et al., 2025). The gender digital divide in Sub-Saharan Africa remains a complex challenge; women often face restricted digital participation due to socio-cultural norms, insufficient financial resources, and limited ownership of digital devices (Mashapure et al., 2025). Furthermore, students in rural communities are frequently disadvantaged by the "triple threat" of infrastructure: limited electricity, poor internet connectivity, and the high cost of data, making their learning objectives nearly impossible to achieve (Glotan Journals, 2024; Scielo, 2024). This technological gap risks widening existing academic disparities, as the digital divide significantly affects educational outcomes for those without easy access to modern information technology (ResearchGate, 2025).

By examining the digital and economic prerequisites that risk excluding the very groups ODEL was designed to serve, this study aims to provide evidence-based recommendations to fulfill the promise of SDG 4 in the Zimbabwean context.

The references supporting this research include various works discussing the importance of equitable education, the challenges faced by women in accessing education, the revolutionary potential of ODEL, and the systemic hurdles that perpetuate inequality. These include studies

by Adipat and Chotikapanich (2022), which emphasize the significance of SDG 4, and Afrobarometer (2025), which highlights the socio-cultural barriers faced by women. Further contributions from Dzvimbo et al. (2022) and Mashapure et al. (2025) detail the implications of educational reform and the digital divide. The collective insights from these sources aim to underline the urgent need for an inclusive approach in the educational sector, particularly in a Zimbabwean context where ODEL presents both opportunities and challenges.

1.2 Statement of the problem

Despite the promise of Open and Distance e-Learning (ODEL) to foster inclusivity, a paradoxical situation has arisen where both inclusion and exclusion coexist, hindering marginalized women and subaltern groups from achieving their educational goals. While ODEL is designed to provide flexibility in terms of distance, time, and space, certain processes and systems within it have become exclusionary, undermining its original intent. Consequently, many individuals eager to pursue their studies through ODEL encounter substantial barriers, resulting in unfulfilled potential. This growing gap in inclusivity reveals that the system's intended accessibility is increasingly out of reach for some, as reflected by declining participation rates.

1.3 Research Questions

The following research questions guide the study:

1. What are the key challenges faced by marginalized women and subalterns in accessing and participating in ODEL programs in Zimbabwe?
2. How do socio-economic and cultural factors affect the experiences of marginalized women and subalterns in ODEL?
3. How can ODEL programs be designed and implemented to better support the educational aspirations of marginalized women and subalterns?

2. Literature Review

2.1 Factors influencing participation in ODEL

A deeper understanding of the factors that impede learners' effective participation in ODEL is essential for educators and policymakers to design accessible and inclusive systems. These influencing factors can be broadly categorized into learner-related, environmental, technological, institutional, and policy-based dimensions.

2.1.1 Learner-Related Factors

2.1.1.1 Intrinsic Motivation and Self-Discipline

ODEL requires a high degree of intrinsic motivation and self-regulation, as it relies heavily on self-directed learning. Unlike traditional education systems where physical presence and group interactions with instructors and peers foster accountability, ODEL learners often find themselves isolated. Hartnett (2016) highlights that intrinsic motivation and self-discipline are critical for sustained engagement and success in online learning environments. Students lacking these qualities may struggle to remain focused and complete their studies.

2.1.2 Digital Literacy and Experience

Given that ODEL is technology-mediated, digital literacy is a prerequisite for participation. The ability to navigate digital platforms and use technological tools effectively significantly influences learners' experiences and outcomes in ODEL programs (Kearns, 2012). However, a persistent digital divide, particularly in developing nations, exacerbates inequities. This divide is not limited to access to devices but extends to insufficient digital literacy, which further marginalizes learners (Liyanagunawardena et al., 2013). Bridging this gap is crucial for ensuring equitable access to ODEL.

2.1.3 Environmental Factors

2.1.3.1 Learning Environments

The effectiveness of ODEL is heavily influenced by the learner's environment. Traxler (2020) asserts that a quiet, private, and conducive study space minimizes distractions and promotes engagement. However, many learners, especially those from low-income households, find themselves in congested or noisy environments that are not conducive to learning, which presents a significant barrier to effective participation.

2.1.4 Collaboration and Interaction

Opportunities for peer-to-peer and instructor interactions are integral to a meaningful learning experience (Garrison, 2017). While ODEL allows for virtual collaboration, the geographic dispersion of learners often results in feelings of isolation. Limited opportunities for real-time interaction can hinder the development of a sense of community and affect learning outcomes.

2.1.5 Socio-Economic and Cultural Factors

Socio-economic status, cultural norms, and financial constraints play pivotal roles in determining access to ODEL. Moyo (2018) notes that cultural expectations,

particularly for women, often place them in caregiving roles that conflict with their educational pursuits. Similarly, Kearns and Unwin (2015) argue that the intersection of poverty, gender, and disability exacerbates educational exclusion. High tuition fees and the lack of financial assistance further alienate disadvantaged groups. As asserted by Koul & Jadav, 2020, institutions must consider offering scholarships, flexible payment plans, or partnerships with donors to alleviate these barriers.

2.1.6 Technological Infrastructure

Reliable internet connectivity and access to devices such as computers or smartphones are prerequisites for successful participation in ODEL. However, as Guri-Rosenblit (2009) and Traxler (2018) highlight, marginalized populations often lack access to these resources. The high cost of internet services and technological devices remains a significant obstacle, particularly in developing countries (Mtebe & Raisamo, 2014). Moreover, users also require adequate digital skills to navigate ODEL platforms effectively, an area where many learners fall short (Zawacki-Richter & Anderson, 2014).

Institutions play a critical role in shaping learners' experiences in ODEL environments. Adequate support systems, such as real-time help desks and technical assistance, are essential for ensuring a seamless learning experience (Mtebe & Raisamo, 2020). Additionally, institutions must provide comprehensive training for both learners and instructors to promote digital literacy and familiarity with ODEL platforms. The design of these platforms should prioritize user accessibility and inclusivity, as emphasized by Bates (2015).

2.1.7 Policy and Regulatory Frameworks

Supportive policies are essential for promoting ODEL adoption and ensuring inclusivity. According to Latchem and Jung (2010), governments and institutions must implement policies that accommodate marginalized learners, such as financial assistance schemes and flexible payment plans. Blended learning approaches that combine traditional and digital methods can also enhance inclusivity by catering to diverse learner needs (McGreal, 2017). Additionally, mobile technologies have been identified as a tool for increasing access to education among marginalized groups, particularly in resource-constrained settings (Latchem, 2017).

2.1 Enhancing Inclusivity in ODEL

To fulfill its potential, ODEL programs must address the barriers that limit inclusivity. As Ngubane-Mokiwa (2017) notes, the lack of supportive services, such as mentorship and technical assistance, often exacerbates

the exclusion of marginalized populations. Furthermore, Kanwar and Taplin (2016) argue that the design of ODEL programs can unintentionally perpetuate existing inequalities. Institutions must therefore adopt a learner-centered approach, prioritizing the needs of marginalized groups during program design and implementation.

Strategies to enhance the inclusivity of ODEL include offering scholarships, mentorship opportunities, and technical training. Policymakers and educators must also prioritize the emotional well-being of learners, as highlighted by Aldao, Sheppes, and Gross (2015), by implementing support systems that help students balance work, family, and academic responsibilities.

While ODEL holds great promise for increasing access to education, particularly for marginalized groups, its inclusivity is often hindered by a range of factors. Addressing these barriers requires a concerted effort from policymakers, institutions, and educators to design and implement programs that are truly accessible. By prioritizing the needs of marginalized groups and fostering a supportive learning environment, ODEL can become a powerful tool for promoting social justice and equity in education.

2.3 Theoretical Framework

The study is grounded in *Social Inclusion Theory*, which underscores the critical importance of creating equitable opportunities for individuals and groups to actively participate in social, economic, and political life, irrespective of their socioeconomic status, gender, or background (Levitas et al., 2017). Central to this theory is the dual concept of inclusion and exclusion. While social inclusion refers to the process of integrating marginalized groups into mainstream societal functions, exclusion highlights the systematic marginalization and denial of access to resources and opportunities for specific groups or individuals (Dorling, 2020).

When applied to the context of *Open Distance Education and Learning (ODEL)*, Social Inclusion Theory provides a valuable lens for analyzing the paradoxical nature of inclusion and exclusion. ODEL programs, by their very nature, hold the potential to democratize education and create pathways for marginalized women and subalterns to access learning opportunities. However, the design and implementation of these programs must prioritize inclusivity to address systemic barriers. If not carefully structured, such programs risk perpetuating or even exacerbating existing inequalities (McGreal, 2020; Mtebe & Raisamo, 2022).

To truly contribute to social inclusion, ODEL programs must consider the unique challenges faced by marginalized groups, including women in underprivileged settings and subaltern communities.

These challenges often include limited access to technology, cultural constraints, and socioeconomic barriers. As Kearns and Unwin (2020) assert, programs tailored to the specific needs of these groups are more effective at overcoming barriers to participation and fostering inclusive learning environments.

Furthermore, while technology plays a crucial role in ODEL, it also creates a paradox. On one hand, technology enables access to education across vast geographical distances; on the other hand, it can inadvertently reinforce inequalities if access to devices, internet connectivity, and digital literacy is not equitable (Mtebe & Raisamo, 2022).

By situating ODEL within the framework of Social Inclusion Theory, this study emphasizes the need for equity-driven policies and practices. The theory advocates education systems that not only provide opportunities for marginalized groups but also actively dismantle the structural barriers that hinder their full participation. In doing so, the paradox of inclusion and exclusion within ODEL can be effectively navigated, enabling these programs to fulfill their transformative potential for marginalized women and subalterns.

3. Methodology

This study explored the paradoxical dynamics of inclusion and exclusion faced by marginalized women and subaltern groups in accessing education through Open and Distance e-Learning (ODEL). Rooted in social inclusion theory, the research sought to shed light on the complex challenges these groups encounter in pursuing education, which is a fundamental human right.

Adopting a qualitative approach, the study sought an in-depth understanding of the dual nature of inclusion and exclusion within ODEL. This methodology enabled the collection of rich, nuanced data through in-depth interviews with women and individuals with special needs enrolled in the Zimbabwe Open University (ZOU) ODEL programmes. The snowballing technique helped connect with respondents, some of whom had dropped out of school and halted their studies.

In-depth interviews were conducted with 20 participants until data saturation was reached and thematic saturation was achieved. Additionally, document analysis was performed on admission records and registration statistics of enrolled students and dropouts. Thematic analysis was utilized to analyze the qualitative data derived from both the interviews and document review.

Ethical considerations were paramount throughout the research process. Informed consent was obtained from all participants, ensuring they understood the purpose of

the study and their right to withdraw at any time without repercussions. Confidentiality and anonymity were rigorously maintained by de-identifying all personal information. The study adhered to ethical guidelines to protect the rights and welfare of all participants, ensuring a respectful and safe environment for sharing their experiences.

4. Results and Discussion

Recent statistics indicate a significant increase in the number of women participating in Open and Distance Education Learning (ODEL), surpassing their male counterparts. This trend suggests that ODEL may be particularly well-suited for women and marginalized groups who struggle to adhere to the demands of traditional educational systems. ODEL is therefore creating opportunities for previously disadvantaged groups who face barriers to mainstream education. One of the key advantages of ODEL is its flexibility, allowing students to study from virtually anywhere. This is especially beneficial for women, many of whom juggle multiple responsibilities. For instance, a student shared her experience, stating, *"I dropped out of school after I fell pregnant while pursuing O levels. I later wrote my exams as an external student and passed. I am now a housewife and mother of three boys, and I cannot afford traditional schooling since I have no one to care for my children. ODEL has been a blessing; I am now in my second year studying for a Bachelor of Education in Early Childhood Development (ECD) with ZOU. I dream of opening my own ECD Centre. ZOU provided an opportunity I couldn't have accessed otherwise."* This testimonial reinforces the notion that ODEL offers a unique educational opportunity for those balancing familial obligations with academic aspirations (Open University, 2021).

However, not all students experience the same ease in navigating ODEL. One young woman, who is an orphan, expressed her difficulties, saying, *"I am struggling to make ends meet, selling second-hand clothes and airtime to fund my education. The BEAM programme is unavailable for tertiary education, and last semester I couldn't register due to financial constraints. I hope to resume my studies once I gather enough funds."* Her story highlights the need for more robust financial support systems, such as loans for disadvantaged students, which are essential for fostering educational equity (UNESCO, 2020).

The Government of Zimbabwe's initiatives, such as the establishment of ODEL institutions, aim to cater to the needs of disadvantaged groups. One student praised the recent policy revisions that allow pregnant girls to sit for exams, stating, *"I gave birth to twins and had to look for work as a maid while studying with ZOU. Balancing school and familial responsibilities is challenging, but it's essential for a better future."* This highlights the

necessity for educational systems that adapt to the needs of all people, particularly those facing socio-economic challenges (World Bank, 2022).

Additionally, institutional support services, such as counseling, have proven invaluable. A recent graduate in Software Engineering remarked, *"Had it not been for the Student Advisor, I wouldn't have finished my program. I faced severe challenges, but the support I received helped me achieve my dreams."* This feedback underscores the importance of comprehensive student support services in retaining students and ensuring their success (Education International, 2019).

The growing number of women participating in ODEL signifies a positive shift in educational access and equity. While challenges remain, especially for marginalized groups, supportive structures within educational institutions are paving the way for a brighter future. Enhanced financial assistance and flexible learning environments can make a significant difference in empowering these students.

4.1 Learners with special needs

Learners with special needs, including those who are visually impaired, are noted to benefit from Open and Distance Education Learning (ODEL) programs, which aligns with the mission of institutions like the Zimbabwe Open University (ZOU) to empower marginalized groups through open learning. The enrollment of visually impaired learners in various ODEL programs is cited as evidence of this commitment to inclusivity. However, this positive aspect is tempered by significant challenges reported by students with special needs regarding the provision of necessary technological support. A student representative expressed concern that their group was *"not getting adequate and deserved service in terms of the technologies that cater for our group,"* specifically mentioning the lack of institutionally provided computers and specialized software for the visually impaired. Research in the broader context of ODL supports the finding that a lack of accessible learning materials and inadequate assistive technologies are key challenges for visually impaired students, often leading to feelings of isolation and hindering full participation (ResearchGate, 2025; IGI Global, 2022). Furthermore, studies in Zimbabwe have indicated that while ODL is considered ideal for blind students because they can learn at their own pace, there is a great need for specialized resources like Braille computers, internet access in resource centers, and highly trained personnel to assist them (Progressive Academic Publishing, 2017). In the context of digital learning platforms, research has also shown that for students with visual impairments, current e-learning platforms in Zimbabwe were often not designed to accommodate their needs, leading to inaccessibility issues and a lack of modifications by lecturers (ERIC, 2024). Despite these technological and

resource deficits, the students acknowledged and appreciated the efforts the university was making to accommodate some of their needs. The presence of representation for students with special needs within the Student Representative Council was highlighted as a positive mechanism, ensuring that their voices could be heard, which is a crucial component of effective learner support systems in ODL environments (IGI Global, 2022).

4.2 The digital gap

Many students studying through (ODEL) highlighted the significant challenges posed by the digital divide, which severely hampers their learning experiences. One participant articulated this concern, stating, *"Internet is a challenge; where we stay there is no internet facility. We do not even have smartphones and laptops, making our lives very difficult as most of the learning takes place online. We have to travel long distances to internet cafes, which are costly, and we can't afford the fees. We do not see ourselves completing our studies in this situation."* This sentiment reflects a broader issue documented in various studies, which indicate that limited access to reliable internet and digital devices can create substantial barriers for learners in developing regions (Koller et al., 2021; Kyei-Blankson et al., 2019).

Moreover, students expressed a need for institutional support in the form of technology provisions. They suggested that the university establish a scheme to provide gadgets to learners and offer affordable payment options. The obstacles do not end with access; many students reported difficulties navigating e-learning platforms, which for some were entirely foreign to them. This is significant given that educational institutions often assume that all students possess IT literacy, overlooking the reality that many do not. One participant pointed out, *"Some students are encountering computers for the first time and require training in basic computer skills."* This need for foundational computer training is echoed in research indicating that a lack of digital competency can exacerbate educational inequalities, as students who are not proficient in technology will struggle to engage with increasingly digital academic environments (Mahmood et al., 2020).

Moreover, the anxiety and intimidation expressed by students facing computer usage for the first time underscores the urgent need for targeted training programs. Some learners indicated a willingness to pay for such training, highlighting their determination to succeed despite the obstacles they face. This openness to self-investment reflects a broader trend in education, where learners are increasingly seeking additional resources and training to enhance their skills (Broadbent et al., 2018). The need for institutions to provide comprehensive IT training tailored to students with varying levels of experience is critical. Research

indicates that such initiatives are vital for fostering academic success among diverse student populations (Wagner et al., 2023).

Overall, the findings reveal a desperate need for institutions involved in ODEL to address the gaps in technological access and support. A free training program that includes basic computer skills would significantly benefit students, enabling them to navigate e-learning platforms effectively and achieve their academic goals. By creating such opportunities, educational institutions can help bridge the digital divide and empower all learners to succeed in their studies.

5. Conclusion and Recommendation

5.1 Conclusion

In conclusion, Open and Distance Education Learning (ODEL) has emerged as a transformative educational model that fosters inclusivity and provides opportunities for marginalized groups, particularly women, learners with special needs, and those facing socio-economic challenges. Its flexibility and adaptability have enabled many students, such as women balancing familial responsibilities, to pursue their academic aspirations. Testimonies from learners highlight how ODEL has opened doors for individuals who would otherwise be excluded from traditional education systems.

However, significant challenges persist, especially for disadvantaged groups. Financial constraints, inadequate technological resources, and the digital divide remain critical barriers to educational equity. Stories of students struggling to access devices, internet connectivity, and basic IT skills underscore the urgent need for institutional interventions. Additionally, learners with special needs, such as those who are visually impaired, require more robust support systems, including accessible learning materials, assistive technologies, and specialized training.

5.2 Recommendations

To promote inclusivity and equity in ODEL, institutions should implement the following recommendations:

1. Create a variety of financial aid options, including scholarships, grants, and low-interest loans, specifically designed for students from disadvantaged backgrounds. Institutions should collaborate with non-profit organizations and corporate sponsors to secure funding and resources to support student scholarships and financial aid initiatives.
2. Invest in the development of accessible learning materials and assistive technologies, ensuring

that all content is compatible with various disabilities.

3. Provide specialised training for educators and support staff to effectively assist learners with special needs, ensuring they can address various challenges and foster an inclusive environment.
4. Work with governments and private entities to improve technological infrastructure, especially in rural and underserved areas, including investments in high-speed internet.
5. Implement programmes that provide affordable or subsidised digital devices to students, ensuring access to necessary technology for their studies.
6. Establish comprehensive support services, including academic advising, counseling, and peer mentoring, to help students navigate challenges and maintain motivation.
7. Implement regular feedback mechanisms to assess the effectiveness of support services and make necessary improvements based on student experiences.

5.3 Future Research

Building on these findings, this research recommends the following research topics to enhance understanding and further inform future strategies:

- Establish the root causes of the noted declining male enrolment in ODEL programmes to inform targeted interventions.
- Monitor and evaluate the academic progress and outcomes of marginalised students in ODEL programmes to identify areas for support and improvement.

References

- Adipat, S., & Chotikapanich, R. (2022a). Ensuring inclusive and equitable quality education: A study on SDG 4. *Journal of Educational Research*, 115(3), 182–195.
- Adipat, S., & Chotikapanich, R. (2022b). Sustainable Development Goal 4: An education goal to achieve equitable quality education. *Academic Journal of Interdisciplinary Studies*, 11(6), 174–183.
- Afrobarometer. (2025). *Socio-cultural barriers and gender disparities in Zimbabwean education* (Afrobarometer Dispatch). <https://www.afrobarometer.org>
- Aldao, A., Sheppes, G., & Gross, J. J. (2015). Emotion regulation and student well-being in higher education. *Journal of Learner Support*, 7(2), 45–59.
- Bates, A. W. (2015). *Teaching in a digital age: Guidelines for designing teaching and learning*. Tony Bates Associates Ltd. <https://opentextbc.ca/teachinginadigitalage/>
- Broadbent, J., Panadero, E., & Lodge, J. M. (2018). Professional development for digital literacy: Training for the 21st-century learner. *Educational Technology Research*, 26(4), 112–128.
- Dorling, D. (2020). *Inequality and the 1%: Inclusion and exclusion in the modern era*. Routledge.
- Dzvimbo, K. K., Mongwaketse, A., & Mashapure, R. (2022). Educational reform and the drive toward SDG 4 in Southern Africa. *Journal of Development Studies*, 58(7), 1339–1356. <https://doi.org/10.1080/00220388.2022.2029415>
- Education International. (2019). *Student support services and academic success in higher education* (Global Education Report). <https://www.ei-ie.org>
- Garrison, D. R. (2017). *E-learning in the 21st century: A framework for research and practice*. Routledge.
- Glotan Journals. (2024). Infrastructure challenges in rural distance learning: The triple threat. *Journal of African Education*, 5(1), 88–104.
- Guri-Rosenblit, S. (2009). *Distance and e-learning in transition: Learning innovation, technology and social challenges*. Wiley-ISTE.
- Hartnett, M. (2016). *Motivation in online education*. Springer.
- IGI Global. (2022). *Assistive technologies and learner support systems for students with special needs in ODL*. IGI Global Publications.
- Kanwar, A., & Taplin, M. (Eds.). (2016). *Gender and ODL: Policy and practice*. Commonwealth of Learning. <https://oasis.col.org/handle/11599/2361>
- Kearns, H., & Burbidge, I. (2020). Flexibility in open and distance learning: A transformative approach. *International Journal of ODL*, 12(2), 33–47.

- Kearns, P. (2012). Digital literacy and participation in technology-mediated learning. *Journal of Computer Assisted Learning*, 28(4), 321–335.
- Kearns, P., & Unwin, T. (2015). Intersectionality in education: Poverty, gender, and disability. *Educational Policy Review*, 9(3), 201–218.
- Kearns, P., & Unwin, T. (2020). Social inclusion theory and tailored ODeL programs. *Journal of Social Justice in Education*, 14(1), 55–72.
- Khumalo, C. (2024). *The inclusion of students with visual impairment on e-learning platforms post-COVID-19 in Zimbabwe: Towards equity and quality education*. ERIC (EJ1471064). <https://files.eric.ed.gov/fulltext/EJ1471064.pdf>
- Koller, V., Mashapure, R., Dzvimbo, K. K., & Mongwaketse, A. (2021). The digital divide and its impact on learner experience in developing regions. *Global Learning Review*, 8(2), 14–29.
- Koul, B. N., & Jadav, A. S. (2020). *Financing ODL: Scholarships and payment systems for the marginalized*. Open University Press.
- Kyei-Blankson, L., Ntuli, E., & Blankson, J. (2019). *Handbook of research on management of distance education*. IGI Global.
- Latchem, C. (2017). *Using ICTs and blended learning in transforming TVET*. UNESCO; Commonwealth of Learning. <https://unesdoc.unesco.org/ark:/48223/pf0000247428>
- Levitas, R., Pantazis, C., Fahmy, E., Gordon, D., Lloyd, R., & Townsend, P. (2017). *Social inclusion theory: Perspectives on active participation and equity*. Palgrave Macmillan.
- Liyanagunawardena, T. R. (2019). ODeL: A solution for diverse learner needs. *Open Praxis*, 11(4), 355–367.
- Liyanagunawardena, T. R., Adams, A. A., & Williams, S. A. (2013). MOOCs: A systematic study of the published literature 2008–2012. *International Review of Research in Open and Distributed Learning*, 14(3), 202–227. <https://doi.org/10.19173/irrodl.v14i3.1455>
- Mahmood, S., Latif, K., & Li, P. (2020). Digital competency and educational inequalities in distance education. *Computers & Education*, 150, Article 103838.
- Mashapure, R., Dzvimbo, K. K., Mongwaketse, A., & Koller, V. (2025). The second-level digital divide: Gender and technology in Sub-Saharan Africa. *Research in Education and Technology*, 10(1), 15–32.
- McGreal, R. (2020). Systemic barriers in the implementation of ODL programs. *Journal of Distance Education*, 35(2), 1–18.
- Moyo, S. (2018). Cultural norms and women's participation in higher education in Zimbabwe. *Zimbabwe Journal of Educational Research*, 30(1), 74–89.
- Mtebe, J. S., & Raisamo, R. (2014). Investigating students' and lecturers' readiness to adopt e-learning in Tanzania. *International Journal of Education and Development using ICT*, 10(2), 124–137.
- Mtebe, J. S., & Raisamo, R. (2020). Technical assistance and support systems for seamless ODL. *East African Journal of Education*, 3(1), 22–39.
- Mtebe, J. S., & Raisamo, R. (2022). The paradox of technology: Inclusion vs. exclusion in ODeL. *Digital Education Review*, 41, 164–181.
- Muchenetwa, S. (2004). *The role of Zimbabwe Open University (ZOU) in the massification of higher education* (ED490539) [Paper presentation]. Second Pan-Commonwealth Forum on Open Learning, Durban, South Africa. ERIC. <https://eric.ed.gov/?id=ED490539>
- Ngubane-Mokiwa, S. (2017). Supportive services and mentorship for marginalized populations in ODL. *South African Journal of Higher Education*, 31(3), 135–152.
- Open University. (2021). *Women in distance education: A testimonial report*. OU Press.
- Progressive Academic Publishing. (2017). Specialized resources for blind students in ODL environments. *European Journal of Research and Reflection in Educational Sciences*, 5(4), 62–75.
- RSIS International. (2025). *Education 5.0 and the industrialization of Zimbabwe* (RSIS Policy Brief No. 14).

<https://rsisinternational.org/policy-briefs/education-5-0-zimbabwe>

- Scielo. (2024). *Socio-economic hurdles in rural Zimbabwe: Electricity and data connectivity*. Scielo South Africa.
- Traxler, J. (2018). *Distance learning in resource-constrained environments*. Routledge.
- Traxler, J. (2020). Environmental factors and the conducive study space in ODeL. *International Journal of Mobile and Blended Learning*, 12(3), 56–71.
- UNESCO. (2020). *Global education monitoring report: Inclusion and education*. UNESCO Publishing.
- Wagner, J., Smith, L., & Chen, R. (2023). Tailored IT training and academic success for diverse learners. *Journal of Higher Education Policy*, 15(2), 98–115.
- Wang, S. (2025). *Digital divide and its effect on educational outcomes for modern IT users* [Technical report]. ResearchGate. https://www.researchgate.net/publication/395587951_The_impact_of_the_digital_divide_on_educational_equity
- World Bank. (2022). *Zimbabwe education sector analysis: Adapting to socio-economic challenges*. World Bank Group.
- Yu, X., Zhao, Y., & Miller, J. (2025). Reaching the subaltern: ODeL and women in remote Zimbabwe. *Global Education Review*, 12(1), 40–58.
- ZJBEM. (2024). The establishment and impact of the Zimbabwe Open University. *Zimbabwe Journal of Business and Economic Management*, 6(2), 110–125.