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Exploring Teaching and Learning Resources Available in Open and Distance Learning for Teachers' Professional Development at the Learning Centers

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Abstract:

The success of Open and Distance Learning (ODL) programs hinges on the availability of high-quality and sufficient teaching and learning resources. The role of ODL institutions is to clear up any confusion among facilitators and learners regarding the resources available at ODL learning centers. This study aimed to explore the teaching and learning resources needed for effective instruction in ODL and for teachers' continuing professional development at these centers. A qualitative approach was employed to collect and analyze the data. The study was conducted in ODL learning centers located in Dar es Salaam, Ruvuma, and Mbeya, involving 16 participants. These included four officials from the Institute of Adult Education (IAE), three regional IAE coordinators, and nine center coordinators, all selected purposefully. Data collection methods included semi-structured interviews, document reviews, and observational checklists. The study revealed that regional learning centers faced shortages in financial resources, academic staff, and equipment. Based on the study's findings, well-defined steps should be taken to solve the issues with teaching and learning resources that this educational modality faces. The government should keep funding educational institutions, especially ODL Learning institutions, as many of them failed to fulfill their stated objectives due to financial limitations.

Keywords: ODL – Open and Distance Learning, learning centers, IAE – Institute of Adult Education, availability, teaching and learning resources

1. Introduction

1.1. Background Information

The rapid development of science and technology around the world has increased the need for education in different countries. Education plays a significant role in the economic and technological development of a country and enables its citizens to fight against illiteracy and poverty (UNESCO, 2001). It also helps develop peace and harmony among the community members, both locally and internationally (Muthima & Mutima, 2015). At large, the economic development of the world's leading countries depends much on education to increase labor productivity for the efficient use of physical and natural capital (Nodira, 2022). However, the need to provide quality education for all citizens regardless of their environment remains on the global agenda, and Tanzania is one of the developing countries following this agenda (Osaki, 2000). The role of education in providing national development within a country is unavoidable (Aderole et al., 2020). Open and distance learning is a rapidly growing field of education that emerged in the 21st century to promote educational

access (Ilonga et al., 2020). ODL, as a mode of learning, gives learners a sense of freedom and opportunities to choose where, when, why, and from whom they can learn (Sadeghi, 2019).

However, the provision of quality education to ODL learners has been one of the pillars of education in developing countries, including Tanzania (Tshabangu & Msafiri, 2013). Teaching and learning resources are important tools in fostering quality education in any educational institution, and they stimulate learners' self-learning, particularly in the ODL program (Kyando, 2020). The availability of teaching and learning resources that facilitate learning in the ODL program is to be considered for effective teaching and learning (Adebisi, 2019). For instance, Ngatia et al. (2009) pointed out that for effective teaching and learning in an ODL program, teaching and learning resources should align with the learning objectives to enhance the acquisition of relevant skills, preserve cultural knowledge, and influence the development of values and attitudes to learners. This is supported by Rupande (2015), who pointed out that teaching and learning resources should be of good quality and accuracy, engage learners and allow interactivity because they have a direct impact on the quality of teaching and learning in distance education. In addition, Moges (2017) added that in the ODL context, teaching and learning resources should offer an accessible, flexible learning and supportive environment to accommodate different age groups, disadvantaged groups, gender imbalances, and inequalities that the conventional learning system was unable to accommodate.

There are different teaching and learning resources that facilitate teaching and learning in the ODL program. Various scholars, Njeru and colleagues (2020) cited from Quinn and Hughes (2007), Kibore and colleagues (2015), Tappen (2001) and Lock (2018) mentioned five teaching and learning resources necessary for the ODL program such as human resources, learning resources, financial resources, time resources, and the physical resources. ODL teaching and learning resources are not only expected to be accessible to sufficient levels to enable teaching and learning to take place but should also be adequate for utilization in the teaching and learning process (Igwe, 2004). For effective teaching and learning in ODL, Gaba and Dash (2004) and Jegede (2009) pointed out that teaching and learning resources play a major role for ODL learners both in relevancy and adequacy, and the printed materials will remain a powerful media in ODL teaching and learning for both learners and the facilitators found in different geographical location.

While the benefits of ODL are evident and the need for ODL continues to grow, concerns persist regarding the availability of teaching and learning resources at the learning centers (Refae et al., 2021). This is because little is known, for example, about the amount of human, financial, and other resources committed to the ODL program, particularly at the Institute of Adult Education. Since teaching and learning resources play a vital role in shaping the learning experience, student satisfaction, and successful learning outcomes (Muda & Yee Bit-Lian, 2019), it is essential to explore the availability of the teaching and learning resources at the ODL learning centres and address the challenges that arise in this mode of education. This study was conducted to provide an evaluation of the relevance and adequacy of teaching and learning resources at the learning centre in providing quality education and its ability to prepare students for the challenges of the modern world. Therefore, this study aims to examine the relevance and adequacy of the teaching and learning resources necessary for the ODL Program at the learning centre.

1.2. Review of the Related Literature

Studies on open and distance learning (ODL), both locally and internationally, have examined the relevancy and adequacy of teaching and learning resources. A study conducted in the Philippines by Simbulan (2020) and another by Pham and Nguyen (2020) highlighted that learners from underdeveloped countries face significant challenges due to insufficient infrastructure to support ODL modes. In Nigeria, Onwe (2013) found that ODL institutions in Sub-Saharan African countries suffer from a shortage of financial support due to limited budgets. Similarly, a study by Basaza et al. (2010) on the challenges of implementing distance education in Uganda revealed a lack of physical and human resources to meet the demand of distance learners. In Tanzania, Mahai (2020) reported that many ODL institutions across African countries, including Tanzania, struggle with financial and infrastructure problems, especially in rural areas. These studies have primarily focused on the general challenges facing ODL institutions. However, none have specifically addressed the availability of teaching and learning resources at individual learning centres.

1.3. Describing the Theoretical Framework

In exploring the availability of the teaching and learning resources at the learning centres this study proposed the Transactional Distance Theory (TDT), by Moore (1997), Moore provides a framework for understanding the interactions between teachers, learners, and educational content, particularly in distance education. It emphasizes the psychological and communicative space present in educational settings, which varies based on structure, dialogue, and learner autonomy. Moore posits that the quality of dialogue is not only related to its frequency but also to its effectiveness in addressing the educational challenges faced by distance learners. He describes structure as the level of rigidity or flexibility in a course's design, suggesting that a more rigid structure can negatively impact learner independence. Additionally, Moore argues that physical separation between learners and facilitators increases when both structure and dialogue decrease. Benson and Samara (2009) support this view, agreeing that a decrease in physical separation leads to a decrease in dialogue and structure within the instructional program. Moore's theory is particularly relevant to this study as it guides the exploring the availability of teaching and learning resources at learning centers. By applying Transactional Distance Theory, researchers can address the psychological and communicative gaps in distance learning caused by course design and resource allocation (Structure). This ensures that learning center resources are pertinent to learners' needs and sufficient in both quantity and quality, thereby minimizing transactional distance and enhancing the educational experience.

2. Method

This study aimed to explore the availability of teaching and learning resources in open and distance learning programs for teachers' professional development at the learning centres. To achieve this, the researcher used qualitative methods and approaches.

2.1. Research Approach

This study used a qualitative approach; the approach was considered due to the strength that they explore and understand the meanings of an individual regarding a social or human problem (Cresswell, 2018).

2.2. Research Site

The study focused on Diploma students enrolled in Open and Distance Learning (ODL) programs at the Institute of Adult Education learning centres in Dar es Salaam, Mbeya, and Ruvuma regions of Tanzania. The Diploma program was deliberately chosen due to its widespread popularity across mainland Tanzania within the Institute of Adult Education's curriculum offerings. The selection of all learning centers found in Dar-es-Salaam, Mbeya, and Ruvuma was purposeful. For example, Dar es Salaam, serving as the site of the main campus and head office, represents a central educational hub. Mbeya was selected because it is one of the regional centers with a significant learner's population, providing a comprehensive understanding of ODL dynamics. Ruvuma, on the other hand, was chosen for its numerous learning centers with relatively fewer learners. These regional variations were carefully considered to identify important aspects regarding the availability of the teaching and learning resources at the ODL centres.

2.3. Sampling Procedures

Sixteen participants were purposefully selected for the study. Among them were three regional coordinators from Dar es Salaam, Mbeya, and Ruvuma. These regional coordinators were included because they oversee all program matters in their respective regions and supervise all ODL teaching and learning activities at the learning centres. Therefore, they possess comprehensive information regarding the availability of teaching and learning resources in their regions. In addition, nine centre coordinators were included in the study. These coordinators are responsible for the overall management of the learning centres, facilitating and assisting learners, particularly during face-to-face sessions. Their inclusion was crucial as they provided valuable insights into the availability of the teaching and learning resources at the learning centres. Additionally, two IAE officials from the main office were included in the sample due to their managerial and administrative positions within the institution. As the awarding authority of the programs, their views were essential in providing information on the availability of the teaching and learning resources. The ODL program coordinator was included in the study because he is responsible for the day-to-day program activities. Lastly, the registrar was included because he handles admission issues and examinations, providing crucial information on the availability of teaching and learning resources.

2.4. Data Collection Methods

The study employed interviews, documentary reviews, and observations to collect data on the availability of teaching and learning resources at the learning centres. The researcher employed semi-structured interviews to gather data from IAE officials, registrars, the ODL coordinator, regional coordinators, and centre coordinators using an interview guide. This approach allowed the researcher to ask open-ended questions and record the conversations Creswell (2012). Each interview lasted between thirty to forty minutes. Additionally, various documents were reviewed, including the Entrepreneurship Education module, to ensure consistency with the curriculum and to assess whether it adequately imparted relevant skills and knowledge to learners. The ODL information guidebook was examined for its real-world applicability, and the entrepreneurship education curriculum was reviewed for alignment with current skills and knowledge. The prospectus was consulted during the module selection process to assess the number of available academic staff. These documents provided diverse information, particularly regarding the adequacy and relevance of teaching and learning resources, which couldn't be obtained solely through interviews or observations (Yin, 2018). During the review, the researcher focused on the following: accuracy and relevance of the content, clarity and comprehensibility of the concept, structure and organization of the concept, engagement and interactivity, accessibility and inclusivity, assessment and support resources. Lastly, an observational checklist was used to assess the availability of teaching and learning resources. This checklist provides first-hand information from naturally occurring social situations (Cohen et al., 2018).

2.5. Data Analysis

The researcher listened to the recordings, summarized the information, and organized it into themes and sub-themes. Thematic analysis was employed to analyze the data (Clarke & Braun, 2016). Thematic analysis was found valuable for the study because the tool helped the researcher generate themes from categories. Four main themes were identified and categorized as follows: human resources (including academic staff and part-time facilitators, as well as facilitator orientation), financial resources (covering sources of funds and budget), physical resources/infrastructures (such as face-to-face buildings and examination venues), and teaching and learning materials (focused on modules).

3. Findings

The names of the ten surveyed learning center were represented alphabetically: Mbeya center (A), Tukuyu center (B), Kyela center (C), Mbalali center (D), Dar center (E), Ruvuma center (F), Mbinga center (G), Nyasa center (H),

Namtumbo center (I), and Tunduru center (J), with numbers assigned to regions: Mbeya (1), Ruvuma (2), and Dar es Salaam (3). The overall findings are presented in table 1 before detailed information on the findings is provided.

Teaching and Learning Resource	Learning Center		TOTAL	A	B	C	D	E	F	G	H	I	J
Human resource	Gender	Male	47	8	7	2	6	4	6	2	3	4	5
		Female	26	4	0	5	1	3	3	3	2	2	3
	Employment	Academic	18	3	1	1	1	7	1	1	1	1	1
		Part-time	55	9	6	6	6	-	8	4	4	5	7
	Education	Degree	53	7	6	7	6	-	5	5	5	5	4
		Masters	19	4	1	-	1	5	3	-	-	1	4
PhD		4	1	-	-	-	2	1	-	-	-	-	
Physical resource	Ownership	Own	2	-	-	-	-	√	√	-	-	-	-
		Rent	8	√	√	√	√	-	-	√	√	√	√
	Condition	Good	8	√	√	-	-	√	√	√	√	-	√
		Not good	2	-	-	√	-	-	-	-	-	√	-
	Electricity	Available	9	√	√	-	√	√	√	√	√	√	√
		Not available	1	-	-	√	-	-	-	-	-	-	-
Furniture's	Tables & Chairs	3	√	-	-	-	√	√	-	-	-	-	
	Desks	7	-	√	√	√	-	-	√	√	√	√	
Library facilities		1	-	-	-	-	√	-	-	-	-	-	
Financial resource	Sources of Funds	Fee	10	√	√	√	√	√	√	√	√	√	√
		Others	-	-	-	-	-	-	-	-	-	-	-
Teaching and learning material	Module	Hard copy	10	√	√	√	√	√	√	√	√	√	√
		Soft copy	10	√	√	√	√	√	√	√	√	√	√
	Others	Use	10	√	√	√	√	√	√	√	√	√	√
		Content	-	-	-	-	-	-	-	-	-	-	-

Table 1: Teaching and Learning Resources Available at the Learning Centres
Field data 2023. KEY: √ = Available = Not available. Alphabet A-J present the ten (10) learning centres

3.1. Teaching and Learning Resources Available at the Learning Centers

In exploring the availability of the teaching and learning resources at the learning centres, four main themes were identified and categorized as follows: human resources (including academic staff and part-time facilitators, as well as facilitator orientation), financial resources (covering sources of funds and budget), physical resources/infrastructures (such as face-to-face buildings and examination venues), and teaching and learning resources (focused on modules). These results are detailed and presented in the subsections below.

3.11. Human Resources

The data on human resources was triangulated from document reviews and interviews with regional coordinators and officials. Concerning the academic staff, it was found that the main module facilitators in open and distance learning are the academic staff who were employed by the Institute of Adult Education. However, the regional coordinator had the mandate to recruit a part-time facilitator for teaching and learning activities and for marking tests (IAE, 2021. 11). Based on this, the researcher discovered that the academic staff who were employed by the Institute of Adult Education at the regional centres were not adequate to serve all the learning centres available in the region.

Additionally, it was discovered from academic staff records that some learning centres had six employed academic staff, while others had only five (Prospectus, 2023). This indicates an inadequacy in the number of academic staff available. This observation was corroborated by regional coordinators during the interviews. For instance, Regional Coordinator 2 stated, "There are five learning centers in my region and five academic staff working for my institution. We used to rotate among the learning centers based on a special timetable we designed. However, the available academic staff number is insufficient compared to the academic demands we face, so we rely on part-time facilitators" (Regional Coordinator from Region 2, 4th Sept, 2023). However, a different perspective was presented by regional Coordinator 3, whose learning center was located at the headquarters. She remarked, "Since my learning center is at the headquarters, I have an adequate number of academic staff" (Regional Coordinator from region 3, 6th June, 2023).

Similarly, officials interviewed also confirmed the scarcity of academic staff employed by their institution at regional centers in comparison to the number of learning centers available. This is why they permitted regional coordinators to recruit part-time facilitators. Official 2, in a separate interview, elaborated, "We don't have as many academic staff at regional centers as we do at the head office. However, we are in the process of employing more academic staff. Currently, we allow them to hire part-time facilitators" (IAE Official 2, 7th June, 2023). This highlights the limited number of academic

staff assigned to regional centres to facilitate modules at the learning centres. This shortage was inadequate to handle the teaching and learning activities in the region, except for those learning centres located at the head office.

Lastly, based on educational level, according to the National Council for Technical and Vocational Education and Training (NACTVET, 2018) guidelines, the minimum educational qualification for technical teachers should be in the relevant subject area and at least one level higher than the level they are teaching. A review of part-time facilitators' employment records indicated that these facilitators possessed the required degree qualifications. Interviews with Open and Distance Learning (ODL) coordinators confirmed this finding, stating, "We have the criteria that our office uses to hire part-time facilitators. Those who facilitate, for example, a diploma, must have a bachelor's degree. We also consider subject specialization to ensure our students receive a quality education." (ODL Coordinator, 7th June, 2023). Based on this standard, it was found that the facilitators' level of education was relevant and adequate. A degree-level education was considered adequate for facilitating diploma learners. Therefore, both the reviewed documents and the interviews revealed that while the academic staff employed at the regional centers were not adequate to serve the available learning centers, the facilitators' level of education was relevant and adequate for facilitating diploma learners.

3.1.2. Financial Resources

This theme reflects on the sources of funds necessary for supporting the ODL program at the learning centres. Concerning the sources of funding, it was discovered by researchers that the funding sources for the ODL program primarily come from the tuition fees paid by ODL learners (IAE, 2021, p. 10). This was affirmed by Official 2 during an interview regarding the program's funding sources. He clarified that "fees constitute the main source of income, as the program does not receive subsidies from the government" (IAE Official 2, 7th June, 2023). Similarly, the ODL coordinator supported this in the same interview, emphasizing the program's dependence on learner tuition fees; he said, "We rely on learner's tuition fees, but the money was not enough to cover the expenses" (ODL Coordinator, 7th June 2023). However, it was noted that despite this dependence, the revenue generated from tuition fees falls short of covering the program's expenses. Consequently, while the sources of funds are relevant, they prove inadequate in supporting the program's activities effectively.

3.1.3. Physical Resources

This theme explains physical resources that are used by ODL learners during their face-to-face teaching and learning activities. Concerning face-to-face buildings and examination venues, the researcher found in a guide for training that ODL learners are assured with study centre facilities such as venue, tables, chairs and sanitary services for effective learning during the face-to-face sessions and examinations (IAE, 2021, p. 11). However, it was found that there were inadequate physical resources, such as buildings; this is why they allowed regional coordinators to hire. Out of ten learning centres visited, only two learning centers buildings are owned by the Institute of Adult Education the rest are hired.

On this, Regional Coordinator 1 had this to say, "We don't have our building; we rely on rented buildings. I often used to hire the secondary school halls, they are of good quality and meet all the requirements, in some areas where they lack those secondary school halls, we use primary schools' classes" (Regional Coordinator from region 1, 11th April, 2023) Added by the registrar who commented, "*It depends on the environment, there are no basic criteria that my office sets for the selection of examination rooms. The main thing is to focus on quality; the examination room should be large, and there should be space that will allow invigilators to move here and there, enough chairs and tables, light, and air*" (Registrar, 8th June, 2023). However, another regional coordinator 3 coordinating at the headquarters had something different to say, "*I have no problem with the buildings; the buildings that are used belong to my institution, and they meet all standards of teaching and learning*" (Regional Coordinator from region 3, 6th June, 2023)

Additionally, during the face-to-face visit to the learning centres, it was revealed that two out of eight classes used for face-to-face sessions were found to be not in good condition; classes had no electricity, causing some challenges in the ICT lesson. Some learning centres, especially a hired primary school building, do not have chairs and tables; instead, learners use desks, which make them uncomfortable. Also, internet coverage is a challenge in almost all learning centres. This was also revealed during the interview with regional coordinator 2, who explained, "*internet network is a problem, it doesn't matter whether you are in urban or rural areas, look here, we are in the city, but the internet is not stable. Also, the internet bundles are very expensive for our learners to afford all the time*" (Regional Coordinator from Region 2, 4th Sept 2023). This was added by the centre coordinator of Learning Centre B, who confirmed, "*The internet coverage is a challenge, sometimes we were informed to attend the Zoom classes, but we failed to do so due to network problems*" (Centre Coordinator from Centre B, 12th, April 2023). This demonstrated that the physical resources available in some learning centers were inadequate for effective teaching and learning activities for diploma learners.

3.1.4. Teaching and Learning Materials

This theme is based on the teaching and learning materials that are used for ODL learners at the learning centres (Module). Researchers found that modules in both soft and hard copies were used as teaching and learning materials for ODL learners. Additionally, there are audio and video resources that complement the printed materials (IAE, 2021, p.10). However, based on the learner's environment, the use of modules alone is relevant for learners to acquire all the necessary knowledge and skills. This was also highlighted by a regional coordinator during an interview about the teaching and learning materials used in the ODL program. The coordinator mentioned that while the modules prepared by the Institute of Adult Education (IAE) were primarily used, laptops, tablets, and mobile phones were also important additional resources. For instance, Regional Coordinator 2 explained, "*Modules are mostly used as teaching and learning material by our learners, but mobile phones and laptops are also helpful in providing additional materials for those who have them*"

(Regional Coordinator from Region 2, 4th Sept 2023). Furthermore, during a site visit to learning centers for face-to-face sessions, it was observed that learners and facilitators used modules, phones, tablets, and laptops in their teaching and learning activities. Therefore, it was concluded that modules alone were not adequate, and learners needed supplementary teaching and learning materials.

4. Discussion

This study aimed to explore the availability of the teaching and learning resources necessary for the ODL program at the learning centres. This part presents the discussion of the findings about the challenges that emerged in the identified themes as follows;

Study findings revealed that regional centres were challenged by insufficient academic staff, which caused them to use part-time facilitators during the face-to-face sessions. Also, some learning centres face the challenges of getting qualified part-time facilitators. These findings were in line with Messo (2014), who pointed out that the major weakness was the insufficient academic staff in ODL regional centres. This was added by Bork-Huffer et al. (2021), who did a study and found that learners are challenged by the lack of availability of some teachers in the ODL learning centres. These findings were similar to what was observed during a face-to-face visit, as it was found that the academic staff available at the regional centres were very few when compared to the number of learning centres available in the region.

Concerning the facilitator's orientation, it was revealed that regional coordinators orient facilitators, but they do not have a specific orientation guidebook, although they preferred to have one because orientation helped facilitators to know what they are supposed to do; this was similar to Chawinga (2017) who pointed out that orientation for part-time facilitators is essential because it helps them to be equipped with the knowledge and skills of ODL teaching and learning activities.

Study findings revealed that ODL learning institutions face inadequate financial resources to run the program and manage the activities at the learning centres as they depend on tuition fees paid by learners. These findings were in line with Moges (2017), who found that ODL institutions are challenged with inadequate financial resources to run the learning centres, which made learners develop a negative perception of the ODL program due to poor services.

Study findings revealed that some learning centres lack important facilities like electricity, which causes challenges in doing a practical in ICT. Not only that, but some learners were also not comfortable sitting at desks. These findings were in line with Ng' (2021) who revealed that some learning environments lack some facilities that cause disturbances to ODL learners, and added by Mutatana (2019), who found that ODL learners from ZOU were challenged by a lack of physical resources.

On teaching and learning materials, study findings revealed that the module is the only teaching and learning material that they depend on and they do not receive it on time at other times. These findings were in line with those of Asgal and Satyanarayana (2021), who found that modules in print format are the most important self-learning material for open and distance learning. The findings on delayed modules were similar to those of Musingafi et al. (2015) and Nyakuleha & Simengwa (2023), who found that learners are challenged with a lack or delayed study materials, especially the module Concerning the relevancy of teaching and learning material (module), participants revealed that teaching and learning materials were very useful in meeting the needs of the learners and were very helpful in their work and life in general. These findings were similar to those of Yang et al. (2017), who pointed out that ODL teaching and learning materials are relevant in meeting the personal and professional needs of the learners and influencing their persistence.

Furthermore, the findings of the reviewed entrepreneurship education module revealed inadequacy. It should be noted that although the prepared modules could give ODL learners general knowledge and skills, the issue of quality is very crucial. As stated by Hamwetee (2012), the module used for open and distance learners should be well-designed and of high quality and utilized as an aspect of maintaining high-quality instruction and academic standards. Thangeda et al. (2016) added that the ODL teaching and learning material should be up-to-date and relevant. The observed weaknesses during the module review were clear, and they need to be worked on by the ODL institution. This was because the work of ODL institutions was not only to provide educational chances for learners but also to impact learners with knowledge and skills necessary for the social and economic development of the country (Latif & Subramanian, 2015). For instance, in reviewing the entrepreneurship education module, the researcher found that the module did not adequately cover certain concepts based on curriculum enabling learning outcomes that need learners of this module to apply entrepreneurship skills to manage adult education programs on curriculum (IAE, 2019, p.17) that would be very helpful for learners especially those without prior knowledge of entrepreneurship as pointed out by Cheung (1998) that entrepreneurship education should help learners to develop skills to face the challenges of economic and social need of the society. Adding those concepts would provide them with the necessary entrepreneurial knowledge, skills and competence. For example, when explaining the basics of entrepreneurship (IAE, 2019, pp.8-13), learners would better understand the characteristics and traits of successful entrepreneurs. They would be able to identify challenges, seek opportunities, and drive their businesses to success (Lackeus, 2015).

Additionally, by recognizing their entrepreneurial potential, learners could be innovative in creating businesses, driving economic growth, creating jobs, addressing societal challenges, and enhancing global competitiveness (Galloway, et al., 2006). Finally, understanding the disadvantages of entrepreneurship would aid learners in decision-making, market awareness, resource allocation, and active problem-solving. By understanding the steps to generate a business (IAE, 2019, p.17) in the module, learners would be able to identify business opportunities within their environment, solve problems, conduct market surveys, develop entrepreneurial skills, and become innovative (Blank, 2020). Additionally, by learning about the legal forms of business, learners who study entrepreneurship modules would gain knowledge on how to protect assets, minimize taxes, clarify ownership and management structures, access capital, and plan for the future of their

businesses (Hisrich, et, al., 2017). Furthermore, understanding how to organize and operate a small business would enable learners to choose businesses that align with their environment and income levels. Lastly, by adding the concepts of writing and preparing a business plan, learners would be able to articulate a clear vision, develop strategic planning skills, manage resources effectively, handle risks, improve communication and presentation skills, evaluate opportunities, receive feedback, and create a roadmap for long-term planning and growth (McKeever, 2018). Therefore, adding these concepts would help learners make informed business decisions based on their environment and income. Moreover, this module should include activities and tasks that enable learners to practice and develop motivation for establishing learning centres. For example, assignments could involve visiting learning centers to understand their operations and preparing an innovative business plan to motivate them to open a centre. This would be in line with Scarborough and Cornwall (2018), who observed that entrepreneurs need skills in business planning because inadequate planning is a major reason for business failure.

5. Conclusion

Despite the important role and increasing popularity of open and distance learning (ODL), the availability of teaching and learning resources in ODL has been called into question. The study revealed that ODL learners faced challenges due to inadequate teaching and learning resources at the learning centres necessary for the ODL program. Specifically, weaknesses were found in one of the teaching and learning materials, the entrepreneurship education module, across various units and sections regarding the accuracy and relevance of the content, clarity and comprehensibility of the concepts, structure and organization of the content, engagement and interactivity, accessibility and inclusivity, assessment, and support resources. For example, important concepts that could be helpful to learners were absent. This implies that the module was not reviewed by other entrepreneurship experts and gave their views before its actual use. However, the current entrepreneurship module primarily focuses on providing knowledge and skills for opening and running adult learning centers. This narrow focus might lead learners and facilitators to believe that the module is intended only for those interested in managing learning centres, ignoring other entrepreneurial pursuits. Given that learners' needs and interests vary, developing general knowledge and skills in entrepreneurship would benefit them not only in opening and running adult learning centres but also in engaging in other entrepreneurial activities.

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