Driving socio-economic transformation through ODL: Infrastructure and Access for rural peripheries of Zimbabwe

Moffat Chitapa Tarusikirwa
Zimbabwe Open University
e-mail: mctarusikirwa@gmail.com/ mctarusikirwa@justice.com/
mctarusikirwa@yahoo.com/ tarusikirwam@zou.ac.zw

Abstract

The provision of Open and Distance Learning (ODL) is embedded with a number of impediments, particularly so from a developing country perspective. In Zimbabwe’s remote rural corners of the country, for example, the delivery of ODL is beset by a number of barriers that are exacerbated by poor infrastructure and accessibility problems. This paper was based on a study on the experiences of ODL practitioners in Zimbabwe on the provision of the ODL service to students. The study employed a qualitative research methodology. A purposive sample of 20 practitioners was used. Semi-structured interview technique was used to generate the data. Interpretive content analysis was used for data analysis. A number of factors that affect socio-economic transformation through the provision of ODL in Zimbabwe were surfaced by the study. Some of the factors that emerged from the study are: Poor internet and road infrastructure, long distances from main city centres for students to travel, poor telecommunications service and electricity infrastructure, lack of mobile service, lack of finance to purchase computers by students, poor radio broadcasting services and lack of library, printing and photocopying facilities among others. The paper discussed the above factors in addition to offering conclusions and recommendations for an improved ODL service. In conclusion, it was hoped that this may lead to socio-economic transformation as more people got educated leading to better paying jobs, hygiene, improved health and standard of living in these areas of the country. A major recommendation was that institutions of higher learning should assist poor students to acquire soft loans so that they could buy lap tops, tablets and afford fees that are often demanded upfront by the institutions. That way students would get access to ODL learning materials via the internet. Furthermore, it was recommended that the government, could work with ICT firms in order for them to enhance access to ODL learning by installing internet infrastructure in remote rural areas of the country.

Key words: Socio-economic transformation, Open and Distance Learning, Infrastructure, Rural Zimbabwe.
Background to the study

The ODL mode of educational provision presents a number of advantages for both student and provider. Scholars have written about some of these advantages. For example, the ODL mode of lesson delivery presents flexibility as students are able to study in their own time while at the same time working and going on with their daily lives. Moreover, large numbers of students can be developed at the same time as there are no space limitations, while ICT such as the internet among others has reduced distance between the tutor and tutee to zero and made reading material abundant. However, educational provision through ODL can at times be embedded with disadvantages. Some of the disadvantages that have come to the fore are as follows: Depending with the level of ICT development of a particular country, the mode of delivery can be imbued with a number of challenges, for example where e-learning was the envisaged mode of lesson delivery, access to computers and internet facilities becomes a must for every student (see Linn, M. C., 1987; Ertmer, P. A., Addison, P., Lane, M., Ross, E. and Woods, D., 1999). In other words, it becomes a must that every student gets access to a computer or some other ICT gadget such as a smart phone, tablet, iPod or some such gadget that can help the student to access learning materials through ICT based teaching methodology. In some lowly developed countries, access to ICT and internet facilities is a pipe dream for those people in the peripheries of the countries. Furthermore, there are challenges of poor financial support from the fiscus, infrastructure such as electricity, telephone, printing and typing facilities among others making learning material production difficult. Zimbabwe’s rural peripheries are not an exception to these challenges.

Methodology

The major aim of the study was to investigate the experiences of ODL practitioners in Zimbabwe with respect to challenges/disadvantages of teaching through ODL. A qualitative research methodology was used. A purposive sample of 20 ODL tutors was used. Semi-structured open-ended interview technique was used to gather the data and interpretive content analysis was employed for data analysis. In this study, the researcher was more interested in what it is that the tutors said as subjects rather than statistical analysis. The researcher was therefore interested in unpacking the experiences of ODL tutors with regard to challenges of teaching through ODL from their on voices.

Table 1: Distribution of informants by gender (N=20)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>14</td>
<td>70</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

In Table 1, there were more male informants than female. The reason for this observation was because there were more males than females among the tutors at the institution under study and were readily available for the study.

Table 2: Distribution of Informants by age (N=20)

<table>
<thead>
<tr>
<th>Age (in years)</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-29</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>30-34</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>35 and above</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

In Table 2, there were more male informants than female. The reason for this observation was because there were more males than females among the tutors at the institution under study and were readily available for the study.
Table 2 indicated that the majority of informants were in the age range 30 to 35 and above. The informants were fairly mature adults who had varying degrees of work experience in the ODL mode of educational provision.

Table 3 shows that, the majority of informants were those that tutored students on the Post Graduate Diploma in Education. There were more tutors tutoring this programme who made themselves available for this study. Moreover, there has been an increase in the number of students taking this programme, hence, more tutors have been deployed to tutor the students.

### Results and discussion

In response to the question: What are the major constraints experienced by tutors in the delivery of instruction through ODL in Zimbabwe's rural areas? Informants raised a number of impediments they faced in their daily operations as follows: One of the challenges as given by informants bordered around the mode of lesson delivery which depends on the use of written modules/ text material. The informants mentioned that they had problems with unavailability of modules for students. They also had problems of space limitation and or poor classroom quality. Furthermore, they had challenges of an overcrowded work time table which was exacerbated by limited resources in the form of transport, typing and printing materials, finance among others.

Moreover, informants raised the issue of access to technological gadgets by ODL students. A number of students did not have access to computers, tablets or smart cell phones. This paused a serious challenge particularly so in the case of e-learning as the envisaged mode of lesson delivery. Secondly, the challenge of access to computers was intertwined with that of unavailability of internet facilities in the far removed rural areas of the country. In other words, it is a must for a student to have both access to a computer as well as internet facilities if e-learning is to become a reality. Additionally, some tutors pointed out to limited computer skills for both themselves and some students. One other issue surfaced by the study was that of tutors at times spending lengthy times away from their families at centralised working venues for examination processing and other duties while others complained of being left out of these exercises and felt demotivated. Other factors that came up were of an administrative nature and those of student recognition by employers. Furthermore, issues of infrastructure were mentioned as pausing some of the challenges.

<table>
<thead>
<tr>
<th>Course</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma Primary Education</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Postgraduate Diploma in Education</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>B. Ed. (Early Childhood Development</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>B.Ed. (Secondary)</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 3: Distribution of Informants by Courses taught (N=20)
number of PGDE students has ballooned due to the UNICEF/ Ministry of Primary and Secondary Education programme launched by the President of Zimbabwe. Here are some statements from the informants:

“We did not receive enough modules in all courses for students in PGDE and BECD. We were expecting them before registration but not enough were sent.”

“We have problems with students who did not receive their modules at the beginning of the semester. We are struggling to tell them when to expect their modules as we have been told that they are coming but we have not received them.”

“The module problem has been made worse by the large student numbers this semester. More than half of them have not received any modules.”

As evident from the above statements by informants, the issue of module unavailability is posing a challenge to both tutors and students whose expectations have not been met. Non delivery of modules or delivery of small and not enough quantities of modules is a serious challenge which ought to be addressed urgently. Furthermore, there is the aspect of large student numbers in PGDE, which is a positive development.

In the views of Endean, 2003, p.6, “One of the key questions to address as a provider of ODL is the extent and manner of support you will be offering to learners. All learners need access to some kind of ‘tutor’ to help guide them through the sticky patches. The range of possibilities extends from old-fashioned ‘correspondence tuition’ to regular f2f meetings and includes student/student peer support. Many factors combine to influence what level of support is appropriate, ranging from the geographical distribution of learners to the cost of providing a given level of service. But support there must be if learners are to complete in any numbers.”

I echo the sentiments expressed by Endean (2003) above. In ODL, the module is the tutor in the absence of face to face sessions. The student must be given the modules at registration to avoid these challenges. Such a scenario will help to ease the tutors’ job in their efforts to help the students.

Workload

Informants also raised the issue of workload. Some of the informants felt that in certain places, as student numbers begin to rise, the workload in terms of what had to be done was also increasing. This was particularly so in those programmes that had been relaunched such as PGDE. Some of the tutors had a double workload in that while they had a job in another unit, they doubled up as tutor for another, making them very busy and at times pressed for time to achieve certain tasks. Here are some of the statements from informants:

“Currently, I am the only one in the Department here. The other member is away and will only come back next month. I have to do everything by myself and I am under pressure.”

“I am struggling to do TP by myself as there is no one to help me. The other staff members say they are busy with their own jobs.”

“We have had an increase in student numbers and the workload has also increased with respect to assignment marking, item writing and project supervision. We are working under pressure.”

As is evident from the above statements by informants, the aspect of work overload is a challenge for some of the tutors. It appears that there is need for more staff to be hired for those programmes with increasing student numbers so that it does not affect TP supervision, assignment marking, item writing and project supervision.

Transport

The study also surfaced the aspect of poor transport arrangements for tutors on TP duty. In the views of the informants, certain centres only have one vehicle which also serves as the Director’s car. Here are some of the statements by informants:

“We have only one vehicle in the Region and it was down due to a flat tyre. We were not able to go for TP until it got fixed. More vehicles for the Region would be helpful.”

“There is a problem with transport here. Can
you please talk to the Director about transport so that we can get the car for TP.”

From the above statements by informants, it is clear that there is need for more cars at centres so that learning activities are carried out timely.

Access to ICT equipment:

With respect to access to computers, tablets, smart phones and other ICT gadgets, informants raised a number of issues, for example while most tutors had access to ICT gadgets, most students did not have access due to poverty and poor salaries. Students were unable to purchase these. As alluded to earlier, this was particularly so with students from remote rural areas in the periphery of the country. In that respect, students are not able to access learning materials through e-learning without their ICT equipment as mentioned above. Such a scenario poses a serious challenge to e-learning as the mode of lesson delivery. Here are some of the statements from the informants:

“For some students, there is a problem when it comes to accessing learning materials through the internet. We experience problems when we send messages and learning materials through the e-mail. Some students are unable to download these due to lack of computers and internet connectivity.”

“Some of the students say that they cannot afford to buy a computer as it is expensive for them as their salaries are not enough for this.”

“We also have communication problems with students in areas with poor internet networks.”

From the above statements, a number of issues are raised by informants. Firstly, there is the issue of the lack of access to computers which is intertwined with the economic challenge of low salaries of learners; hence learners cannot afford to buy a computer, tablet etc., on their own. Secondly, there is the challenge of the lack of internet facilities which is discussed in another section. Such a problem is synonymous with the global situation in some developing countries when it comes to the provision of ODL in rural areas (see Brown and Brown, 1994; Bates and Poole, 2003). If socio-economic transformation is to be achieved through ODL, institutions of ODL in developing economies such as Zimbabwe have to be innovative in their approach to the provision of learning through this mode.

Need for ICT skills among Tutors and Students

Most of the tutors felt that while they had a certain degree of computer literacy, they were not sufficiently literate to handle the demands of e-learning on a day to day basis. They needed to be trained in e-learning skills as well as computer skills. The informants were also of the view that most of the students from remote rural areas needed training in both e-learning and computer literacy skills before one can introduce e-learning. Here are some statements from some of the informants:

“Before we can talk of e-learning, we need further training in my Vista. I have a challenge in that I am not good at using a computer. We need this training so that we can teach the students well.”

“There is need to train the students in computer literacy as well as my Vista before we can put modules online. Learning to use a computer is difficult.”

“There is need to train students in computer skills before we can use e-learning for their lessons, assignments and modules access through the internet.”

“I have struggled to acquire e-learning skills as each time I do it, is like I am starting anew. More time is required to do it.”

“Even some of the other lecturers are not as computer literate. We are not able to help each other that well. We need a hands on technician to be available for us.”

From the above statements, it would appear that lecturers also need training in computer skills. According to Bates and Poole (2003,p.25), “Skills needed to use technology effectively have also increased in complexity and importance.” Hence, teachers need to learn new skills in order to design and deliver technology based teaching. In the views of
Bates and Poole (2003), if someone has to survive in the knowledge based society; literacy in a range of different media and technologies is a critical skill. Moreover, Bates and Poole (2003) argue that students need to be literate to use computers effectively. Additionally, they are of the view that Educational Technology requires a relatively sophisticated organisational support structure. In other words, they argue that Organisational issues should address issues of effectiveness in the use of technology; hence there is need for quality programming, design and delivery of quality learning through the use of technology. Moreover, Bates and Poole (2003) argue for the development of skills needed in order to use technology effectively in the teaching and learning process. In this regard, both tutors and students need to have computers and computer literacy skills for a successful socio-economic transformation through ODL.

Also surfaced by the above statements from informants is the view that learning to use the computer is difficult; hence they prefer to stick to the printed module. Ertmer, et al. (1999) argues that one of the barriers to the use of technology in learning is one’s belief system and way of doing things. This affects both the tutor and the learner. People are afraid of change or of learning new things or new ways of doing things hence they want to stick to what they have been practicing. In the views of Ertmer, et al. (1999), These barriers include people’s beliefs about teaching and in my view, about learning as well, about computers, established classroom practices and I believe it also includes learning practices and unwillingness to change. Hence, some of these tutors will need to make an effort to learn how to use e-learning as a delivery tool for ODL teaching.

Infrastructure: Classrooms

Tutors had a problem with inadequate or poor conditions of the classrooms they used for face to face sessions during weekend school. Although this problem is limited to a few Centres, it is very important that such a scenario is addressed as soon as possible. Here are some statements from some of the informants:

“Due to large numbers of students, some classrooms become overcrowded during weekend school sessions. The state of the furniture in the rooms makes the problem worse.”

“There is a problem of furniture in the rooms at weekend school. Some of it is broken down and it’s not enough for the students.”

From the above statements, the issue of small classrooms comes to the surface. Also surfaced is the aspect of the poor and inadequate position of the furniture in the classrooms. There is therefore need for the hiring of venues with enough space and furniture in order to create a conducive learning environment. In the views of Warger and Dobbin 2009, p.1,

Most ODL classrooms now have at least a minimum kit of equipment for mediated instruction such as network access, a projector, various media players, and a computer or at least provision for a laptop and a network port. These technologies aids bring more informational resources into the teaching space, and they also extend the boundaries of the room, enabling outreach to other sources of information and indeed to other places.

Briefly, a modern classroom for ODL tutoring should ideally have such ITC capabilities in order to bring it up to the conducive ODL learning environment state. From what the informants have said, the classrooms they are using are far from being conducive learning environments. If we are to produce graduates that will drive socio-economic transformation, we need to hire state of the art weekend school venues where proper tutoring and student learning will take place.

Infrastructure: Internet

The study also revealed that while the ideal mode of lesson delivery in ODL would be best supported by internet based delivery technologies, the situation in some rural areas
is that internet infrastructure still needs to be
developed. Tutors also revealed that
ownership of equipment such as computers,
tables or smart phones among other gadgets
that can be used for e-learning was still a
problem for some students in these areas. Here
are some statements from some of the
informants:

“We experience problems when it comes to sending
soft copy modules to students as they are not able to
download and print them where they are. Some do not
have internet facilities at their workplaces. They have
to travel to the centre and sometimes the internet here
is down, so we may not be able to print for them either.”

“Some of the students do not have computers or
anything to use in order to download learning materials
via the internet. They need their hard copies, which
they have been asking for from us for a while now.”

It is evident from the above statements
that some students are disadvantaged by the
lack of internet infrastructure in remote rural
areas of Zimbabwe. As such they are not able to
get access to learning materials through the use
of the internet. This problem often affects
people in the remote rural peripheries of the
country. As a result offering ODL through
the use of ICT becomes a challenge.

Infrastructure: Electricity, telephone,
printing and typing facilities
The study surfaced further challenges with
respect to infrastructure as follows: Tutors felt
that they were disadvantaged by poor
infrastructure such as electricity, telephone,
printing and typing facilities which were
sometimes not available in certain areas they
operated in. Due to the lack of electricity and
or shortage in some rural areas, ODL tutors
and students are not able to work or study
properly as at times there had no power or
lighting. This problem also affected printing,
photocopying and typing activities of the
informants. Where there are no telephone
facilities, both fixed and mobile, it is difficult
for tutors to communicate with their students
and fellow tutors on tutorial dates, assignments
and learning materials. Here are some
statements from the informants:

“It is difficult to do any work at night after
work due to electricity shortages that lead to load shading
by ZESA. The load shadings are unscheduled and
that makes planning difficult as one is not sure when it
takes place.”

“Sometimes it becomes difficult to communicate
to students on important information such as
examinations, tutorials, assignments and so forth as
communication networks are either down or nonexistent
in a particular area.”

“Due to lack of typing facilities in some places,
students have failed to hand in assignments and projects
on time and that interferes with marks deadlines.”

From the above statements, apart from
the already alluded to issues of electricity
shortages, poor or none existent printing and
typing facilities as well as poor telephone and
mobile networks, there is also the aspect of
late assignments and projects from students.
It is important to point out that late submission
of assignments and projects by students can
lead to Centres’ failure to adhere to set
deadlines for the handing in of marks to
National Centre and this delays the processing
of student results.

Administrative issues
Informants also raised issues of an
administrative nature that affect them. Here
are some statements from some of them:

“Sometimes the registration deadline keeps
changing giving us problems with the late registered
students with respect to assignment deadlines. These
students usually demand that they be given time to do
their assignments and at times there is very little time
left from the assignment hand in deadline and when
they registered.”

“Sometimes problems arise as there may not be
enough time to mark assignments and give student
feedback before examinations due to late registrations.”

“Sometimes there are problems with tutors who
fail to turn up for weekend tutorials at the last moment
leaving the coordinator with a class of students but no
tutor.”

“We have problems with the way the marking
of assignments and exams are being organised lately.
While others are invited and take part in this important
exercise, we are left out of it. We feel that we should also take part in the marking of examinations and assignments.”

“Printing is sometimes a problem as there is no paper and toner. There is need to have enough assignments and tutorial letters for all the students from National Centre .”

The above statements surface a number of administrative related issues such as the late delivery or non delivery of modules, the shifting/ indefinite student registration deadlines, difficulty in giving assignment feedback and absence of tutors / lecturers at weekend tutorials. Furthermore, there are issues of tutors who feel left out of the marking exercise as well as the issue of printing recourses such as paper and toner.

Recognition of the ODL qualifications by employers and the public

The study also surfaced a number of issues that have to do with government officials and public perceptions of ODL qualifications. Here are some statements from some of the informants:

“We were recently besieged by a number of former students needing assistance with their qualifications so that they can be employed. It appears that some officials at the Ministry offices are querying the authenticity of their qualifications.”

“Some prospective students sometimes ask whether our degree is recognised by employers as they have been told that in order to be recognised, they need to do a degree with a conventional university.”

“Our students are being treated as temporary teachers instead of trainee teachers like students from other colleges. This gives them problems as they need to raise fees as well as look after their families.”

With respect to the above sentiments, it is evident from the statements by informants that certain members of the public and even government officials have a bias towards people who have or are doing their qualifications through ODL. In that regard, ODL institutions and students have a disadvantage due to the kind of stigmatisation from certain quarters of society. It therefore means that both students and the institutions have to fight hard against the problem of perception by those who view education as the one got from conventional institutions.

Financial Challenges

Furthermore, informants raised the aspect of problems associated with poor financial support from the fiscus exacerbated by poor salaries which makes their lives difficult. They point out that sometimes they are unable to get their salaries on time putting them in bad footing with creditors as well as landlords for accommodation. They also mentioned family problems associated with lack of money for food and so on. These sentiments are evident from the following statements by informants:

“We have a serious problem with late salaries. My landlord is not happy with me every month end as I keep making the same excuse of late payment. If they had takers for my accommodation, I would have long been kicked out.”

“I keep borrowing money from an understanding friend every month end, otherwise my children would go without food.”

“My creditors do not believe me. They keep enquiring when I will pay my instalment for the clothes I bought on credit. Sometimes when the salary comes its not enough for all my needs as I would have borrowed from friends before it comes.”

Late salary payments intertwined with a poor salary regime for tutors does not auger well for the ODL working environment and staff morale. In order for a successful socio-economic transformation through ODL, let alone any mode of teaching, the teachers need to be motivated through timely payment of their salaries and benefits.
Conclusion

In conclusion, this paper has highlighted some of the problems associated with the offering of learning through ODL from a developing country perspective. If socio-economic transformation has to be achieved through the offering of education through ODL, practitioners in ODL have to pay serious attention to those challenges experienced by ODL academics as surfaced by the study. For example, Administrations of ODL institutions and government need to addressed the issues of lack of access to computers due to poverty, lack of sponsorship for ODL students, unavailability of infrastructure in remote rural areas and negative perceptions towards ODL qualifications by certain segments of society. Moreover, issues of poor salaries, delayed pay days, poor e-learning skills base, unavailability of resources such as paper and toner, transport vehicles, heavy workloads for academics among others have to be addressed.

Towards socio-economic transformation through ODL

Recommendations

The following recommendations are advanced:

1. It is a recommendation of this study that ODL practitioners be trained in e-learning skills as well as computer literacy in order for them to be efficient in their work.
2. The issue of access to ICT gadgets for e-learning purposes by ODL students and staff should be addressed. For example students could be assisted through grants and scholarships to buy tablets, computers or smart phones for study purposes. Alternatively institutions could include such costs as part of the fees paid by students. In other words, ODL students should be afforded loans and grants for study by the government just like students in convention institutions at a National level.
3. ZESA needs to be empowered more so that they build enough generation capacity for uninterrupted power supply to the whole country. Moreover, the rural electrification programme should be given priority by government so that electricity infrastructure is developed across the whole country.
4. The government should seriously consider looking into the poor salaries and working conditions for local academics so that they remain motivated to produce the highly skilled labour for the country’s socio-economic transformation.
5. Providers of ODL are encouraged to source and provide their tutors and students with affordable tablets or computers. The government could be approached for assistance.
6. Providers of internet facilities are encouraged to expand their networks into remote rural areas of the country.
7. The government and ODL institutions are encouraged to educate people on the ODL mode of human resource development as a worthy alternative to conventional education to remove negative perception of ODL training programmes.
8. Politicians and administrators are encouraged to deploy resources into the rural peripheries of the country with respect to the development of ICT infrastructure, telephones, electricity and so forth.
9. Service providers are encouraged to deliver learning materials on time as well as giving feedback on time including stamping out lecturer absenteeism at weekend schools.
References


