Open and Distance Learning (ODL): Experiences from Biology Learners of the Distance Learning Institute, University of Lagos

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Abstract

This paper examined a survey of the challenges facing Biology learners in Distance Learning Institute, University of Lagos. The study was conducted using qualitative and quantitative approaches. The population of the study comprised all Biology Education learners while a sample size of one hundred learners was obtained using stratified random sampling technique. Data was collected using structured questionnaire. Frequency table, bar charts and percentages were the main descriptive statistics used to analyze and present the findings. The results showed that a large percentage of learners (85%) do not have the technological knowledge and skills for the electronic mode of the program, there are lapses of effective online interaction between the learners and their facilitators. Despite running a distance learning program, seventy-two percent (72%) still want a face-to-face interaction. More than fifty percent The study recommended that the learners' support unit should be empowered to train and retrain learners who are digital immigrant adults on the e-learning mode. There is need for the system to encourage effective interaction and improve on the feedback mechanisms between the learners and their facilitators. This will further increase the interest of the learners in the course of study.

Key words: Biology learners, Open Distance Learning, Feedback, Interaction

Introduction

The chronological improvement of the information age has strikingly affected every area of our lives. These effects occur not only in the changes of making life easier such as in increased availability of sophisticated means of transportation and communications, but also in the learning process and learning methods which have a critical role on the development of individuals. Two most important improvements offered by technological developments are the computer usage and internet usage. The effectiveness of the learning process is increased and expected to continue increasing by using these two tools together (Andresen, 2009). Concepts such as web-based education, visual class and distance education have entered into the education and academic world. These new approaches by their nature should be considered seriously from the traditional face-to-face education, otherwise, failures in implementation and deviation in achieving the desired targets of the educational plans may occur (Glennie, 2006).

Recently, Moore and Kearsley, (2011) defined Distance Education as teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organisation. Distance education has some characteristics which separate it from the traditional system of education and provide it with unique features as parallel to formal education such as absence of direct interaction or face-to-face activity between facilitators and learners but compensated by contact or counselling sessions. There is two-way communication between facilitators and learners, which is facilitated by the organizing institutions. The institution develops self instructional materials with the help of subject experts these are then printed by specialists before sending to learners by post. This communication between facilitators and learners can be termed as indirect interaction. Another characteristic feature of distance education is either contact sessions or counselling sessions aimed at solving the queries of learners generated after studying self-instructional materials.

The conferences of the need for continuous learning and unprecedented technological innovation in communication have pushed distance education approach to the fore-front of educational practices (Garrison, 2011). All over the world, distance mode of education is gaining momentum and becoming more popular than conventional education (Attri, 2012). As distance mode of education is becoming bigger and better, more courses of different professions are finding their way into this mode of learning. Typically in the past, audiences for distance education opportunities were adults often seeking advanced education and training at home, on the job, or in the military. Their multiple responsibilities or physical circumstances prevented attendance at a traditional institution (Kerka, 1986). But

presently, anyone (Cosmas and Mbwette, 2009; Mokoena, 2013 and Musingafi *et al.,* 2015) is potentially a distance learner, a concept that has implications for Africa. Most literature and policy discourses in distance education often prioritise on expanding access to the disadvantage of challenges experienced by learners admitted.

Learners of science inclined courses in open and distance education including the Biology learners are peculiar group of learners as they deal directly with things that are peculiar to lives, and also carry out experimental works in the laboratory. Science education in distance learning has really experienced lots of growth. However, there are challenges facing the learners of distance education including the Biology learners. Some of these challenges are investigated in this survey.

Research Methods and Participants

This study is guided by Andragogical learning theory propounded by Malcolm Knowles (1980). The study adopted a qualitative data collection method. The design of this study is descriptive in nature. The population comprised of the undergraduate learners of Biology education of Distance Learning Institute, University of Lagos. The sampling technique used was stratified random sampling. It's a probability sampling technique where the researcher divides the entire population into different strata, then randomly selects the final subjects proportionally from different strata. A total of 100 respondents were sampled for this study consisting 59 males and 41 females learners. The instruments of data collection for this study are questionnaire and literatures on authors related to the subject of this study.

Findings
The challenges were categorized into different groups. The first category of challenges as shown in Table 1 relate with the effectiveness of interaction between Biology learners and their facilitators.

Table 1: Response on effectiveness of interaction between learners and facilitators

Challenges	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed
Lack of effective interaction between Biology learners and facilitator	47	40	13	0
Learners and facilitators only interact through contact in the classroom	11	46	28	15
Interaction with learners through the class representatives	34	51	0	15
Learners rarely interact with their facilitators via electronic media	10	70	15	5
Learners lack easy access to facilitator outside the classroom	10	5	37	30

Source: Field Survey, 2016
Most respondents showed that they have challenges reaching their facilitators. As represented in Table 1 above, fifty-seven percent of the respondents can only reach the facilitator through face-to-face contacts during tutorial classes. However, eighty percent of the respondents rarely make use of the electronic media of interaction. This implies that most of the learners cannot access whatever the facilitator might have posted on the media.
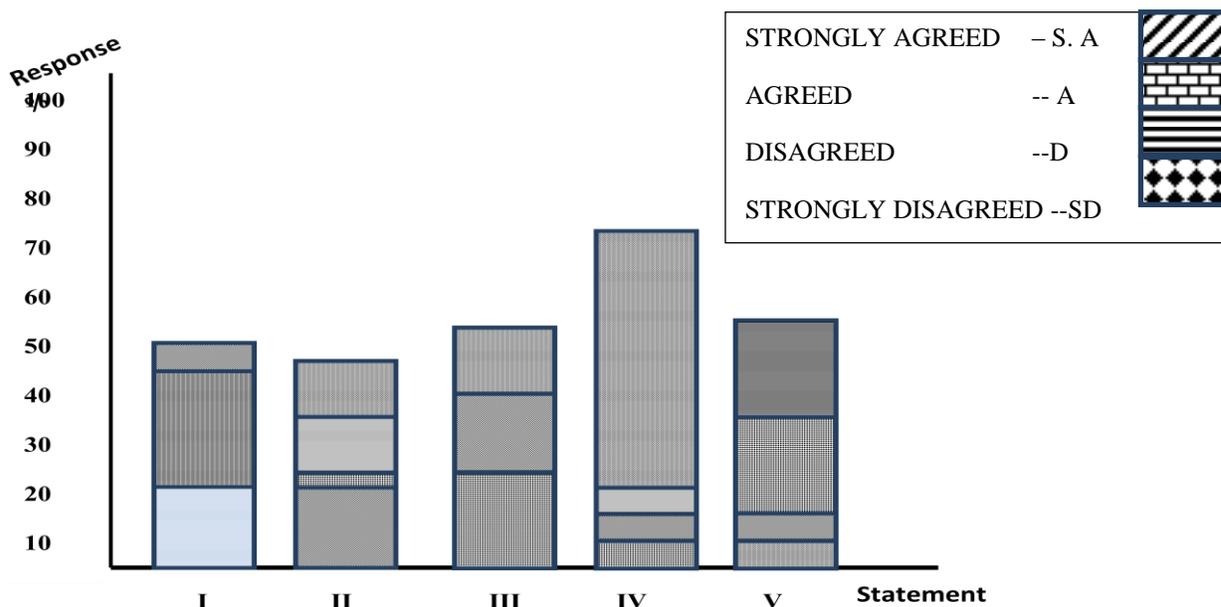

Fig 1: Effective communication between learners and facilitators
Source: Field survey, 2016

From Fig. 1 above, most respondents showed that they are not enjoying effective interaction with the facilitators. The chart showed that eighty-seven percent (87%) of the respondents agreed that there is no effective interaction while thirteen percent (13%) disagreed. In like manner eighty-five percent (85%) of the respondents also agreed that information between them and their facilitators is majorly through their class representatives.

It is obvious therefore that there is wide distance between learners and facilitators. The implication of this is that most of the learners cannot relate and interact with their facilitators on a face-to-face basis since they are distance learners. This becomes a challenge especially in tackling pressing issues relating to their study.

The second category of statements as shown in the Table 2 below relate with the extent to which learners have feedback from their facilitators.

Table 2: Response on feedbacks from facilitators

Challenges	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed
Lack of regular feedback to learners	30	48	7	15
Assignment and test scripts if given back to learners can serve as a means of self-evaluation	10	70	5	15
Learners lack frequent contact with their facilitators for feedback	18	67	0	15
Lack of adequate tutorial periods to enhance coverage of course contents and feedback	36	36	14	14
Difficulty in treating assignment and test questions with learners before examination	21	64	0	15

Source: Field survey, 2016

The responses were summarized and shown in Fig. II below.
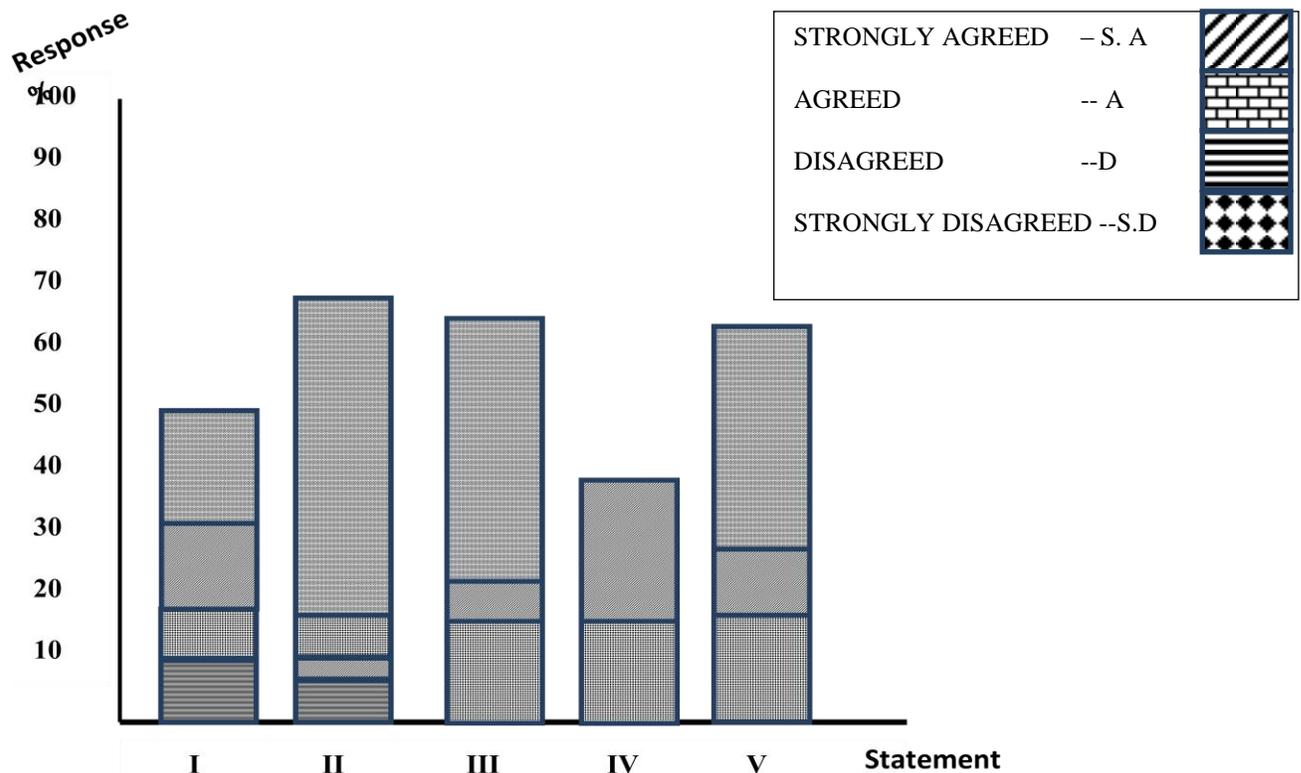From Table 2 above it is obvious that most respondents do not have regular feedbacks from the facilitators.

STRONGLY AGREED	– S. A
AGREED	-- A
DISAGREED	--D
STRONGLY DISAGREED	--S.D

Fig 2: Level of feedbacks from facilitators

Fig. 2 above showed that a large percentage of the respondents do not have adequate feedback from their facilitators. In column II there is indication that eighty percent (80%) of the learners are not getting their test scripts after being marked which would have served as a feedback mechanism for a better performance in subsequent exercise. Eighty-six percent (86%) of the respondents would have appreciated it if assignment and test questions are treated during tutorial classes before examinations while seventy-two percent (72%) want more face-to-face contacts with the facilitators before examinations. This result shows that there is poor feedback to learners. This becomes a challenge to both learners and facilitators for evaluation purpose in such distance learning program.

The third category of statements as shown in Table 3 below relate with the percentage of Biology learners in distance learning that have good ICT knowledge and skills needed for the electronic mode of the program.

Table 3: Response on learners with ICT capabilities

Challenges	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed
Difficulties in accessing the internet for academic purposes	86	14	0	0
Lack of personal computers	38	62	0	0
Lack of good knowledge in ICT	38	40	22	0
On-hand training by ICT learners' support	21	10	45	24
Third party involve in performing online activities	26	15	23	36

Source: Field Survey, 2016

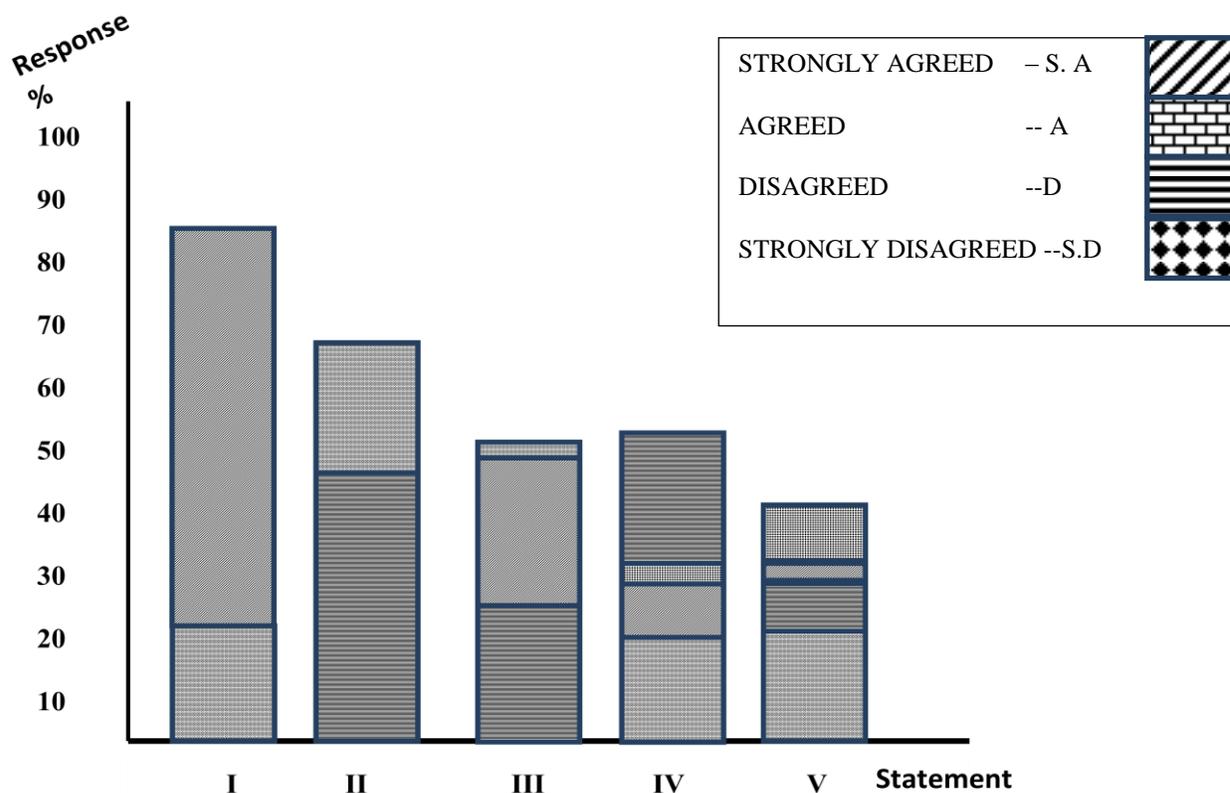The response to the statements were summarized and shown in Fig. 3 below:

Fig. 3: Level of learners with good ICT skills and knowledge
Source: Field Survey, 2016

From Fig. 3 above, one hundred percent (100%) of the respondents agreed completely that they do not access the internet frequently for academic purposes and this same percent of respondents also agreed that they lack personal computers which go a long way to show that personal computers are rarely found among the Biology learners. Also, most learners (69%) disagreed that they are well trained in ICT needed for the open and distance learning program. These results from the respondents clearly show that a large percentage of the Distance Learning Institute learners do not have good ICT knowledge and skills needed for the electronic made of the Distance Learning program. This therefore becomes a factor or challenge to the learners which also affect the standard of the program as a whole.

The forth category of challenges as shown in the Table 4 below relate with the standard of Biology practical classes.

Table 4: Response on effectiveness of Biology practical

Challenges	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed
Lack of standard Biology laboratory	60	16	9	15
Difficulties in attending laboratory practical	33	38	14	15
Lack of coordinated Biology practical	0	0	30	70
Lack of appropriate practical manuals that cover most topics in Biology courses	13	21	42	24
Adequate support from the technologists during practical classes to promote self reliance	24	14	40	12

Source: Field Survey, 2016

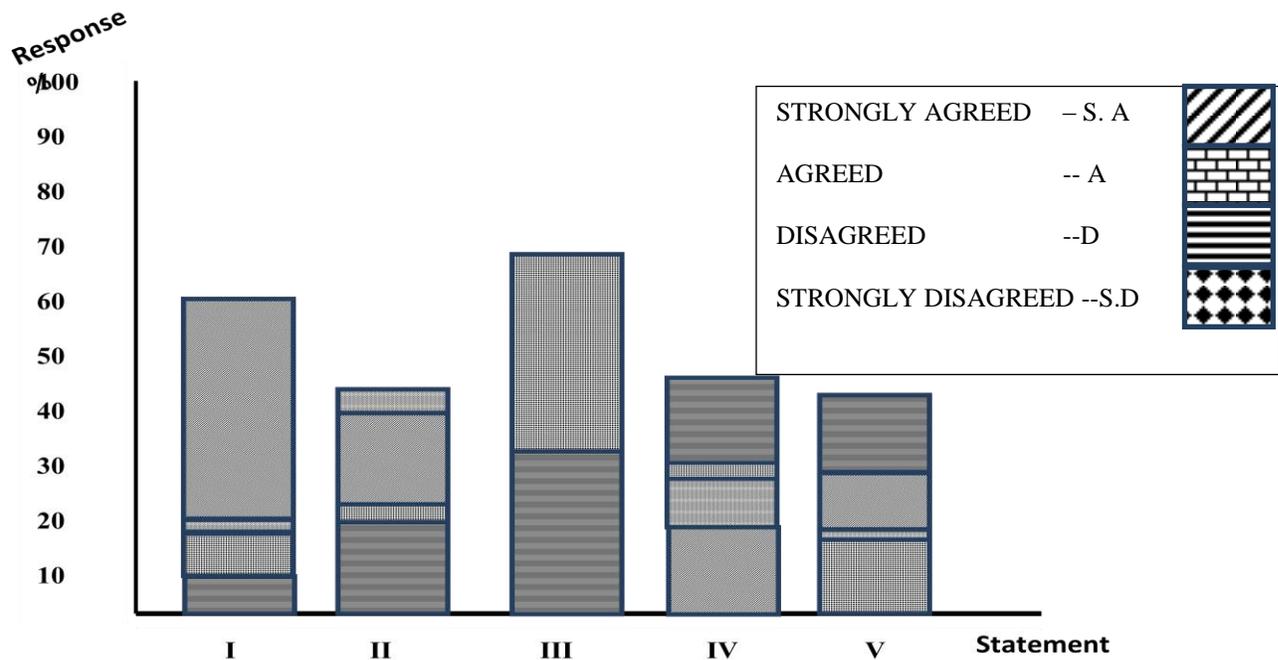The response were summarized and shown in Fig. 4 below:

Fig. 4: Adequacy of laboratory practical

Source: Field Survey, 2016

From Fig 4 above seventy-six percent (76%) of respondents agreed that there is lack of standard laboratory in their institution with well equipped and modern equipment. Even though 100% of the respondents disagreed that Biology practical are not coordinated, seventy-one percent (71%) of them agreed that they have challenges in attending practical classes. Thirty-four percent (34%) of the respondents showed that practical classes are not conducted for most of the topics in the Biology course materials while fifty-two (52%) showed that the technologists do not take them through details of the practical classes. From this result, it is evident that the standard of Biology practical classes organised for the learners are not adequate and that the learners do not utilize the opportunity as a large percent of them do not attend the class and that becomes a challenge to the learners and standard of output in this science program.

Discussion

Most learners are faced with difficulties in coping with the blended learning mode of distance education in science program. They have to deal with the technicalities in studying science oriented courses like Biology. It was deduced from the study that most learners rarely make use of the electronic platform of learning. They more than necessary want to have face-to-face contacts with the tutors which is against the distance learning mode. This could be due to their socio-technological challenges in adapting to electronic mode of learning. Similarly, Cosmas and Mbwette, (2009) findings with ODL students in Tanzania also showed this phenomenon and thus they reiterated that in today's digital world, application of ICT in ODL is a must and not a matter of choice. This finding also agrees with

Moodley (2002) who argues that students have stereotype attitude towards distance education. These sets of learners have to be at work, look after their families and often do not have the time for electronic media.

Findings also show that learners do not have regular feedback from the facilitators. It could be that the learners do not make use of the online platforms such as discussion forum and chat. This may also be as a result of not being motivated by the facilitators. Keegan (1986) argued that the link between the teacher and the student constitutes a vital link in teaching-learning transaction and that the link, which is broken by distance, must be restored one way or the other. This is in consonance with Nart and Altunisik (2013) who find out that when both facilitators and learners make use of the various interactive platforms in ODL it will increase their abilities to use these tools and the effectiveness of education will also increase. Andresen (2009) also stressed that, increased posting by the lecturer causes learners to perceive the lecturer as being more enthusiastic and having more expertise.

This study further showed that majority of the learners has neither a personal computer nor ICT skills for the distance learning program. They usually contract out assignments to third parties. Financial challenges, unemployment, lack of pre-training before embarking on the program may be the reasons for this problem. These challenges were also shown in the works of Mokoena (2013) and Musingafi *et al.* (2015) respectively on the challenges of ODL in South Africa and Zimbabwe. This study also showed that in addition to lack of standard laboratory, the learners also find it difficult attending practical classes despite having co-ordinated practical sessions. This also correlates with Musingafi *et al.* (2015) where learners complain of travelling distance in getting to their centres as a results of social-economic factors. They also agreed to the fact there is practical manual for their usage. However, if these learners have access to these facilities and do not make effective use of them, then equalities in studies will not be achieved.

Conclusion

There are many challenges that confront learners in distance learning education. However, interaction between learners and facilitators can become effective through the use of ODL learning tools. Prompt and regular feedback to learners will give a sense of belonging for equality and an avenue for improvement.

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