

Distance Learners' Perceptions of and Attitudes towards Distance Education in Ethiopia

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Abstract

The main aim of this study was investigating distance learners' perceptions of and attitudes towards distance education. For this descriptive survey, a total of 120 students were selected from two governmental Universities (Bahir Dar University and Haramaya University) that have distance education systems. The respondents were selected using simple random sampling technique; on the other hand, the institutions were selected purposefully since the researcher believed that they were prestigious for their distance education programs and the period of their tutorial programs was parallel to the data collection period of the research. A Likert scale questionnaire was employed to collect the data needed. Then the data were analyzed through descriptive statistics, particularly percentage. The results of the study showed that students had negative perceptions of and attitudes towards the various aspects of distance education institutions. Thus, the government, distance education institutions and curriculum designers should take their respective measures in maintaining students' perceptions of and attitudes towards distance education. Furthermore, these bodies should design strict policies and procedures for distance education systems so as to modernize and up-grade the system in general.

Key words: Perceptions and attitudes; Distance education; Distance learners

I. Introduction

1.1 Background

Distance education's origins may be traced to the nineteenth century in England and continental Europe when colleges used postal services for providing education by means of correspondence (Phipps and Merisotis, 1999; Ponzurick, Russo and Logar, 2000; Sherry, 1996; Wernet, Olliges and Delicath, 2000). The term "distance education" has been used to describe the process of providing education where the instructor is distant (geographically separated) from the student (Gallagher and McCormick, 1999), or any instructional arrangement in which the teacher and the learner are geographically separated to an extent that requires communication through media such as print or some other form of technology (Moore and Thompson, 1997 as cited in Spooner, Jordan, Algozzine and Spooner, 1999; Perraton, 1988; Keegan, 1986; Garrison and Shale, 1987 as cited in Sherry, 1996).

Higher education via distance learning is expanding in scope and use of information and communication technology. In many parts of the world, there have been expansions of distance

education and online academic programs. Particularly, the past one decade has put a significant contribution to the fast growth of distance education in Ethiopia.

From time immemorial, teacher-lecturing/student-listening was the primary mode of traditional academic education. The delivery system for higher education has been a classroom setting with a professor giving a lecture and students listening and writing notes. Interaction between the professor and the student has been viewed as an essential learning element within this arrangement (O'Malley and McCraw, 1999), often referred to as the "sage on the stage."

Technological improvements such as printing machines, postal services, telephone, radio, television, and more recently the Internet, have been a driving force yielding new delivery methods and platforms. These new learning methods used to deliver distance education are proliferating exponentially in various learning programs, and leading some experts to predict that the "residential based model", in the form of students attending classes at prearranged times and locations, will disappear in the near future (Blustain, Goldstein, and Lozier 1999; Drucker, 1997 as cited in O'Malley, 1999). Although an expensive option today, video conferencing may create a virtual feeling that we are "back in the classroom." Some form of distance education has progressed in concept and practice from an "anywhere," to an "anytime," to an "any pace" delivery method.

A substantial body of research on distance education, conducted between 1952 and 1992, showed that distance education outcomes were not that different from those achieved in traditional classrooms (DeSantis, 2002). In their review of distance education programs, Phipps and Merisotis (1999) reported that 1) most writings suggest similarities in learning outcomes of those using technology and those attending classroom instruction 2) distance learners generally have positive attitude and are satisfied 3) most studies conclude that courses of distance education programs are of comparable merits with classroom-based ones and win high level of student satisfaction irrespective of the technology used. Russell (2002) also examined numerous studies and similarly reported further support of the "no significant difference" phenomenon. On the other hand, numerous research studies have presented a different picture and therefore conflict with the conclusions cited above, creating a mixed and confusing situation (Dellana, Collins, and West, 2000).

A major concern about distance education continues to be its quality compared to traditional classroom education. This concern has spurred extensive research into the factors that affect the quality of these programs. In many cases, "broad" measures of the effectiveness of distance education have been examined focusing on academic performance, satisfaction, attitude and evaluation of instruction (Ojo and Kayode, 2006). Although student achievement is one common measure of a distance education program's success, it is recommended that program evaluators collect and report additional data to give the most exhaustive description possible.

Recent meta-analysis studies have focused on specific characteristics in distance education: student satisfaction (Allen, Bourhis, Burrell and Mabry, 2002); instructional features affecting learner achievement (Machtmes and Asher, 2000); and education technologies in K-12 learning (Cavanaugh, 2001). As distance education in Ethiopia has been suffering from various factors related to attitude, quality, feasibility and sustainability from the outset, the current study investigates distance learners' real perceptions of and attitudes towards distance education in the Ethiopian context, taking the above theoretical backgrounds as a base.

1.2.Statement of the Problem

Distance education refers to various forms of educational activity in which learners are physically apart from the teacher or the teaching institution for much of the teaching and learning process (Rumble, 1989). Distance education is emerging as a distinct discipline that has drawn attention of educational researchers who wish to probe various aspects of this innovation in countries like U.K., Canada and Australia and now in various Asian and African countries including Ethiopia. This is bound to lead to further improvement and investigation of a variety of new communication media, which are now easily available.

Relatively little research has been devoted to exploring factors that predict the success of distance learners (Cookson, 1989). Furthermore, the research that does exist has concentrated largely on demographic correlates of student success (Biner et al, 1995). Sahoo (1994) reported that the majority of the studies are exploratory in nature and useful for being aware of the condition of distance education and almost all do not facilitate macro and micro level decision-making. From the review of studies, it is evident that empirical researches highlighting the contribution of learners' characteristics to success in distance learning system have been neglected with a few exceptions such as those conducted by Das (1992), and Renu (1990). Other researchers took it as a component in their study e.g., Anand (1979), Gomathi (1982), Khan (1982), Pillai and Mohan (1983) and Sahoo (1985). A careful scrutiny of the meager research available in the field of distance education leads one to believe that it is a growing field with vast research potential. Surveys of research in education in Ethiopia vouch for it. It is also clear that the battery of predictors generally used to predict the success in formal system may not adequately do justice.

Shortage of researches in the area of distance education, inadequacy of existing research evidence to predict the perception and attitude of distance learners in Ethiopia and the researcher's teaching experience in the system have served as motivating factors for undertaking the present piece of research so as to fill an important knowledge gap. In view of the importance of learner characteristics in the success of the distance education system, the researcher was inclined to study perceptions of and attitudes towards distance education as predictors of academic performance of undergraduate distance learners in two governmental universities.

1.3.Objectives of the study

1.3.1. General Objective

The general objective of this study was examining distance learners' perceptions of and attitudes towards distance education in Ethiopia.

1.3.2 Specific Objectives

The specific objectives of the study were:

- Discovering students' perceptions of and attitudes towards distance education in general.
- Identifying students' perceptions of and attitudes towards the methods and materials used in the distance education system.
- Identifying students' perception of assessment in the distance education system.
- Discovering students' perception of the quality of distance education.
- Discovering students' attitude towards the quality of employees who passed through distance education.

1.4 Significance of the Study

This study can benefit various concerned bodies. Firstly, it would inform methodology specialists and curriculum designers in the Ethiopian education system about how distance learners perceive the distance education system and enable them to consider distance learner's characteristics. Distance education institutions can also benefit from this study since it triggers them to revisit their functioning by taking learners' perceptions of and attitudes towards distance education into consideration. Above all, this fairly limited study may pave a way for further research in this area.

1.5 Scope of the Study

This study was carried out on only two learner characteristics, namely, perception and attitude, and only two governmental universities (Bahir Dar and Haramaya) running distance education programs. The research would have been more inclusive and comprehensive if students of the universities in other study centers, other institutions such as private ones and other stakeholders such as teachers, employers and curriculum experts were included.

1.6 Limitations of the Study

This study focused on assessing distance learners' perceptions of and attitudes towards distance education with reference to two governmental universities. Firstly, the exclusion of private institutions due to inconvenience of collecting data from their scattered tutorial centers would affect the generalizability of the results of this study. Secondly, the study has not assessed tutors' and other

stakeholders' perceptions and attitudes in parallel to those of students. Thirdly, the use of questionnaire only might have its own negative impact on the strength of this study.

1.7 Definitions of Operational Terms

Distance education: The process of providing education where the instructor is distant (geographically separated) from the student

Students' perception: Students' understanding and awareness of distance education

Students' attitude: Students' outlook and feelings towards distance education

Conventional institutions: Institutions that provide education face to face

II. Methodology of the Study

The design of the study was descriptive survey with a quantitative approach. A total of 120 students selected from two governmental universities (Bahir Dar University and Haramaya University) through simple random sampling participated in the study. The institutions were selected purposefully since the researcher believed that they were prestigious for their distance education programs and the periods of their tutorial programs were found to be quite parallel with the study's data collection period. The data were collected as students were taking their tutorials in the Minilik I Primary School in the weekends. The data were then collected in a period of two weeks.

A Likert scale questionnaire was used to assess students' perceptions and attitudes. To this effect, a perception and attitude inventory which was developed by a Nigerian researcher (Ojo, 2006) was slightly adapted. The questionnaire contained 30 items classified under five categories. In the first category, there were seven items dealing with students' perception of distance education; the second category contained seven items on methods and materials; the third category had three items on assessment; the fourth category contained seven items on quality education, and the last category contained five items on employees' quality. The questionnaire was filled by all students regardless of batch, age, sex and other variables. The questionnaire was also filled through face to face approach. 120 questionnaires were distributed and 102 of them collected back.

After data collection, data were organized thematically and encoded into the SPSS 20 software. Then, the data were analyzed and discussed, the analysis being immediately followed by the discussion under each sub-title. Since the approach of the study was fully quantitative, descriptive statistics was employed. To this end, the frequency and percentage of responses were calculated and analyzed using five tables under different categories.

III. Data Analysis and Discussion

The analysis of data was made under five categories focusing on students' attitude towards distance education in general, their perception of the methods and materials in the distance learning program, their perception of the assessment process in distance education, their perception of the quality of distance education and their perception of and attitude towards distance education in relation to employment. Thus, the analysis is made according to the five major categories each of which contain 3-7 items, and the results were presented in tables using percentage as a numerical tool. For the analysis purpose, only the valid percent was used avoiding the missing part from the statistics.

In addition to this, a total of 120 questionnaires were distributed and only 102 of them were returned. As a result, the frequency of all of the 102 papers is calculated in this part except a very few missing elements under most of the items. The data analysis and discussion is made together preceding the data presentation followed by a discussion at the end of each sub-title.

3.1 Students' Attitude towards and Perception of Distance Education in General

Table 1: Students' Attitude towards and Perception of Distance Education in General

No	Statement	Percentage of Responses		
		Agree	Disagree	Undecided
1	I am happy that I am attending my first degree in distance education	50%	16%	34%
2	If I had the choice, I would have learnt my first degree via the conventional system	77.2 %	10.9 %	11.9%
3	It is easier to obtain a degree by distance learning than by regular university program.	68.3%	21.8%	9.9%
4	Distance learning program are better than regular degree program.	15%	75%	10%
5	The entry point into the distance education system seems more relaxed than the conventional system.	66.7%	18.6%	14.7%
6	It is easier to work and study in the Distance education institutions unlike in the conventional Universities.	71.7%	17.2%	11.1%
7	The distance education institutions permit one to extend the completion of a program without penalty.	60.6%	18.2%	21.2%

Table 1 above shows the item-by- item analysis of the data on students’ general perceptions and attitude towards distance education.

The first item asked the students if they were happy that they were studying for their first degree in distance education. Accordingly, half of the respondents (50%) agreed that they were happy, but only 16% of them disagreed. 34% of the respondents were not in a position to decide whether they were happy or not.

In the second item, most of the students (77.2%) agreed that they would study for their first degree if they had a choice. Here, 10.9% and 11.9 of the students disagreed to the statement and were unable to decide, respectively.

Item 3 of table 1 shows most of the students (68.3) believed that obtaining a degree by learning at a distance is easier than by attending a regular university program. 21% of the respondents disagreed while 9.9 of them were not able to decide.

Item 4 is about the comparison of distance learning program and regular degree program. Most of the students (75%) disagreed that distance education is better than regular program while 15% of them agreed on the statement. Here, 10% of the respondents were not in a position to decide.

In the fifth item, 66.7% the students agreed that the entry point into the distance education system seems to be more relaxed than the conventional system. 18.6% and 14.7% of the respondents disagreed and unable to decide, respectively.

Responding to item number 6, most of the students (71.7%) agreed that it is easier to study and work in the distance education institutions unlike in the conventional universities. Here, 17.2% of the students showed their disagreement, but few of them (11.1%), were unable to decide.

On the final item of Table 1, 60.6% of the respondents agreed that the distance education institutions permit one to extend the completion of a program without penalty while 18.2% of the students disagreed on the statement. Still, 21.2% of the students were not in a position to decide on the above idea.

From the above data, we can understand that the students had a negative attitude towards distance education in general. Although half of the students seem to be happy about attending their first degree via distance education, most (77.2%) of them preferred to study for their degree through the conventional education system. This can simply tell us that though half of the students pretended to enjoy studying in the distance education system, they are more interested in conventional education system. Furthermore, students had some misconception on the formality and load-related standards of distance education. All these evidences could show us how students in the distance education system are negatively perceiving the educational system they are engaged in.

3.2 Students’ Perception of Distance Education Methods and Materials

Table 2: Students’ Perception of Distance Education Methods and Materials

No.	Statement	Percentage of Responses
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		Agree	Disagree	Undecided
1	The study materials received in the distance learning are of better than the lecture notes received in the conventional system.	24.5	63.7	11.8
2	The materials provided in the distance education programs are self-sufficient for my studies	28.7	56.4	14.9
3	I don't go to library, and I don't need to read other books since the modules are enough	66.6	25.5	6.9
4	The counseling needs of learners are better met in distance education than in the conventional higher education.	28	62	10
5	Group discussions are more important in distance education than the conventional system.	84.4	7.8	7.8
6	The time given for tutorial is not enough.	77.7	14.2	8.1
7	The tutorial in use in the distance education is as effective as the lecture methods used in the conventional system	24.5	62.7	12.8

Table 2 is about students' perceptions of methods and materials used in distance learning programs. The first item asks students if they believed that the study materials of distance learning programs are of better quality than the lecture notes received in conventional system. Thus, only 24.5% perceived that the course materials used in their distance study are of higher quality than the lecture notes provided by lecturers at conventional institutions while most of them (63.7%) did not perceive the distance learning course materials as being of higher quality than lecture notes.

In item 2 of Table 2, students were asked if the materials in the distance education programs were self-sufficient for their studies. 55.5% of students disagreed while 28.7% and 14.9 of them agreed and were unable to decide, respectively. This result indicates that more than half of the students did not believe that the materials in distance education programs were sufficient to their education.

In response to item 3, 66.6% of the students reported that they did not go to library and read books other than their modules believing that the modules were enough. The remaining 25.5% and 6.9 disagreed and were undecided, respectively. This is contrary to the response of over half of the students to item 2: that the materials provided in distance education programs were not self-sufficient.

Responses to item 4 suggest that students' need for counseling were better met in ODL institutions than in conventional university; only 60% of the students responded negatively to this statement, while 28% responded positively, and 21.2% indicated they were undecided.

The majority of the students (84.4%) agreed that group discussions were more important in distance education than in conventional education, whereas 7.8% disagreed and the other 7.8% were undecided.

The time given for tutorial in distance education programs was reported to be inadequate by the majority of the students (77.7%) while 14.2 disagreed on the statement. 8.1% of the respondents were not in a position to decide. In response to item 7, most of the students (62.7%) disagreed on the effectiveness of distance education tutorials compared to that of the lecture methods in the conventional education while 24.5% agreed and 12.8% were undecided.

From the above presentation, one can deduce that the students had negative perceptions of the methods and materials of distance education programs in various measurements, except their positive outlook on the importance of group discussions in distance education. This can give us a good understanding of students' real perception of distance education programs, particularly on their perceptions of the methods and materials which can highly influence the teaching-learning process.

3.3 Students' Perception of the Assessment Process in Distance Education

Table 3: Students' Perception of the Assessment Process in Distance Education

No.	Statement	Percentage of Responses		
		Agree (%)	Disagree (%)	Undecided (%)
1	There is more room for academic cheating in distance education than conventional education.	70.3	18.8	10.9
2	The assessments in the distance education program are easier than the assessments in the conventional studies.	65	28	7
3	Very little effort is required to obtain a degree via distance learning.	15	79	6

Table 3 assesses students' perceptions about the assessment process of distance education. Under item 1, students were asked if there is more room for academic cheating in distance education

than conventional education and 70.3% of them agreed while 18.8 showed their disagreement. Fewer students (10.9%) were not sure of the statement.

Regarding the assessments in the distance education program, 65% of the students agreed that the assessments in distance education program easier than the assessments in the conventional studies. Here, 28% of the students put their disagreement on the statement while 7% of the respondents were not in a position to decide.

In parallel to the assessment process, students were asked to show their perception on a statement 'very little effort is required to obtain a degree via distance learning'. Accordingly, 79% of them disagreed, 15% of them agreed and 6% undecided.

From the above data one understand that most of the students (70% and 65%) perceive that the overall process of assessment in the distance education system is sub-standard in comparison to the assessment process in the conventional education system. This could tell us that students in the distance education system have a negative perception about the assessment process of the institutions where they are learning in through distance.

3.4 Students' Perception about the Quality of Distance Education

Table 4: Students' Perception about the Quality the Distance Education

No.	Statement	Agree (%)	Disagree (%)	Undecided (%)
1.	Teachers in the distance education program less competent than teachers in the conventional program.	67	21	12
2.	The quality of a bachelor's degree obtained through distance learning is inferior to that obtained through a regular university program.	62.7	25.5	11.8
3.	Conventional university program are more rigorous than distance learning program	68.6	19.6	11.8
4.	There is no difference in quality between degrees obtained by distance and regular university program.	24.7	67.4	7.9
5.	Distance learning degrees are for students who cannot gain admission into regular university	20.5	66.7	11.8

program.

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| 6. Students on distance learning program are as intelligent as their counterparts in regular program. | 23.7 | 64.4 | 11.9 |
| 7. A degree via distance learning is as good as degree obtained via a conventional university degree program | 25.2 | 62.6 | 12.1 |

The issue of quality education is covered in the items under table 4. In item 1, students were asked if teachers in the distance education program less competent than teachers in the conventional program. As a result, 67% of the students perceive that their teachers in the distance education program are less competent than teachers in the conventional program. Still, 21% of the students disagreed and 12% of the students were not in a position to decide. 62.7% of the students agreed that the quality of a bachelor's degree obtained through distance learning is inferior to that obtained through a regular university program, but 25.5% showed their disagreement on the statement. 11.8% of the students did not put their stand on the statement.

In relation to the above idea, 68.6% the respondents do believe that conventional university program are more rigorous than distance learning program while the remaining 19.6% do not accept this idea, and 11.8% shown their neutral position.

Item 4 is about difference in quality between degrees obtained by distance and regular university program. 67.4% of the respondents here disagreed while 24.7% agrees on the quality between degrees obtained by distance and regular programs. 7.9% of the students were not in a position to decide on the statement.

Although students result in the above discussed items show that they perceive that distance learning education if inferior to regular program, most of the students (66.7%) disagree on the statement which reflects that distance learning degrees are for students who cannot gain admission into regular university program. However, 20.5% of them agreed on the statement. There were few students (11.8%) who were not able to decide.

On items 6 and 7, most of the students (64.4% and 62.6%) disagreed on the concept of the equivalence students' intelligence and degree qualities between the distance and conventional education system. There also students (23.7% and 25.2%) who had an opposite stand towards the inequality of the two programs.

From the above descriptions, it is understood that most of the student in most cases do believe that the quality of distance education is inferior to the quality of conventional education. This will have a clear implication on the quality of distance education since perception has a direct relation with practice and implementation. However, students knew that distance education is not designed for students who cannot gain admission into regular university program. In contrary to the previous ideas, students' perception on the existence of distance education for all kind of students as a preference has a positive implication on the distance education system.

3.5 Students' Perceptions and Attitudes about Distance Education vs. Employment

Table 5: Students' Perceptions and Attitudes about Distance Education versus Employment

No.	Statement	Responses		
		Agree (%)	Disagree (%)	Undecided (%)
1	Graduates who obtained their degrees via distance learning usually lack adequate skills compared to graduates of regular academic program.	58.9	25.4	10.8
2	Graduates of regular degree program require less training on the job compared to those from distance learning program.	63.4	26.7	9.9
3	If I were allowed to select my assistant, I would not employ someone with a distance learning degree.	55.9	25.5	17.6
4	Distance learning degrees are useful for gaining knowledge but not good for preparation for employment.	54.9	37.3	7.8
5	I will not recommend a distance learning program to anyone who wants a good quality degree.	56	35	9

The main purpose of the items in table 5 is on assessing students' perception and attitude about distance education versus employment. To know students' perception about if graduates who obtained their degrees via distance learning usually lack adequate skills compares to graduates of regular academic program. Thus, 58% of them believe that distance education graduates lack adequate skills compared to regular program graduates. Here, 25.4% of the students disagreed on this statement. Few (10.8%) were not in a position to decide.

In relation to the above idea, students were also asked if graduates of regular degree program require less training on the job compared to those from distance learning program. Similarly, the majority of the students (63.4%) agreed on the statement while 26.7% of them disagreed and 9.9% of them not decided.

On item 3 of table 5 students' attitude measured through technically asking them what would have been their decision of employing someone learning in the distance education program had they been allowed to employ their assistant. Accordingly, 55.8% of the students agreed not to employ their assistant from distance program while 25% of them disagreed and 17.6% remained undecided.

Another systematic question which may challenge students' decisions was also raised on item 4 and more than half of the students (54.9%) agreed on the statement about distance learning degrees are useful for gaining knowledge but not good for preparation for employment while significant number of students (37.3%) disagreed and 7.8% remained undecided.

Finally, a statement on '*I will not recommend a distance learning program to anyone who wants a good quality degree*' was raised and students were asked to put their stand on. As a result, 56% of the students agreed that they will not recommend anyone to evolve in the distance learning program while 35% disagreed and 9% were not in a position to decide.

All of the above questions are raised knowing that most of the students in the distance learning program have work experiences since most of them are employees or employers. Like the previous discussions, most of the respondents have negative perceptions and attitudes towards the qualities of employees who have attended their education by distance education system.

Furthermore, most of them have showed a preference of employing someone in the conventional education system than someone in the distance education program. Most of them also said that they will not recommend a distance learning program to someone who wants a good quality degree. However, unlike to their previous perceptions on learning distance education, they said that they learn degrees through distance education for gaining knowledge than good for preparation for employment. This idea contrasts with their previous concerns on the quality of distance education versus the conventional education one. So, it seems that significant numbers of learners in the distance education program are not sure of the entire objectives of attending their education in the distance channel despite the chance they got to continue their education.

IV. Conclusions and Recommendations

4.1 Conclusions

Based on the above analysis and discussion, the following conclusions have been drawn:

- Though students claim that they are happy of attending their first degree via distance education, they have a negative attitude to and poor conception about distance learning program as it is compared to the conventional education in terms of preference and formality.
- Students reported a negative perception towards the methods and materials in the distance education programs in various measurements (modules, tutorial and counseling), except their positive outlook on the importance of group discussions in distance education in comparison to the conventional education system. This can give us a good understanding on students' real perception on distance education programs, particularly on their perception of the methods and materials which can highly influence the teaching-learning process.
- Most of the students perceive that the overall process of assessment in the distance education system is sub-standard in comparison to the assessment process in the conventional education system. This could tell us that students in the distance

- education system have a negative perception on the assessment processes of the institutions where they are learning in through distance.
- The majority of the students believe that the quality of distance education is inferior to the quality of conventional education. This will have a clear implication on the quality of distance education since perception is directly related to practice.
 - However, students knew that distance education is not designed for students who cannot gain admission into regular university program. Unlike to the previous ideas, students' perception on the existence of distance education for all kind of students as a preference has a positive implication on the distance education system.
 - Similarly, most of the students have negative perceptions and attitudes towards the qualities of employees who have attended their education through distance education system.
 - Generally speaking, students have negative attitudes to and perception about distance education program in Ethiopia though they showed positive attitudes and perceptions in very few components of distance education.

4.2.Recommendations

Based on the above conclusions, the following recommendations are made.

- Students should first know and believe in the advantages and disadvantages of distance education and have a clear attitude and perception of the distance education system to be successful through the course of their stay in the system.
- The methods and materials used in the distance education system should be designedcritically and pedagogically by the Universities which provide the program since having well designed material and methods have a great role in maintaining students' attitude and perception towards distance education.
- The assessment and admission requirements of distance education institutions should have a standardized polices and guidelines that would rather keep the reputability of the institutions and the distance education programs as well. This will then maintain students' attitude towardsthe above requirements of distance education.
- The main objective of every educational system, whether it is conventional or distance, should providing quality education. Therefore, distance education institutions should work hard so as to change their students' negative attitude towards quality of education in the distance education system in comparison to conventional education system.
- Distance education students' attitude towards the quality of employees who have attended their education through distance education systems should be maintained since employment has lots of things to do with quality education. So, the institutions and other stakeholders should work on changing students' negative attitude towards employment.

- Ministry of education in collaboration to other stockholders, such as Higher Education Strategic Center (HESC) and Higher Education Relevance and Quality Agency (HERQA), should design standardized and dynamic policies and procedures of distance education system that can be followed, controlled and evaluated sustainably.

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