

Challenges and Implementation of Measurement, Continuous Assessment and Evaluation in Open and Distance Learning in Ethiopia

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Abstract

This research on challenges and application of assessment and evaluation in open and distance learning in Ethiopia was made by taking 160 distance learners from 3 government and 2 private university distance learners in filling Likert type questionnaire of which 142 are given back to the researcher. In addition, secondary data as archival were referred from two institutions and 7 FGDs among 49 learners have been conducted. Participants were selected using multistage sampling followed by stratified sampling from university to department level and year level or seniority. It was found that there are repeatedly narrated feedback problem in addition misuse of formative evaluation is the potential challenge. The misuse was in terms, weight given for assessment tools, assignment feedback or reporting pitfalls and lack of transparency. From the FGD it was also found that most of the learners make assignments to be done by others through payment. As assessment has equivalent role with teaching learning process in quality education, (Asthana, 2000), the misuse assessment and evaluation affects the progress and cross checking of learning outcomes that the institutions expect as per the statement of objectives on course syllabus. On the other way, summative evaluation and final exam administration has also drawbacks as susceptibility to cheating at administration and subjectivity at scoring as there is claim of "Single-Blindness" in terms knowing the learners' marks. As per the finding recommendations are given to institutions, centre coordinators, invigilators and scorers (who mark exam papers). Though it seems impractical, efforts should be made to shift to e-contact of learner with the centre for both formative and summative evaluation.

I. Introduction

1.1. Background

Globally, educational processes including teaching and learning have moved and have continued to move from the usual classroom face to face interaction between the teachers and the students to learning which is not restricted to the four walls of an institution. This is learning which can take place anywhere, anytime and at the comfort and pace of the learner. This type of learning which has been accepted world over in the form of Open and Distance Learning (ODL) is driven by electronic learning otherwise called e-learning. To this effect, the nature of teaching and learning is changing across all parts of the higher education sector globally. Therefore assessment practices have come under scrutiny as a result. The traditional pen and paper examinations which were held at a high esteem, have been found to have very often failed to illuminate the existence of critical thinking, effective decision-making, collaborative skills, or the ability to apply what is learnt in practical problem solving situations (Reju and Adesina, 2009). It is hoped that the use of technologies in assessment may offer opportunities to correct these deficiencies. Multi- media approach to teaching, learning and assessment is what is invoke in different parts of the world. But the application must be pedagogically and andragogically led, and appropriately selected. As far as many academic of higher institutions are concerned, the appeal for e-assessment lies in its ability to capture aspects of learning previously considered impossible to assess. It is noted that the assessments arranged in the traditional pen and paper form can be singled out as one of the most laborious recurring tasks.

Distance learning is rapidly transforming the delivery of education at all levels within developed and developing countries. Key trends associated with its application in the more advanced economies are described including its rapid rates of growth and adoption, the trend towards technology convergence on the Internet, innovations in content creation, and the move towards horizontal integration as a necessary organizational strategy to sustain distance learning systems. More developed countries are in the process of using distance learning as a primary strategy in TVET reform. These initiatives are being driven by a recognized need for more

efficient and effective human resource development strategies in response to the forces of international competition and globalization (Stevens, G.,2001).

Still, the lack of infrastructure in Sub Sahara Africa does not preclude the region from moving forward on the application of distance learning for technical / vocational training. The most viable option for the region, under the prevailing conditions, is the implementation of a relatively basic model of distance education delivery that integrates print-based materials, remote study / access centers, and the incorporation of face-to-face components for imparting manual / psycho-motor skills (Stevens, G., 2001).

Print, as the basic medium of instruction, has the capability to provide access to training for large numbers of participants at relatively low unit costs. Other advantages include reliability, ease of access, relatively low development costs, capability to integrate well with other media, and its proven effectiveness for technical / vocational training in developed countries and the region. When developing specific institutional and/or program strategies it will be important to explore how print might be integrated with broadcast / instructional radio and other mass media. Additionally, the acquisition of print-based learning materials from other jurisdictions is a cost-effective strategy for expediting implementation in the region. Although acquired materials will likely need to be adapted to the requirements of the region, local adaptation costs are a fraction of original development (Stevens, G., 2001).

Distance Education is a new, global technology-based education to facilitate easy, immediate learning and interaction for communicators, teachers, and students in education programs. Distance Education can provide mass-education for everyone. It leads people to learn individually and shifts responsibility for learning from instructors to students. It facilitates student selection of courses and content to reflect their needs and motivations. It provides creative and qualified ideas and information to motivate students from diverse backgrounds.

To be effective, distance education programs need to redefine the roles of teachers and students in the learning-teaching process. Even on the aforementioned literature on challenges of ODE, it is illustrious that the issue of "measurement and evaluation of distance learners' learning outcomes" is neglected.

1.2. Statement of the Problem

Distance education is believed by many to hold promise in addressing critical problems facing skills development at present, namely: a lack of qualified instructors, the need to greatly increase the delivery of skills training on a wide scale, and the need to deliver training at much lower unit costs owing to constraints on financing.

Continuous assessment signifies the progress of learners. This techniques helps to look in to the effectiveness of the method of teaching the teachers use. One of the most important tasks for classroom teachers is to ensure that students achieve instructional objectives. Teachers must monitor the progress of the both the class and individual students in order to make good decisions about where to begin teaching, when to move on to the next unit of instruction, whether to re-teach the present unit, or whether a particular student or subgroup of students needs special help to master the learning task. The quality of these decisions influence the effectiveness of the classroom instructional program (Thorndike, 1997)

Very often, it is valuable and fair to give high credit for evaluation mechanisms as is to the preparation of plan, course outline and even learning and teaching process. Instructors may not do what they intend to do in assessment techniques on their course outline and/or plan. Continuous assessment is one of mechanisms of assessing student's performance. As professionals assessing student's performance continuously is very important to get continuous feedback for their improvement than covering the whole course by giving exams. That is why the government gives much emphasis and implementing in different levels of educational institutions at this time. But there is also complainant in that continuous assessment is very difficult to perform at large class when number of students is in a big deal. So what? But which one weighs better cope up of class size or missing the advantage of formative evaluation?

Despite the promises and obvious advantages to distance learning, there are problems that need to be resolved. These problems include the quality of instruction, hidden costs, misuse of technology, and the attitudes of instructors, students, and administrators. Each one of these has an effect on the overall quality of distance learning as a product. In many ways, each of these issues relates to the others (Holmberg, B., 1989).

However, the very important element is missed in this literature, that is, assessment and measurement of learning outcomes.

Having all these things in mind the present researches tried to explore previous researches conducted in relations to this issue, it is found to be none in ODL as far as the knowledge of the present researchers. Therefore, the lack of well documented information and the presence of debate in the area initiate these researchers to investigate evaluation and assessment in ODL. Hence, efforts were made to address the following research questions:

- Is there periodical follow up of learning outcomes in ODE?
- Are the assignments and projects works good at boosting students'/learners' independent performance?
- Is it impractical and difficult to use continuous assessment techniques in ODE?
- Are there faulty applications of continuous assessment techniques in the GHIs and PHIs and are they the cause for dropout and attribution rate?
- Are there significant differences among universities in the implementation of measurement and evaluation?

1.3. Objectives

A. General Objective

Pinpointing the challenges of assessment and evaluation in open and distance education.

B. Specific Objectives

- Identify presence of periodical follow up on assessing learning outcomes.
- Diagnosing use of continuous assessment techniques to come up with progressive teaching-learning process.
- Investigating impracticality and difficulty of using continuous assessment techniques in day-to-day practice of teaching.
- Searching efforts of instructors purport to insure quality education by using proper continuous assessment techniques.

1.4. Significance of the Study

This research is highly valuable, timely and important in various aspects. It serves the practitioners and students to be familiar with the continuous evaluation mechanisms. Since no research was conducted so far on this issue specifically in JJU and TTC, this study could be served as a benchmark reference for further empirical research works on the same issue. The study is also initiative for concerned bodies to give due attention for the continuous assessment mechanisms. Above all, it contributes a lot on

assurance and striving for quality education.

1.5. Delimitation

In terms of content, the scope of this research is bounded in measurement, assessment and evaluation in ODE. The research area is delimited to 3 Government Higher Institutions (GHIs) and 2 Private Higher Institutions (PHIs).

1.6. Limitation

This research output has been done as per the response from five higher institutions engaged in ODE. However, the response from the respondents was from students at given moment not longitudinal. All the respondents were from Addis Ababa coordinating center wherein access is assumed better than those in the country out of the capital city; as a result external validity seems relatively a bit doubtful though advantage lies here on the aforementioned locale.

1.7. Operational Definition

Continuous assessment: - regular follow up on the progress and attainment of learning outcomes by learners.

Formative evaluation: - ongoing assessment techniques/mechanisms to find out learning improvement and to shape the procedures.

Classroom achievement tests- assessment tools constructed and administered by instructors at course level.

II. Review of Related Literature

2.1. Overview

Distance Education refers the interactive, educational process between student and teacher separated by physical distance. It adapts to individual differences and the way students react to media. Personality, intellectual abilities, cognitive and learning styles are important concerns in distance education (Harry et al., 1993).

Distance education is expanding rapidly as it gains worldwide acceptance by students, educational institutions, employer organizations, and the public at large. It makes education accessible to underserved populations, and flexible in fitting into complex lifestyles, schedules, and responsibilities of today's learners. The quality of Distance Education is no longer in question, and focus has moved beyond defining what it is to determining what it can do.

Instead of traveling to attend regularly scheduled classes at a teacher-centered campus, students can access internet courses virtually anywhere. Despite the physical distance between students and teachers, communication technologies offer many opportunities for interaction. These same communication technologies facilitate rapid dissemination of new concepts in disciplines such as science and technology. Distance learning is a positive influence for change and global implementation in all disciplines. Pedagogy in traditional institutions of learning has been affected by distance education.

For societal development; education should be a leader in providing easy access to knowledge, effective ways to learn, and growth opportunities for qualified people. Distance education enables people to learn individually at any time or place. They learn from computer assisted programmes, interactive multimedia, and internet discussions rather than from lectures and classroom methods of instruction. Distance Education is really related by the discovery of truth for gaining antithesis sides of the thoughts to get the exact knowledge (Willis, 2002).

Distance Education requires alternative learning process, roles of teacher and students (Clark, 2001). People roles in distance education can be categorized in four subtitles as:

Students: In distance education, students have role to learn. In that process, student has difficult and different roles according to traditional learning process.

Teacher: The main role of the teacher is the design of the course and setting the needs of students. Teacher has role to guide the students.

Designer Groups: These persons determine goals, content, delivery systems, interaction, and evaluation. Usually it is a team of subject matter experts, educators, instructional designers, and production personnel. They design the cyber and digital environment for the effective teaching and learning.

Directors: In all institutes, there are people who direct planning, implementation, and evaluation of the education process.

Interdependence, distance and interaction interplay with the roles of students and teachers. There are three types of interaction within the distance education: learner-content interaction; learner-instructor interaction; and learner-learner interaction.

These three types of interactions play a key role in distance education. As in face-to-face communication, they share ideas through email and chatting (Harry et al., 1993).

In summary, distance education is evolving based on changing economical and social contexts. Knowledge has become one of the most important economic forces; knowledge is rapidly expanding and its useful life time becomes increasingly shorter. To survive in the market, companies need to change, to train and retrain their employed; unemployed workers also need to be retrained. Investing in

the human resources seems to be the only way for a sustainable development (Mario and Heinze, 2001).

The pace of change, the need for lifelong learning, and diminishing educational budgets are pressuring educational institutions to create alternative efficient ways to learn through distance education.

2.2. Theoretical Framework

Distance Education is a form of education in which course content is delivered and interaction provided by the technologies and methodologies of the Internet. The online environment allows people to interact with others asynchronously or synchronously in collaborative environments; to gain access to remote multimedia databases for active, resource-based learning; and to manage self-paced, individualized learning in a flexible way. Moreover, the Internet allows students to enroll in courses from anywhere in the world at almost any time.

There is a new vision developed during the past 15-20 years, strongly influenced by the social and cognitive sciences. The educational system now focuses on learning rather than on teaching. The focus of learning theory has changed to learning styles and perception. Knowledge is considered as socially constructed through action, communication and reflection involving learners (Huebner and Wiener, 2001).

To design effective distance education programs, it is important to understand how learning occurs and the factors that influence motivation, communication, perception, and learning. Learning strategies may consider 1) cognitive learning strategies 2) metacognitive activities for planning and self-regulation 3) learner's goals and motivation. Cognitive strategies cannot be divorced from learner's purpose in using them. Therefore, learner goals and motivation highly influence the cognitive strategies. The distance education requires intrinsic motivation to support skill development, intellectual interests, challenge or personal growth consistent with the results of relevant research (Gibson, 1997).

Moore and Kearsley have enumerated design considerations for distance education as: Good structure, Clear objectives, Small units, Planned participation, Completeness, Repetition, Synthesis, Stimulation, Variety, Open-ended, Feedback, Continuous Evaluation (Moore, Kearsley, 1996, p.1 22).

Reflection in distance education means engaging individual students to explore their experiences to lead to new understanding and appreciations. Holmberg (1995) handled the guided didactic conversation between teacher and student as pervasive characteristic of distance education; those feelings of personal relation between the teaching and learning parties promote

study pleasure and motivation; that such feelings can be fostered by well-developed self instructional material and two way communication at a distance; that intellectual pleasure and study motivation are favourable to the attainment of study goals and the use of proper study processes and methods; that the atmosphere, language and conventions of friendly conversation favour feelings of personal relation; that messages given and received in conversational forms are comparatively easily understood and remembered; that the conversation concept can be successfully translated, for use by media available, to distance education; and that planning and guiding the work, whether provided by the teaching organization or the student, are necessary for organized study, which is characterized by explicit or implicit goal conceptions (Holmberg, 1995, p.47).

Learner autonomy should be the goal of distance education. It is good for students to be self-directed, motivated, evaluative, and responsible for their own learning. This changes the traditional role of the teacher from disseminator and manager to designer, moderator, guide and coach. Learner autonomy is realized when distance learners participate in setting learning objectives, implementing their program of study, and evaluating their personal learning and performance. Instead of face-to-face instruction, distance educators design learning environments that stimulate productive learning activities. Students use these activities to achieve course goals and meet their individual needs.

Learning environments range from teleconferences to interactive multimedia via the Internet. They are designed to engage the learner. For example, in audio conferencing there are four major strategies for the teacher: humanizing and relating to the learner; participation and interaction; message style presentation of information; lastly, feedback to determine effectiveness of learning and teaching.

According to Kearsley, M. 1996, television, printed materials and computers are tools used by educators to disseminate and manage instruction. It is important for educators to know the values and limitations of different communication media and techniques. The coordinator of distance education should establish competence, continuity, control and confidence. Large group one-way communications should be supported by small group activities and interactive computer experiences. Even in distance learning, there may be a need for individual tutoring with real time interaction between students and teachers, or peer learning where students work together and support each other. Students need guidance, encouragement and reassurance; constructive criticism and advice, fair and objective grading, and timely response from the instructor.

For the most part, distance education students are adult learners. Compared to school-age students, they are self-reliant and responsible for their own learning. They should be encouraged to assume responsibility for setting objectives, self-direction, personal responsibility, personal experiences, making decisions, learning to solve problems, and maintaining intrinsic motivation (Kearsley, M. 1996).

Research in distance education encompasses the changing roles of teachers and students, the role of interactive technologies, and its global impact on traditional and underserved populations of learners. It describes distance education as synchronous and non-synchronous, anywhere and

anytime, and learner focused. It adds a vocabulary of technical terms related to computers, television, and interactive multimedia.

Some studies compare the quality of learning; others examine the quality of the learning experience. For example, a study of Ohio's distance education courses via microwave television compared student perceptions based demographic variables (İşman). "The level of student satisfaction in the class was not high. More than 50% of the observational data indicated that students did not agree that they learned as much in the interactive television class." Test results revealed no relationship between gender and students' perceptions. Age and college classification were strongly related to perceptions of interactive television courses. Less significant relationships were found between academic major and graduate/undergraduate status (İşman, 1 999).

Teachers should share their knowledge and experience with students by providing consulting, helping, directing, and advising. Distance Education embraces whole of the student activity, responsibility and willingness for formulating and asking relevant questions and seeking answers. Many Distance Education programmes use discussion and question-answer type media, or decisions based on short scenarios or simulations. The main consideration is here to define and measure role effectiveness of teacher-student communication on learning at a distance (Willis, 2002). Distance education is new technological power for developing a dynamic self-concept for students. The constructivist approach changes the role of educators. Distance Education emulates this approach by leading the students (learner) to develop his or her own strategies, objectives, evaluation, implementation under guidance of a teachers (Gibson, 1997).

Importance Roles of Students and Teachers

Distance Education, or earning a degree online is a rapidly growing industry already slated to be worth billions. While many people waste countless hours surfing on the net, others invest the same time and technology to improve their education. Higher education institutions, business, industry, government, health care, and more recently K-12 schools are embracing this new opportunity for learning.

Distance Education resolves distance, time and some financial aspects of education. Distance learning empowers individuals to participate in self improvement and career development.

2.3. Measurement and Evaluation at Distance Education

According to Thorndike (1997), typically classroom teachers employ a wide range of instructional objectives for a particular class. Cognitive objectives may include the building of a knowledge base or the development of cognitive skills, such as reading or writing. Affective objectives involve the development of attitudes, values, interests and personal or social attributes. Depending up on the area of instruction assessing achievements of these objectives may focus on evaluation of products or performances as well as on acquired cognitive skills and information. Different methods of assessment are often required to determine if different types of objectives have been achieved by students. However, it is critical regardless of the approach to assessment, that the

information collected be accurate and relevant. If the techniques used to collect information about the achievement of an objective do not yield high-quality information, decisions or actions based on those data are likely to be faulty.

Continuous assessment is the assessment tasks or exercises or activities are spread throughout the time of study (eg. throughout the semester that a subject runs), rather than being concentrated say at the end.

Feedback on assessment: students are provided information that gives some explanatory comment on the adequacy of their assessed work, and hopefully also some indication of what they could have done differently to improve.

Formative assessment is the assessment tasks or exercises occur during the teaching, and the student's performances on those tasks are used by the teacher to make decisions about where the teaching needs to go next in order to assist that student's learning. It is part of the teaching cycle, and not part of grading.

Formative typically occurs along with the teaching activities, and is thus usually 'continuous' in nature. But being continuous does not necessarily make assessment formative. Formative assessment is inherently about making use of feedback, both to the student and to the teacher on the teaching. But the giving of feedback on an assessment does not necessarily make that assessment formative. The assessment of students' learning is a not of well understood and, in most disciplines, an under – researched aspect of higher education.

According to Wakeford cited in Fry, Ketteridge & Marshal, 2004 student assessment has of two main importance: first, assessment is an integral component of the teaching and learning system. Assessment may be used explicitly to guide students in their study. But also, student perceptions of what is rewarded and what is ignored by formal examination procedures will have a substantial impact up on their learning behavior and thus upon the outcomes of a course. Second, for a variety of reasons, assessment needs to be accurate. Assessment needs to be accurate for internal and external quality assurance purposes. Thus assessment may be seen as informal and **formative** – within the teaching process or **summative** – making formal decisions about progress and level of achievement.

Assessment concepts and issue

Depending upon the assessment policies of an individual institution or department, effective assessment will reflect truthfully some combination of an individual's abilities, achievements, skills and potential. To be effective, assessment will need to reflect **program content, and be valid (or appropriate), reliable (or accurate and consistent) and fair.** Assessment needs to reflect the course or program content accurately by being blueprinted onto it, at both general and detailed level. At a general level, the nature of assessment will reflect the general out comes (intended outcome) of a teaching course or program. A more detailed level, the questions or items used within an assessment component need to be created according to some form of blueprint

(Asthana, B. 2000). A large number of assessment methods are available for use in higher education. Those most likely to confront new university teachers are long essay questions, short answer questions, multiple-choice questions, practical or laboratory exercise and quite possibly oral questions.

An increased sense of inclusiveness. Continuous assessment provides students with a constant stream of opportunities to prove their mastery of material and sends the message that everyone can succeed if given enough time and practice. This reduces the anxiety and finality around testing and heightens the emphasis on the learning itself. When mastery instead of competition with other students becomes the point of assessment, the focus shifts from superficial competition to true understanding and personal learning goals(Stevens, G.,2001).

Higher learning standards for all. In a system of continuous assessment, advanced students can progress through material at their own pace and remain engaged by pursuing more challenging work as they pass out of the basics. In this sense, the standards for such students stretch to help each student maximize potential. Because success is defined on an absolute and individualized basis, students cannot be satisfied with their achievements relative to others; they are encouraged to seek their own course and take responsibility for their learning.

Clarified purpose of assessment. The problem with administering assessments only once in a while is that the primary aim is to compare students while at the same time allowing them to “pass” to the next level. This produces a situation in which the purpose of assessment is muddled: the tendency is to let students level up (because, regardless of standards, everyone is generally expected to pass) although they may not truly grasp the material or have a very weak understanding of it. For this reason, students may start the next level at a weaker state with no opportunity to correct their misunderstandings.

Capacity to remediate weaknesses through strengths. When we, as Christensen suggests, begin measuring the length of time it takes to master a concept or skill and contrast the efficacy of different approaches, we are able to gather data about the learning process and put this knowledge to work for students: “Because learning will no longer be as variable, we can compare students not by what percentage of the material they have mastered, but by comparing how far they have moved through a body of material.” This sort of data solves another problem: the self-perpetuating cycle through which the curriculum and methods of instruction for various subjects are tailored for those who are gifted in them. Math classes, for instance, are taught by those who are gifted at math and through texts written by those who are gifted in the subject as well; and class itself is shaped by the questions and comments of gifted math students. (This leaves those who are not gifted at math feeling excluded and turns them off from the subject.) Imagine an alternative: the confidence students develop in the areas in which they excel helps them learn subjects for which they have less proclivity. And better yet, strategies that have been proven effective for students with specific weaknesses can be used to help other students with those weaknesses. Envision a system that places a student on a proven effective learning path once he displays a learning style and proficiency level that is similar to another student in a network.

Increased self-awareness for students who, through continuous assessment, come to understand their proficiencies and knowledge gaps. Time and again, we encounter evidence that self-awareness — understanding of how one feels, thinks, and learns — is one of the most significant factors in professional and personal success. The famous psychologist, Gardner argues that self-knowledge — “intrapersonal skill” — is one of the eight defining types of intelligence (the others being “linguistic,” “logical -mathematical,” “naturalist,” “bodily - kinesthetic,” “spatial,” “musical,” and “interpersonal”). The more continuously we assess students, the more knowledge they can gain about themselves — what it takes for them to master something, how they can approach problems differently, what their blind spots are, and how to eliminate them(Stevens, G.,2001).

Capacity to uncover interdisciplinary relationships between subject domains and concepts. Continuous assessment allows us to refine our understanding of the content that we are teaching students. We might discover that effective remediation in a subject requires attention to another subject or that the root of common misunderstandings within a subject is something altogether unexpected.

2.4. Empirical Justifications

A poorly constructed tool may not only be useless, but dangerous, but, certainly high-stakes tests are carefully constructed, administered, and scored.

High-stakes testing - the use of tests and assessment alone to make decision that are of prominent educational, financial, or social impact.

Promotion and graduation decision on students and their families and both significant and controversial.

Using test to provide information relevant to this decision is usually not controversial in and of itself. What is controversial is;

- A. That in many high-stakes testing programs these decision are based entirely, or in large part on the results of a single test and.
- B. Whether high-stakes are valid measures of learning.

According to Kubiayn & Borich (2004) prominent national measurement originations such as the American Education Research Association (AERA) and the National Council on Measurement and Evaluation (NCME) have all individually development policy or position statement about high-stakes testing that are remarkably consistent. They all acknowledge the potential benefits that can accrue from HST programs when they care properly used, yet they also express concerns about the potential misuse of HST.

The AERA position statement concerning HST in July 2000 (AERA, 2000) is based on the 1999 standards for educational and psychological testing (AERA, APA, NCME 1999). The AERA statement classifies that the 1999 standards, which were developed in cohabitation with the APA and NCME, “remain the most comprehensive and authoritative statement by the interpretation.”

2.5. Continuous Assessment Tools (CAT)

A single standardized test score provides only a portion of students' achievement over the school year; regardless of the grade level (Kubiszyn & Borich, 2003). Using data collected on a single day and from a single- test to make what otherwise would be complex, time- consuming and difficult decisions has obvious attractions.

Types of assessment instruments

According to Thorndike (1997) there are various categories of assessment instruments.

A. Standardized achievement tests.

At the beginning of the school year, when he/she is facing new class, student scores on standardized achievement test might help a teacher in planning instruction for that class.

B. Teacher-Made Assessment Instruments

The five general methods of collecting data on the achievement of instructional objectives: paper and pencil tests; oral tests; product evaluations; performance test and portfolio assessment and affective measures.

Objective that call for knowledge about a particular subject area, the capacity to use that knowledge to solve problems, or a general educational skill such as reading can be most reliably and validly appraised by teacher made paper and pencil test. Unfortunately most teachers made are poor measuring instrument. There are typically two problems with these kinds of instruments. First the items on the tests often do not match the stated goals of the class, and second the tests tend to have poor psychometric qualities because the items are not well written.

Teacher seldom use even minimal data-analysis procedures, such as determining the central tendency or variability on their test results. As a result of these weaknesses, the information obtained from such tests may be of questionable value in making instructional decisions.

2.6. Summary and Implication

Review of related literature depicted that assessment is part and parcel of the learning-teaching process for monitoring the progress meaningfully. Classroom teacher made tests are supposed to be ways through which instructors acquire information for decision making as well as for intervention. It is highly acquainted with quality also.

However, the implementation problems and misuses are supposed to be pinpointed for the purpose that evaluation and continuous assessment is intended. It is this gap that issued the researchers to conduct this study.

III. Research Methods

3.1. Study Area/ Locale

This research was designed to be conducted among five Universities who offer distance education. Of these educational institutions are 2 are private and the rest three are governmental.

3.2. Population

The populations of the study are distance learners from five universities.

Private University	Government Universities
St. Mary's University	Bahr Dar University
Unity University	Haramaya University
	Jimma University

Table 1: Universities wherein the population is located from which samples are recruit All are from Addis Ababa coordinating centre.

3.3. Sample and Sampling

Sampling is based on multistage sampling but those who are available at tutorial sessions of the respective university were incorporated. 160 participants took part in responding for items in the questionnaire based on convenience sampling taking 30 percent of admitted students in Addis Ababa center of each university taking homogeneity in to account.

University	No. of Participants	Remark
St. Mary's University	35	
Unity University	30	
Bahr Dar University	30	
Haramaya University	35	
Jimma University	30	
Total	160	

Table 2: Sample size across included universities

3.4. Instruments

In order to collect the data, Likert scale type questionnaire (with open & close ended items), interview guide, observation checklist and Focused Group Discussion (FGD) guiding questions are constructed and employed after validated and check up on reliability. In addition, secondary data are used from reports of college deans semester report.

3.4.1. Construction

After intensively read different literatures, the aforementioned tools i.e. both open ended and closed ended questions and focused group discussion guideline are constructed by the researchers.

3.4.2. Validation/Piloting

Pilot test was conducted in order to check the reliability and validity of the instruments. The reliability computed by Cronbach Alpha is found 0.79 which is encouraged to proceed. The validity of the instruments was evaluated and commented by other professionals in the area from Psychology department.

3.4.3. Administration

After piloting of the instruments, the investigators had given detailed orientation to two assistant data collectors. Then, the researchers in collaboration with these assistants administered the questionnaire to all participants. 190 participants took part in responding for items in the questionnaire. Of which only 142 are found to be valid and properly responded. Moreover, focused group discussion was conducted by the two investigators. Finally, all data were collected and ready for scoring.

3.4.4. Scoring

After collecting the data, responses are scored. First, researchers checked whether there are skipped questions in all respondents' questionnaire the 142 were found to be valid for analysis. The perceived reasons for the rejection of 18 questionnaires are minor negligence from few respondents, orientation gap and presence of few jargon words- which are "must" to be used.

Second, items of the instrument were grouped in to the same domains and they coded and fed in to the SPSS computer program. Finally, data quality was assured by double data entry.

3.5. Analysis Method

For meaningful dissemination of the finding, technically enriched way of qualitative analysis, logical flows and narrative explanations are used with direct quotations in the data analysis procedure. Moreover, the information collected from questionnaire are quantitatively analyzed by using descriptive statistics (mean, standard deviation and tabular illustration of percentages). Above all, all quantitative analysis are made with the help of Statistical Package for the Social Science version-15 (SPSS-17) computer program. Finally, to make the findings more momentous and disseminate to stakeholders conclusions and recommendations are given as per the need and usage.

IV. Analysis, Result and Discussion

This chapter presents the analyses and interpretations of the data gathered from the participants through a five point Likert type scale. This level of measurement has five scales represented by numbers that is: *SD = Strongly Disagree; D =Disagree; N = Neutral; A =Agree; SA = Strongly Agree*. Items from the scale were selected and grouped together on similar theme for the simplicity of presenting and analyzing the data. The analyses and interpretations are done in relation to the research questions. To this effect, it would be sounder to remind of the basic research questions to be treated here.

- Is there periodical follow up of learning outcomes?
- Is it impractical and difficult to use continuous assessment techniques in ODE?
- What are the challenges of application of assessment and evaluation in ODE?
- Are there limitations in assessment procedure (administration) of tools and giving vivid feedback for learners in ODE?
- Are there significant differences among universities in the implementation of continuous assessment and summative evaluation?

Accordingly, the data are presented in tables and analyzed through descriptive statistics (frequency, percentage, mean and standard deviation). Following each table, interpretations of data are presented in detail.

4.1. Participants' Background Information

So long as sex is concerned there were 80 female students and the rest were male participants. The age of respondents is in between 17 and 45 years.

4.2. Continuous Assessment Implementation

Table 3: Presence of Periodical follow up of Students Learning outcomes in the University

S/No	Items		Scales				
			SD=1	D=2	N=3	A=4	SA=5
1	Our institution uses continuous evaluation process rather than evaluating at the end of the program/course of study	F	8	39	33	51	11
		%	5.6	27.5	23.23	35.9	7.7
			Mean = 3.13		SD= 1.08		
2	The presence of periodical follow up in our institution help to check the achievement learning outcomes	F	13	25	23	65	16
		%	9.2	17.6	16.1	45.8	11.2
			Mean =3.32		SD=1.16		
3	Our teachers should use various techniques	F	13	25	41	36	27

	in relation to the nature of the course	%	9.2	17.5	28.9	25.3	18.9
		Mean = 3.28	SD=1.22				
4	In our institution, continuous occurs frequently in process	F	11	37	37	33	24
		%	7.7	26.1	26.1	23.2	16.8
		Mean =3.16	SD=1.21				
5	In current condition of our institution continuous assessment application, there is integration of different tools (project work, quizzes, tests, etc)	F	16	28	40	43	15
		%	11.2	19.7	28.2	30.3	10.6
		Mean =3.10	SD=1.17				
6	In the teaching-learning process of our institution, there is an ongoing assessment	F	13	29	42	49	9
		%	9.1	20.3	29.5	34.5	6.3
		Mean =3.10	SD=1.08				
7	Our institution instructors give tutorial classes for needy students based on continuous assessment	F	22	33	53	21	13
		%	15.4	23.2	37.3	14.7	9.1
		Mean = 2.80	SD=1.15				

As it is indicated in table 3 above, 33.1% of the respondents showed disagreement on the implementation of proper assessment and evaluation whereas 23.23% are not certain as the respond that they are neutral. On the other hand, 43.6% which is below the average show their agreement level on the presence of continuous evaluation presence on the institution. In the evaluation procedure there is tendency of integrating different tools for assessment.

4.3. Feedback for Educational Assessment

Table 4: Continuous Assessment as an Advantage for Progressive Change

S/No	Items		Scales				
			SD=1	D=2	N=3	A=4	SA=5
1	Instructors take corrective actions based on continuous assessment when the students' experiences don't meet their expectations	F	13	38	37	35	19
		%	9.1	26.6	25.9	24.5	13.3
		Mea = 3.06	SD=1.19				
2	Instructors use continuous assessment as the most important in helping students to make	F	16	22	46	43	15
		%	11.2	15.4	32.2	30.1	10.5
		Mea =3.13	SD=1.15				
3	Our institution practically implement	F	13	37	53	29	10

	continuous assessment in distance learning	%	9.1	25.9	37.1	20.3	7.0
		Mea	= 2.90		SD=1.05		
4	Our institution explicitly use continuous assessment to monitor students learning objectives	F	8	49	44	28	13
		%	5.6	34.3	30.8	19.6	9.1
		Mea	=2.92		SD=1.07		
5	Results of continuous assessment help our institution students to know the extent of progress in their learning	F	18	37	40	38	9
		%	12.6	25.9	28.0	26.6	6.3
		Mea	=2.88		SD=1.13		
6	In our institution continuous assessment techniques enable the learner to continuously	F	10	24	67	25	16
		%	7.0	16.8	46.9	17.5	11.2
		Mea	= 3.10		SD=1.04		

As it can be depicted in table 4, most instructors are not giving proper feedback for the students as a result it is found that intervention on tutorial arrangement and monitoring students' learnin progress is very limited.

Table 5: Practicality of Continuous Assessment

S/No	Items	Scales					
		SD=1	D=2	N=3	A=4	SA=5	
1	Distance/location is the obstacle to execute continuous assessment	F	10	36	17	45	34
		%	7.0	25.2	11.9	31.5	23.8
		Mean	=3.40	SD=1			
2	Our institution is comfortable in applying continuous assessment	F	28	43	43	20	8
		%	19.6	30.1	30.1	14.0	5.6
		Mean		SD=1.			
3	Our institution manages location/physical distance not to miss the advantage of	F	12	22	64	37	7
		%	8.4	15.4	44.8	25.9	4.9
		Mean	=3.04	SD=			
4	In current condition of our institution it is difficult to give feedback to students timely based on their continuous	F	6	56	23	41	16
		%	4.2	39.2	16.1	28.7	11.2
		Mean	=3.04	SD=1.1			

55.3% of the respondents claim that location/distance affects the implementation of continuous assessment.

4.4. Feedback loop

Table 6: The Use of Continuous Assessment and Feedback Provision

S/No	Items		Scales				
			SD=1	D=2	N=3	A=4	SA=5
1	For our institution proper use of assessment is to ensure quality education	F	16	45	25	40	16
		%	11.2	31.5	17.5	28.0	11.2
		Mean =2.96		SD=1.23			
2	The better strategy to check the knowledge, attitude and skills attained by our students is assessment	F	8	19	49	47	19
		%	5.6	13.3	34.3	32.9	13.3
		Mean =3.35		SD=1.05			
		%	13.3	16.1	22.4	43.4	4.2
		Mea = 3.09		SD=1.			
4	Instructors in our institution give academic advice and tutorial supports for the needy students that	F	11	47	42	34	8
		%	7.7	32.9	29.4	23.8	5.6
		Mea = 2.87		SD=1.			

In the quality education assurance procedure 42.7% of the respondents have shown disagreement of the presence of feedback loop on the process quality improvement where as there i found that 40.6% agreement was found on the use of continuous assessment as an important tool to improve the quality of education in the institution.

In addition the very alarming point for the institution is on the neutrality level of respondents on the relevance of CA for quality assurance.

4.5. Students Involvement

Table 7: Continuous Assessment and Students' Active Engagement

S/No	Items		Scales				
			SD=1	D=2	N=3	A=4	SA=5
1	Different assessment techniques make our students be motivated, active, reflective, and self regulative their learning in the institution	F	15	37	20	51	19
		%	10.5	25.9	14.0	35.7	13.3
		Mean =3.15		SD=1.25			
2	Our students are interested and satisfied with assessments	F	20	18	36	59	9
		%	14.0	12.6	25.2	41.	6.3
		Mean =3.13		SD=1.16			

3	In our institution there is active engagement of in the process of continuous assessment	F	20	47	34	31	10
		%	14.0	32.9	23.8	21.	7.0
		Mean =2.75		SD= 1.16			
4	Students in our institution are motivated to study and enjoy their learning due to continuous	F	5	32	49	39	17
		%	3.5	22.4	34.3	27.	11.9
		Mean =3.22		SD=1.04			

Table 7 above indicated students' active engagement in continuous assessment. The highest number of the participants, 51(35.7%), M=3. 15 and SD= 1.25 agreed that students were motivated, active, reflective and self regulative in their learning when teachers use different continuous assessment techniques. at the same time, the largest number of respondents, 59(41.3%), M=3. 13 and SD= 1.16 agreed that students were interested and satisfied with the use of evaluation and continuous assessment as assessment mechanism in distance learning processes. On the other hand, 47(32.9%), M=2.75 and SD= 1.16 participants were disagreed about the active engagement of learners in the process of evaluation and continuous assessment. Moreover, 49(34.3%), M=3.22 and SD= 1.04 respondents were neutral and unable to agree or disagree about the role of continuous assessment that makes students to be motivated to study very hard and enjoy their learning.

4.6. Discussion

Distance Education requires an individualized learning process where the learner can access knowledge from computer-assisted programs and/or other technologies such as television. With development of high technology, learners look for fast, easy, any-time, anywhere education opportunities. They expect high educational standards based on global competition. Distance Education may serve as an alternative to traditional on-campus instruction or "blended" to combine distance with on-campus courses.

The changing roles of students and teachers in distance education are influencing classical education standards and pedagogy. According to research findings on the roles of the students' in distance education are: Be disciplined and on task; Consult with and seek guidance from advisors through required access methods; assume responsibility for your own learning; develop effective interaction with teachers and counselors (like classical learning); evaluate and judge your own performance; and combat prejudice and communication barriers(Asthana, B., 2000).

According to research findings on the roles of the teachers in distance education are: assume responsibility for preparation and presentation of learning tasks; immediately consult with students to correct problems and keep them on task; be aware of student needs and wishes; respond promptly to communications and tests; build student motivation; combat prejudice of communicational barriers; establish an effective environment for student-teacher and student-student interaction.

Research provides data to compare effectiveness of the teaching and learning in a great variety of situations. Learning in a high-tech, global environment presents new roles and responsibilities for both teacher and learner. In addition; there is a radical change in construction and delivery of course content. Media to facilitate interaction between and among learners, teachers, and content increases the opportunity for in-depth and meaningful learning (Gibson, 1997). Constructivist techniques support learning and teaching, self-development and self evaluation (İşman, 1999). Constructivism is an integral part of distance education. The focus is on the student and his active role in learning supported by technology.

Teacher Role in Distance Education based on Constructivist Approach; teacher promotes learner autonomy and is aware of individual differences; teacher uses relevant and current information to transmit knowledge. Teacher constantly researches the curriculum and provides concrete up-to-date examples; teacher gives importance to the thoughts of students and promotes student research, evaluation, discussion, and reporting; teacher is aware of individual student differences when designing course materials; teacher knows student prerequisite skills and knowledge and uses this foundation to build new knowledge. In addition, the teacher knows how learner can learn.

Moreover, the teacher initiates student-teacher interaction, and has communication and technological skills to effectively implement distance education; teacher constructs student-centered learning with opportunities for interaction. Students are responsible for learning and responsible for contacting teacher when needed; teacher collaborates with student in self-development and responsibility; teacher provides environment, materials, and guidance for collaborative learning, interactive discussion groups, individual learning, and research; and teacher provides prompt and accurate feedback to students to facilitate learning.

Student Role in Distance Education based on Constructivist Approach:- students use appropriate technology to interact collaboratively with each other and teacher, and use feedback and consultation to develop and refine knowledge, skills, and attitudes; students are self-responsible for their own learning. They should decide what they want to learn, establish their goal, research and develop their subject; students research current data to answer questions and solve problems; students learn to solve problems by assessment, data collection, and developing and implementing strategies using relevant information; students identify communication barriers, their causes, and solutions; and students promote life-long learning and know how to access and use information when instruction is finished.

The roles of students and teachers under the constructivist approach are listed above. These roles should be in the consciousness of communicators to develop effective distance education processes and resolve interaction difficulties (İşman, 1999). Teachers and students need to be responsible collaborative planners, communicators and evaluators in their distance education roles. Together they can break down communicational barriers and overcome limitations in the technology and its implementation. Substantial benefits will result from taking personal responsibility, improving the process, and solving problems to create a rich interactive learning environment.

The development of specific and detailed strategies for the implementation of distance learning in

the Sub Sahara region need to occur on a country by country basis, and, in some cases, at the institutional level. The judicious use of external technical assistance for the transfer of required distance learning expertise, the establishment of partnerships with established distance learning organizations, and the creation of distance learning consortia among institutions within the region are a number of measures that can potentially mitigate risk, reduce costs and expedite the implementation of distance learning strategies. Most importantly, a systematic and comprehensive planning process for distance learning implementation, driven primarily by needs rather than technology, can greatly assist in designing pedagogically sound and sustainable policies and programs. The Technology Enhanced Learning Investigation (TELI) process, developed in South Africa with World Bank and UNESCO () 63.7% of the respondents have shown that summative evaluation is preferable than CA for the reason that CA gives additional task for teachers and stressing to the students. This outlook is contradictory to the ample relevance of CA (Bennett, D. (2001)). It has been found that there is misuse of CA which supposed to be corrected in that it affects the process and outcome. The end cannot assure quality because it is late rather focus should be on the progressive, additive, constructive and formative manner that the emphasis is supposed to be but this is not being done is it is shown on the research finding.

V. Conclusion and Recommendation

5.1. Conclusion

Implementation of assessment and evaluation has great contribution on learners' progress as well as change based on objectives. In the same way with integrated contribution stakeholder, quality education can be assured. However, to the other end in the research area, it was found that there were potential obstacles that hinder implementation of continuous assessment and evaluation of distance learners' performance.

- $\frac{3}{4}$ Most instructors do not have table of specification or test blue print to prepare exam questions.
- $\frac{3}{4}$ Invigilation procedure is exposed to cheating.
- $\frac{3}{4}$ Exams tend to be prepared when the time of exam period approaches.
- $\frac{3}{4}$ Feedback is late for letting students know their test result so that they would have gotten chance to be in progress by adjusting their own learning method.
- $\frac{3}{4}$ An interesting big picture point about ways to think about assessing institutional effectiveness related to accreditation specifically, but makes sense with regard to assessment generally. They argue that student outcomes not be considered the only marker of educational quality.

So long as measurement tools are concerned very limited types of assessment techniques and/or instruments often exam and assignments in 88% of the institutions.

Challenges on implementation of assessment and evaluation is manifested by lack of content validity and variety on the type of items. The proportion of number of items and the weight given are critically in doubt of enabling autonomous learning and independent performance of students. In addition to the aforementioned facet of challenge, exam administration, scoring, feedback and formative self assessment genuineness are at question mark as to the respondents across implemented tools of data gathering.

It was found that cheating and inconveniency of exam taking process/procedures are repeatedly narrated challenges from exam administration feature.

Student respondents repeatedly complain on the transparency of feedback on the scoring procedure as well as their result both from formative and summative evaluation.

It is also found that assignments, project works and senior essay papers are often done by other people as proxy with payment or relation to someone else.

5.2. Recommendations

The challenge is to make certain that the multiple missions of the institution remain at the core of accreditation. At most institutions, some combination of teaching, research, and public service (also known as outreach, engagement) are supported. If student performance becomes too much the focus of defining quality in accreditation, the public good of the institution becomes redefined in terms of the private gain of the students. Higher education makes multiple contributions to our society, and they must be recognized in any evaluation of quality and integrity. Practically, a multiple perspectives strategy employing multiple indicators and measures of quality and effectiveness is required.

As per the objective and findings, the following suggestions are given and recommended for the concerned body and stakeholders.

A. Distance Coordinators And University Management

- Gap due to distance should be minimized for easier and better implementation of assessment and evaluation.
- Training and/or forum on Educational Measurement and Evaluation should be given for examiners by professionals in a manner of orientation by coordinators of ODE.

B. Examiners, Exam Coordinators and Scorers

- Respecting the ethics of invigilation is mandatory. So minimize cheating, checking ID cards to avoid external contamination, make the procedure smooth with minimum noise and disturbance in the exam hall/room.
- Exam scoring should be clear and free from any form of bias so that students can be clearly evaluated and communicated as per their true performance.

- Instructors had better attain better content validity of tests and optimize the weight given for assignment, tests, quiz, projects, practicum and exams in administration and scoring..

D. Department Administrators

- Feedback of assignments and other continuous assessment tools should be given back to students before summative evaluation.
- Transparency of scoring and grading is important for further performance of learners autonomously, so exam content at preparation, administration, scoring and grading should be vivid for students so that they can pin point their weakness and strength.
- Advisors and center coordinators should frequently get in touch with learners through internet i.e. e-mail so that feedback of the students' performance can be communicated in time.

E. Distance Learners'

- It is unethical to submit assignment which is done by somebody else. So be genuine and honest for doing your own.
- Group tutorial among distance learners could boost up peer evaluation so this trend should be implemented so that continuous self assessment can enhance distance learners' autonomous tasks via formative evaluation.

References

- Asthana, B. (2000). *Measurement and Evaluation in Psychology and Education*. Sikandra Ravi Mudralaya; AGR-2
- Basom, M., & Sherritt, C. (1992). *Higher Education Problems in the Twenty-First Century: A Survey of Higher Education Administrators and Politicians*. Paper presented at the Annual Conference for International Higher Education Administrators, Nice, France.
- Bates, T. (1995). *Technology: Open Learning and Distance Education*. New York: Routledge.
- Bennett, D. (2001). *Assessing Quality in Higher Education*: Reprinted with permission from *Liberal Education*, Volume 87, No. 2. Copyright held by the Association of American Colleges and Universities, <http://www.aacu-edu.org>.
- Bollag, B., & Overland M.A. (2001). *Developing Countries Turn to Distance Education*. *Chronicle of Higher Education*, 47 (40), 29-31.
- Caffarella, E., et al. (1992). *An Analysis of the Cost Effectiveness of Various Electronic Alternatives for Delivering Distance Education Compared to the Travel Costs for Live Instruction*. Greeley, Colorado: University of Northern Colorado, Western Institution for Higher Learning. (ERIC Document Reproduction Service No. ED 380 127).
- Carr, S. (2001). *Union Publishes Guide Citing High Cost of Distance Education*. *Chronicle of Higher Education*, 47 (35), 39-41.
- Carter, A. (2001). *Interactive Distance Education: Implications for the Adult Learner*. *International Journal of Instructional Media*, 28 (3), 249-261.
- Christensen, E. et al. (2001). *Receptivity to Distance Learning: the Effect of Technology, Reputation, Constraints, and Learning Preferences*. *Journal of Research on Computing in Education*, 33 (3), 263-276.
- Clark, T. (1993). *Attitudes of Higher Education Faculty toward Distance Education: A national survey*. *The American Journal of Distance Education*, 7, 19-33.
- Commonwealth of Australia (2000). *The Australian higher education quality assurance*
- Dervarics, C. (2001). *Support Builds for Distance Learning*. *Community College Week*, 14 (1), 3-5.
- Dibiase, D. (2000). *Is Distance Education a Faustian Bargain?* *Journal of Geography in Higher Education*, 24 (1), 130-136.
- Fall, B.(2002).*Online Journal of Distance Learning Administration*, Volume V, NumberIII, State

University of West Georgia, Distance Education Center: Back to Journal of Distance Learning Administration Contents

- Ferguson, L., & Wijekumar, K. (2000). *Effective Design and Use of Web-Based Distance Learning Environments*. *Professional Safety*, 45 (12), 28-33. framework
- Fry, Ketteridge & Marshal, (2004). *Overview of Assessment*
- Gober, P. (1998). *Distance Learning and Geography's Soul* . *AAG Newsletter*, 33 (5), 1-2.
- Greenberg, G. (1998). *Distance Education Technologies: Best practices for K- 12 settings*. *IEEE Technology and Society Magazine*, (Winter) 3 6-40.
- Guilford, J. (2008). *Psychometric Methods*. Kalma Nagar surjeet publications.
- Harner, M., et al. (2000). *Measuring the Effect of Distance Education on the Learning Experience: Teaching Accounting via Picture tel*. *International Journal of Instructional Media*, 27 (1), 37-50.
- Hiltz, S.R., & Wellman, B. (1997). *A Synchronous Learning Network as a Virtual Classroom*. *Communications of the ACM*, 40 (9), 44-49.
- Holmberg, B. (1989). *The Concept, Basic Character, and Development Potentials of Distance Education*. *Distance Education*, 10 (1), 127-135.
- Horgan, B. (1998). *Transforming Higher Education Using Information Technology: First Steps*. (On-Line). Available: <http://microsoft.com/education/hed/vision.html>.
- Imel, S. (1998). *Myths and Realities of Distance Learning*. Columbus, Ohio: ERIC Clearinghouse on Adult, Career, and Vocational Education. Ohio State University. (Eric Document Reproduction Service No. ED 414 446).
- Inman, E., & Kerwin, M. (1999). *Instructor and Student Attitudes Toward Distance Learning*. *Community College Journal of Research & Practice*, 23 (6), 58 1-592.
- JJU .(2005). *Jigjiga University Academic Quality Audit/Assurance Directorate (AQAD)*
- Keegan, D. (1995). *Distance Education Technology for the New Millennium: Compressed Video Teaching*. ZIFF Papiere. Hagen, Germany: Institute for Research into Distance Education. (Eric Document Reproduction Service No. ED 389 931).

- Konting, M. Kamaruddin, N. & Man, N. (2009). *Quality Assurance in Higher Education Institutions: Exist Survey among Universiti Putra Malaysia Graduating Students*. V.2, [No. 1. www.ccsenet.org/journal.com](http://www.ccsenet.org/journal.com)
- Kubisyn, T. & Borich, G. (2003). *Educational Testing and Measurement; Classroom Application and Practice* (7th ed). United States. John Wiley & Sons. Inc.
- McKnight, M. (2000). *Distance Education: Expressing Emotions in Video-Based Classes*. Paper presented at the Annual meeting of the Conference on College Composition And Communication, Minneapolis, Minnesota. (Eric Document Reproduction Service No. ED 441 270).
- Moore, D.R., & Lockee, B.B. (1998). *A Taxonomy of Bandwidth: Considerations and Principles to Guide Practice in the Design and Delivery of Distance Education*. Unpublished manuscript: Portland State University.
- Nig, K. (2000). *Costs and Effectiveness of Online Courses in Distance Education*. *Open Learning*, 15 (3) 301-308.
- Olesinski, R. et al. (1995). *The Operating Technician's Role in Video Distance Learning*. Paper presented at the Instructional Technology SIG, San Francisco, California. (ERIC Document Reproduction Service No. ED 387 123).
- Omoriegbe, M. (1997). *Distance Learning: An Effective Educational Delivery System*. (Information Analysis 1070). (ERIC Document Reproduction Service No. ED 418 683).
- Ostendorf, V.A. (1997). *Teaching by Television*. *Teaching and learning at a distance: what it takes to effectively design, deliver, and evaluate programs*. (71), 51-57.
- Palloff, R., & Pratt, K. (2000). *Making the Transition: Helping Teachers to Teach Online*. Paper presented at EDUCAUSE: Thinking it through. Nashville, Tennessee. (ERIC Document Reproduction Service No. ED 452 806).
- Phelps, R.H. et al. (1991). *Effectiveness and Costs of Distance Education Using Computer-Mediated Communication*. *American Journal of Distance Education*, 5 (3), 7-19. Policy. unpublished
- Savoie, C. (2001). *Distance Learning with a Twist-Real Campuses*. *Christian Science Monitor*, pp. 15, 21.
- Schlosser, C.A., & Anderson, M.L. (1994). *Distance Education: A review of the literature*. Washington D.C.: Association for Educational Communications and Technology. (ERIC Document Reproduction Service No. ED 382 159).

Sherritt, C. (1996). *A Fundamental Problem with Distance Programs in Higher Education*. (Opinion paper no. 120). Viewpoints. (ERIC Document Reproduction Service No. ED 389 906).

Stevens, G.(2001). *Distance Learning for Technical and Vocational Education I in Sub-Sahara Africa: Challenges And Opportunities*; the World Bank

Teaster, P., & Blieszner, R. (1999). *Promises and Pitfalls of the Interactive Television Approach to Teaching Adult Development and Aging*. *Educational Gerontology*, 25 (8), 741-754.

Thorndike, R. et al. (1997). *Measurement and Evaluation in Psychology and Education* (6th ed). USA. Prentice- Hall, Inc.

Thorpe, E. (2000). *Mental Ability and Quantitative Aptitude*. New Delhi. Tata McGraw-Hill publishing company Limited.

Threlkeld, R., & Brezoska, K. (1994). *Research in Distance Education*. In Willis, B. (ed) *Distance Education Strategies and Tools*. Englewood Cliffs: Educational Technology Publications.

Weber, J. (1996). *The compressed video experience*. Paper presented at Summer Conference of the Association of Small Computer Users. North Myrtle Beach, South Carolina. (ERIC Document Reproduction Service No. ED 405 838).

West, G. (1994). *Teaching and Learning Adaptations in the Use of Interactive Compressed Video*. *THE Journal*, 21 (9), 71-74.