COMBATING THE CHALLENGES IN ADULT LEARNING: THE CASE OF KNUST DISTANCE LEARNERS

W. Owusu-Boateng and R. Essel
Centre for Distance and Continuing Education, Institute of Distance Learning
Kwame Nkrumah University of Science and Technology
Kumasi, Ghana.

ABSTRACT

Majority of distance education students are adults. Such people have many responsibilities; they have families, jobs, social life and other commitments. The ability to manage and co-ordinate their enormous activities will determine how successful they would be in their studies. The primary role of the student is to learn. The purpose of this paper was to find out the challenges faced by the students pursuing distance programmes at Kwame Nkrumah University of Science and Technology (KNUST) and how they are able to effectively manage them. To enable the students achieve this challenging task requires motivation, planning, and ability to analyse and apply the information being taught. Questionnaire was used to elicit information from a sample size of 120 students pursuing undergraduate and post graduate programmes at the Institute of Distance Learning (IDL), KNUST. The study revealed that the challenges facing the students include how to combine their work with their studies, manage family and social activities. They are often misunderstood, isolated and some are contemplating dropping out from the programme. They also feel burdened with studies and do not know where to turn to for help. Recommendations were made on how the IDL could help the students to manage and co-ordinate their activities in order to go through their programmes successfully.

Keywords: *Distance learners, relations, Feedback Systems, Time Management, Motivation*

INTRODUCTION

Open and Distance Learning is a way of learning that focuses on releasing learners from constraints of time and place whilst offering flexible learning opportunities. For a lot of working adults, Open and Distance Learning (ODL) is a way of combining work and family responsibilities with educational opportunities. There are many challenges faced by those who embark on distance education. As many of the people who embark on distance education are workers and married, such people have many commitments to fulfill (Evans,1994).

For such people to be successful, they should be able to strategise, plan and organise themselves. Distance education is becoming increasingly attractive as it affords people who cannot leave home for residential courses to earn any qualification of their choice at their own pace. According to Eskey (2003) distance learning is a perfect fit for varying schedules of non-

traditional students and encourages more people to seek higher education.

Although distance education looks attractive, it has its own challenges. For any person to successfully complete a distance education programme, such a person should be able to effectively combine work with studies. Brundage *et al.* (1993) suggest that for distance education students to be able to successfully go through their studies, they should be able to face and overcome the numerous challenges that confront them. The challenges could be personal, social or academic.

Student retention is one of the biggest challenges in distance education (Dueber and Misanchuk, 2001). To be able to drastically reduce dropout rate in distance education, people who embark on distance education should be taught how to effectively combine their work with their studies. Moreover such people should be made aware of the challenges inherent in distance learning. They should also be taught how to face and overcome these challenges.

The objective of this paper was to assess the challenges faced by distance education students as they combine work with their studies.

METHODOLOGY

In this paper we would look at the biodata of the students, the relationship between their professional work and the programme they are pursuing, feedback systems and how distance education students relate with their relations. We will also look at how the students manage their time and the role motivation plays in distance education.

The population for the study was the distance learning (nonresidential) students pursuing undergraduate and post graduate programmes at the Institute of Distance Learning of the Kwame Nkrumah University of Science and Technology. Out of the total number of 1200 students 120 were randomly selected from all the four programmes (BSc.Computer Engineering, BSc. Building Technology, MSc.Industrial Mathematics and Commonwealth Executive Masters in Business/Public Administration) of the Institute. The data was collected from three centres of the Institute namely, Kumasi, Accra and Ho. The questionnaire (instrument) used contained 36 likert scale questions

RESULTS AND DISCUSSIONS
Biodata

This discussion is done in reference to Table 1. The students involved in the research comprised 105 (87.5%) males and 15 (12.5%) females. The number of females enrolled in the programme is very low. Moreover this follows the trend of admissions in the regular stream where males outnumber females in most of the programmes.

Table 1: Age of respondents

Age (in years)	Frequency	Percent
Less than 30	40	32.4
31-35	28	23.1
35-40	26	22.2
41-45	12	10.2
45+	14	12.2
Total	**120**	**100.0**

In reference to Table 2 the majority of the respondents (66.7%) were above the age 30. Those below age 30 are pursuing undergraduate programmes. Those pursuing Postgraduate programmes are quite older.

Twenty two percent of the respondents are above age 40. The research also revealed that 74 (61.7%) of the respondents completed their last course (BSc. or HND) over 5 years ago. This revelation affirms Dubios (2003) assertion that distance education encourages older people to seek higher education.

Table 2: Cross tabulation of enrolment and age

Programme/Number	Less than 30	31 - 35	36 - 40	41- 45	Greater than 45	Total
BT	10	5	3	-	-	18
CE	14	6	5	3	-	28
AS	6	4	2	-	-	12
IM	4	5	2	2	3	16
CEMBA	6	8	14	7	11	46
Total (%)	33.3%	23.3%	21.7%	10.0%	11.7%	100%

Programmes Offered by IDL

The Institute of Distance Learning currently offers three undergraduate programmes namely; Building Technology, Actuarial Science and Computer Engineering and two postgraduate programmes in Executive Masters in Business/Public Administration (CEMBA/PA) and M.Sc. Industrial Mathematics. The undergraduate programmes are under subscribed. Among the programmes the most subscribed is the CEMBA/PA. It is clearly seen from the Table 3 that the CEMBA/CEMPA students form the majority of the IDL enrolment.

Table 3: Enrolment by programme of study 2008/2009

Programme of Study	Enrolment No.	Percent(%)
BT	16	13.3
CE	30	25.0
AS	12	10.0
IM	16	13.3
CEMBA/PA	46	38.3
Total	120	100.0

Distance learning is a viable option for learners who face obstacles, due to job responsibilities and financial commitments (Danesh *et al.*, 2003). Many students (70%) of the IDL - KNUST postgraduate programmes especially CEMBA hold executive and managerial positions.

Relating Course of Study to Normal Wor

One of the factors that help distance learning students to effectively combine their livelihood with their studies is the ability to relate what they learn on their programmes to the work they do. It is most likely that people who pursue programmes that have some bearing on the work they do are likely to complete the programmes they embark on. This section discusses how students relate the programmes they are pursuing with their professional work. The discussion was done with reference to Table 4.

Table 4 indicates that majority of the students (80.8%) are able to relate the courses they study in their programmes to the work they do. Such students find the programmes they are pursuing to be relevant and useful and this will motivate them to take keen interest in the courses they study. Most students are likely to complete their programmes if the courses they are studying at distance would enhance their effectiveness and efficiency at work.

Students who could not relate the programme they are studying to the real work tend to memorization without understanding. According to Morgan (1991) students who lack confidence about their learning tend to concentrate on memorising facts and details in order to complete assignments and write examinations. As a result, they end up with poor understanding of their course materials. Morgan (1991)N views memorisation of facts and details as surface approach to learning.

Table 4: Programme of study in relation to work

Issue	Strongly Disagree	Disagree	Agree	Strongly Agree	TOTAL
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
The programme I am studying relates to the work I do.	4 (3.3)	19 (15.8)	54 (45.0)	43 (35.8)	120 (100)
I relate concepts I learn with everyday experience	4 (3.3)	15 (12.5)	74 (61.7)	27 (22.5)	120 (100)
The instructional materials relate to everyday reality	13 (10.8)	43 (35.8)	47 (39.2)	17 (14.2)	120 (100)
The materials are self contained and need no information from other sources	41 (34.2)	58 (48.3)	19 (15.8)	2 (1.7)	120 (100)
The course materials are explanatory and aid my learning	23 (19.2)	49 (40.8)	42 (35)	6(5.0)	120 (100)

Although the majority of the respondents (66.7%) do not consider their course material to be self contained (contain all the information they need on the course), most of them (84.2%) could relate concepts they learn to everyday experiences. As the courses relate to everyday realties, they help them to master their courses.

Whenever the courses the students study focus on their learning needs, they shift from surface learning to deep learning. The students should have a means to clarify what they learn. Distant education students need to reflect on what they are learning. They need to examine the existing knowledge frameworks in their minds and how these are being added to or changed by incoming information. Examinations and class presentations provide opportunities for the students and facilitators to evaluate learning. However, less formal methods of evaluation will also help the students and the facilitators to understand learning. For example, periodically during the course, the facilitator can ask students to write a brief reflection on what they have learned and then provide an opportunity for them to share their insights with other class members.

This requires the need for distant students to redefine what legitimate knowledge is. Brundage *et al*. (1993) suggest that adult learners may find it difficult to accept that their own experience and reflections are legitimate knowledge. If the instructor takes a facilitative rather than authoritative role, students will see their own experience as valuable and important to their further learning. Burge *et al*. (1993) suggests having learners use first-person language to help them claim ownership of personal values, experiences, and insights.

According to Morgan (1991) for any student to be able to do deep learning they should be able to focus on what is significant and relate and distinguish new ideas and previous knowledge. For a distance education student to be able to effectively combine work with studies, such a student should be able to do the following as suggested by Morgan (1991):

i. Relate concepts to everyday experience.
ii. Relate and distinguish evidence and argument.
iii. Organise and structure content.
Iv. Internally emphasize on focusing on how instructional material relates to everyday reality.

When distance students learn by this approach then real studies have taken place and they can apply what they learn in the future. This type of studies is related to reality.

Feedback System
The main purpose of support services is to serve as feedback. Feedback may be defined as information a learner receives about his or her learning processes and achievement outcomes (Butler and Winnie, 1995).

According to Tomei (2003) a teacher in distance learning is primarily a facilitator of learning and helps the learners to understand the lessons. Teachers at distance should encourage the students to be motivated and independent learners. Facilitators of distance learners should give frequent, early and positive feedback. Distance students should also have the opportunity to practice skills and receive feedback regarding their performance (Davis, 2003).

Feedback is an essential part of instruction (Mory, 1996) and could be provided by the distance education provider, the facilitator and fellow students. Learners find frequent feedback useful (Gagne, 1996) and feedback to learners is essential to effective learning (Reiser and Dick, 1996). Feedback influences cognitive, attitudes and metacognition. Learner feedback can facilitate metacognition in interactive instructional systems (Schweir, 1995) and contributes to self-regulatory learning (Butler and Winne, 1995). Feedback interacts with and contributes to support processes.

Under this section the discussions will be done with reference to Table 4. The first question

asked under this section is whether students were members of study groups. The majority of the respondents (80%) answered in the affirmative. Forming a study group is an essential aspect of distance learning. Study group meetings serve as avenues to receive feedback and help from fellow students.

Distance education students should relate to each other appropriately. Students often learn most effectively when they have the opportunity to interact with other students. Interaction among students typically leads to group problem-solving. When students are unable to meet together, appropriate interactive technology such as access to e-mail systems should be provided to encourage small group and individual communication. Assignments, in which students work together and then report back or present to the class as a whole, encourage student-to-student inter-action. This ensures clear directions and realistic goals for group assignments (Burge, 1993).

Study groups are usually groups of students who are together at their own convenience to support each other. Some of the factors that students consider when forming study groups are location, personality and interest. Study groups are usually small and range from two to six members. Students usually use their study groups to help each other get through assignments.

Most of the respondents (76.6%) corroborated the assertion of Wright (1992) that at study group meetings they discuss personal and academic problems and assignments. Most often, fellow students give frank feedback to each other and give the necessary help and support to those who need them. At study group meetings, students get to know the problems of other students. When a student realizes that he/she is not the only person facing challenges, he gets encouraged to go on with the programme.

As they discuss their problems they collectively seek solutions to them. Due to the support and

encouragement study group members give to each other, they hardly drop out from the programme. Students who are not members of study groups are most likely to drop out from the programme than those who are members of study groups.

Distance education students who receive counseling from their facilitators are encouraged to go through their programmes. Counseling forms a very important component of distance education and helps reduce attrition rate. Most of the respondents (73.3%) indicated that they don't receive counseling from their facilitators. However, 57% of the respondents indicated that they had access to their facilitators via fax, phone, and email when necessary. From the findings it is clear that some sort of counseling takes place at IDL distance programmes, however the counseling is not structured and there is no policy on counseling at the Institute of Distance Learning-KNUST.

Prompt return of marked assignments with comments serve as incentive to distance education students. It can be seen from Table 5 that

Table 5: Students feedback system

Students Feedback System	SD No. (%)	D No. (%)	U No. (%)	A No. (%)	SA No. (%)	TOTAL No. (%)
I am a member of a study group	4 (3.3)	12 (10)	8 (6.7)	71 (59.2)	25 (20.8)	120 (100)
At study meetings we discuss personal and academic problems and assignments	6 (5.0)	11 (9.2)	11 (9.2)	67 (55.8)	25 (20.8)	120 (100)
I have access to my facilitators for counseling	30 (25)	28 (23.3)	30 (25.0)	32 (26.7)	-	120 (100)
Assignments are marked and returned promptly	32 (26.7)	38 (31.7)	20 (16.7)	28 (23.3)	2 (1.7)	120 (100)
End of semester exams are released in good time	14 (11.7)	29 (24.2)	24 (20.0)	46 (38.3)	7 (5.8)	120 (100)
Marked assignments come with facilitator's comments	34 (28.3)	45 (37.5)	10 (8.3)	28 (23.3)	3 (2.5)	120 (100)
Feedback serves as an incentive and helps me improve my learning process	14 (11.7)	13 (10.8)	19 (15.8)	47 (39.2)	27 (22.5)	120 (100)
I can fax, phone, and email to contact facilatators when in need	12 (10.0)	19 (15.8)	19 (15.8)	61 (50.8)	9 (7.5)	120 (100)
Marked assignments are returned promptly with remarks	48 (40.0)	36 (30.0)	_	24 (20.0)	12 (10.0)	120 (100)

less than 70% of the respondents indicated that marked assignments were not returned promptly and moreover they were returned without remarks. Feedback serves very important purposes, especially the return of marked assignment. Butler and Winnie (1995) say that feedback may be defined as information a learner receives about his/her learning processes and achievement outcomes. People like Mory (1996), Smith and Regan (1992) assert that feedback is an essential part of instructional learning. Reiser and Dick (1996) on their part, say feedback to learners may be essential to effective learning and Gagne (1985) says learners may find frequent feedback useful. Learner's feedback can facilitate metacognition in interactive instructional systems (Schweir, 1995) and contributes to self-regulatory learning (Butler and Winnie, 1995). Feedback can reflect upon how the student feels –his response during the instructional experience (Wolcolt, 1995). Feedback interacts with and contributes to support processes.

Due to the important role returned marked assignments play in the student's learning process there is the need for the IDL -KNUST to make a policy on when all facilitators should return all assignments submitted to them. It would be necessary for all submitted assignments to be returned in the next face-to-face session. If a policy is made, all facilitators and students should be made aware of it. In this way, it will go a long way to solve the question of when any assignment would be marked and returned and this will reduce if not eliminate the anxieties students go through in waiting for the return of submitted assignments.

Remarks play very important roles in students learning processes. The remarks can either motivate or discourage students and affect the way they go about their studies. This assertion corroborates that of Ley (1999) that instructor feedback serves a different immediate function within the instructional system and this can go a long way to improve student's performance. Ley (1999) goes on to argue that feedback from the instructor to the learner informs the learner how well he/she is learning and where he/she should direct his/her learning efforts. Learner feedback, which usually requires an external check, essentially closes the gap in the learning process (Gagne, 1995). Practice with feedback is one of the most powerful components in the learning process (Dick and Carey, 1990).

Distance Education Students and their Relations

Distance education students may be anxious of their ability to do well in a course. They are balancing many responsibilities including employment and raising children. Often, their involvement in distance education is unknown to their co-workers and family members. Student performance is enhanced if learners set aside time for their instructional activities and if they receive family support in their academic endeavours. Over 85% of the respondents indicated that they receive co-operation from their family members whereas 50% indicated that they receive co-operation from their co-workers. If distance education students inform their family members, co-workers and friends about the programme they are pursuing, they would be understood by them and receive their support and co-operation whenever they need it.

Whereas 75.5% indicated that the programme has affected the quality time they spend with friends and close ones, 89.9% indicated that it has affected their social life. Most often, social activities such as funerals, wedding and church services take place during weekends when they attend face-to-face meetings. It is very important that whoever would like to embark on distance education programme informs his relations (including his family members, friends, co-workers and church leaders) just before he/she starts the programme. In so doing the one would receive co-operation and support from them. When the close relations are aware of the programme the distance education student is pursuing, they will show understanding and encourage him/her to go through the course.

Table 6: Distance education students and their relations

Issue	No.	Agree %	Disagree %	Uncertain %
My family members are aware of the programme I am pursuing.	120	57.5	1.7	40.8
I receive cooperation and support from family.	120	85.8	8.3	5.8
The programme has affected my relationship with my family.	120	36.6	50.9	12.5
The programme has affected my relationship with my spouse.	120	35.8	57.5	6.7
My employers and Co-workers are aware of the programme I am pursuing.	120	15.0	70.0	15.0
I receive cooperation from my employer/co-workers	120	50.0	30.8	19.2
My friends and other relations are aware of the programme I am pursuing	120	88.3	5.0	6.7
The programme has adversely affected quality time with my family, friends and close relations.	120	75.5	13.3	11.2
The programme has affected my social life (attendance to funerals, church service, etc.)	120	89.9	9.3	0.8

Time Management and Organization

In this section we discuss the importance of planning and time management. Most of the respondents (80%) have private timetable for their studies. They also accepted the fact that it needs discipline to be able to follow one's private timetable. Moreover most of them (69.1%) acceded to the fact that their work schedule adversely affects their personal study time. These call for planning and time management for one to successfully go through distance education.

Harvard (2008) asserts that distance education students are strongly advised to manage their study time carefully. A distant education student should clarify his/her aims, identify her strengths and weaknesses, consider the context in which s/he will be studying and generate a broad strategy for successfully covering the material and completing the course. When reviewing the requirements of any particular module or unit, the student should consider her situation, workload and home responsibilities in

the relevant study period, and then develop specific realistic plans for active study and writing.

The research revealed that students monitor their progress through the modules. This is very important in distance education. The majority of the respondents (69.1%) indicated that the grades one obtains in an examination depends on how effective one combines his/her studies with his work. It also came to light from the research that only 49.2% of the respondents are happy with their cumulative weighted averages.

For the distance student to be successful in his/her studies he/she should set herself targets for the amount of time within which s/he will seek to complete a task. S/he can do this by working out:
- The quantity of work she aims to do in a particular week;
- Progress through the modules or units, bearing in mind his/her other responsibilities and tasks;

Table 7: Time management

Issue	No.	Agree	Disagree	Uncertain
I have time table for my private studies.	120	80	20	-
I monitor my progress through the modules.	120	57.5	18.3	24.2
I discipline myself and follow my time table for personal studies.	120	53.3	22.5	24.2
My schedule of work affects my personal studies.	120	69.1	19.2	11.7
How effective I combine work and study affects my grades in exams.	120	83.4	8.3	8.3
I am happy with my Weighted Average/ Cumulative Weighted Average.	120	39.2	42.5	18.3
I have to strategize my study plan to either improve/maintain my WA/CWA.	120	91.7	2.5	5.8
The challenges I am facing is forcing me to abandon the programme	120	14.2	66.7	19.2

- Progress on assignments.

A distance education student should plan and monitor what s/he does, and where necessary, act to improve the process, quantity and quality of his/her work. S/he should make decisions about the importance s/he will attach to tasks, the time s/he chooses to allocate to them, and sequence in which s/he will do them. People learn in different ways. So we do not expect that all students will approach their studies in the same way, in a way we prescribe, or in an over-planned manner. Distance education providers should advise and assist the students to manage their study and be disciplined about how they do it.

Motivational Factor
In this section we look at motivational factors that influence adults to embark on distance education programmes. The factors that influence adults to embark on distance education are varied.

In Table 8 it is realized that 41.7% of the respondents acceded to the fact that they embarked on the programme due to the need for self enhancement, while only 14.7% embarked on the programme for better salaries. To this

end, Schuemer's (1993) assertion that the factors that influence adults to embark on distance education include self-improvement, higher qualifications and increased salary and better jobs. But it is not just about money and jobs, it is also about feeling good about yourself by fulfilling your potential, and proving to yourself that you have got what it takes to be successful.

Table 8: Motivation factor

Factor	No.	%
Self enhancement	50	41.7
Increased salary	17	14.2
Better job prospect	42	35.0
Others	11	9.2
Total	**120**	**100.0**

RECOMMENDATIONS
Distance education students can effectively combine their work with studies if both the students and distance education providers take appropriate measures. The following recommendations are therefore being offered for the consideration of both distance students and distance education providers.

Any person who plans to embark or embarks on

distance education should inform and seek support from his family, friends, fellow employees and employer. The prospective student should inform these significant associates that his new position would limit his free time and movement and seek their understanding and support.

The distance education providers should teach the new students time management and encourage the students to draw private timetables and discuss them with their counsellors. The students should be told to make adjustment to the timetable whenever it is necessary.

All students should be assigned tutors and should be given the opportunity to contact them at any time they encounter any problem (be it academic, personal or job related) either through the e-mail or telephone. The tutors should give their tutees frequent feedback and this will go a long way to reduce attrition rate.

Another factor that facilitates effective combination of work with study is the ability to relate concepts and ideas learnt in the books to everyday reality. Students who do that find their studies interesting and relevant to the work they do. Such students hardly drop out as the programme they study make them more effective and efficient in the work they do. The facilitators at IDL distance programmes should encourage the students to relate whatever they learn to the work they do and their experiences.

The students should also be encouraged to form study groups and get in touch with their study group members through the e-mail and mobile phone whenever they are in need. Students living in the same vicinity should be encouraged to meet occasionally for discussions and studies. When students relate to each other they get to know that they are not alone in the challenges they face. Moreover they receive support from each other and are motivated to go through the programme.

Facilitators at distance education should be taught how to give diagnostic and prescriptive feedback. The facilitators should return marked assignments on time with the appropriate comments or feedback. In so doing the students could monitor their progress through the programme and make the necessary amends.

Any person who embarks on distance education should be self motivated and determined enough so that no matter the challenges faced they would forge ahead. Self motivation and determination are essential ingredients for success in distance education. Those who lack self motivation and determination are likely to drop out from distance education.

CONCLUSION

Distance education students face many challenges that militate against their studies. The challenges include how to combine their work with their studies, manage family and social activities. They are often misunderstood, isolated and finally drop out from the programme they embark on. They also feel burdened with studies and do not know where to turn for help. Those who manage and co-ordinate their activities very well, receive constant feedback from facilitators and course mates as well as support from employers and family members are able to successfully complete their programmes.

REFERENCES

Brundage, D., Keane, R. and Mackneson, R. (1993). Application of learning theory to the instruction of adults. In Thelma Barer-Stein and James A. Draper (Ed.). The Craft of Teaching Adults. Toronto, Ontario: Culture Concepts.

Burge, E. (1993). Adult distance learning: Challenges for contemporary practice. In T. Barer-Stein and J. A. Draper (Ed.). The Craft of Teaching Adults. Toronto, Ontario: Culture Concepts, 215-230.

Butler, D. L. and Winne, P. H. (1995). Fee back and self regulated learning: a theoretical synthesis. *Review of Educational Research, 65 (3): 245 –2 81.*

Danesh, A., Mandviwalla, M., and Liu, C. (2008). A study in use of technology in distance education and on-line learning. Nova South eastern University, 1-2. Retrieved August 2, 2008, from http://fcae.nova.edu/pet/simonson/monograph.PDF

Davis, B. (2003). Motivating students. *University of California*, 1 & 4. Retrieved February 23, 2008, from http:www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/motiv.htm

Dick, W. and Carey, L. (1990). The Systematic Design of Instruction. Third Edition, Harper Collins.

Dubois, J. R. (1996). Going the distance: A national distance learning initiative. *Adult Learning. 8(1): 19 - 21.*

Dueber, B. and Misanchuk, M. (2001). Sense of Community in a Distance Education Course, Mid-outh. Murfreesboro, TN April 8-10, 2001.

Evans, T. (1991). Understanding Open and Distance Learning. London, Kogan Page.

Eskey, M. T. (2003). Recruiting distance learning. *The Journal*. Retrieved July 31, 2008, from http://www.thejournal.com/magazine/vault/.cfm

Gagne, R. M. (1985). Conditions of learning (3rd Ed.). New York, NY: CBS College Publishing.

Harvard, J. (2006). 'How to effectively manage your Time effectively for distance learning. Retrieved 6th June 2006, from http://www.studykiosk.com/

Ley, K. (1999). Providing feedback to distant students. *Campus-wide Information Systems, 16 (2) : 63 – 69.*

Morgan, A. (1991). Research Into Student Learning In Distance Education. Victoria, Australia: University of South Australia, Underdale.

Mory, E. H. (1996). Feedback research. In Jonassen D. H. (Ed.). Handbook of Research for educational communications and technology, New York, NY: Macmillan. 919-956.

Reiser, R. and Dick, W. (1996). Instructional planning: A guide for teachers. Boston, M A: Allyn and Bacon.

Schuemer, R. (1993). Some psychological as pects of distance education. Hagen, Germany: Institute for Research into Distance Education.

Schweir, R. (1995). Issues in emerging interact tive technologies. In Anglin, G. J. (Ed.).Instructional technology: Past, present, and future. (2nd Ed.). Engle Wood: Libraries Unlimited Inc. pp. 119 –120.

Simond, M. (2008). Issues and Challenges in Open and Distance Learning. Retrieved on 2nd April 2008, from http://ezinearticles.com/

Smith, P. and Regan, T. (1992). Instructional Design. Merrill: New York

Tomei, L. (2003). Learning Theories, A Primer Exercise. University of Sothern California. Retrieved on 26th December 2009 from http://www.duq.edu.tomei/ed 7 1 1 psy/h rogers.htm Wolcott, L. L. (1 9 9 5). The Distance Teacher as Reflective Practioners. Educational Technology Publications.

Wright, S. J. (1992). Teaching in distance education, a faculty perspective. *The America Journal of Distance Education, 6(3): 2- 4*