

RETENTION AND FAILURE IN DISTANCE EDUCATION:  
THE EXPERIENCE OF THE NATIONAL TEACHERS  
INSTITUTE (NTI) KADUNA

BY

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Dedication

This study is dedicated first to my creator, The Lord of the Worlds, the Almighty God and then to my beloved parents, my late mother, may God forgive her of all her sins and my father from who I have benefited so much.

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Abstract

This study sets out to determine the factors leading to wastages among distance learners of the Teachers' Grade II programme of the National Teachers' Institute Kaduna. This is with a view to finding possible solutions to reducing the failure rate and increase the rate of retention.

The data collected through the instruments used were analysed with the chi-square and analyses of variance (ANOVA) to determine the influence of the various factors on the failure and retention rate of the Teachers' Grade II distance learners.

The findings from the study established that:

- i. the educational background of Teachers' Grade II distance learners were found inadequate and it greatly affected their retention and failure rate.
- ii. the course materials significantly affected the learners' rate of retention and failure.
- iii. the facilitator/tutor factor significantly affected the rate of their retention and failure.

- iv. the environmental variables were not conducive to learners' need and thus significantly affected the subjects' rate of retention and failure.
- v. the financial inadequacies of the distance learners grossly affected their rate of retention/ failure.
- vi. the distance learners' are burdened with too much of social responsibilities and this invariably affected their rate of retention and failure.
- vii. the motivation available to learners was not adequate and it thus affected the rate of retention and failure.
- viii that factors like boredom, professional advancement, learners' welfare, external expectation of learners' and their cognitive ability variedly affected the Teachers' Grade II distance learners.

Based on the findings, the following suggestions are made on how distance learning system can sustain learners' interest and improved performance that:

- i. distance learners should understand the basic

- concepts and attributes of Distance Education.
- ii. entry qualification of learners for a particular course of study be uniform.
  - iii. the cost of course materials be highly subsidized by the Government or the employers of the learners.
  - iv. distance learners be motivated and encouraged during the course of their programmes through appropriate reward system in the work place.
  - v. qualified and trained course writers on distance learning system be employed to write course materials for the learners.
  - vi. study centres be adequately equipped with support materials to facilitate better learning environment for the learners.
  - vii. course materials be produced and distributed early enough for the learners use.
  - viii. tutorial masters, supervisors and others involved in any distance learning programme be promptly paid their honorarium to motivate them.
  - ix. the various Government policies should take into consideration the implication on the working populace.

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Finally to the Creator of Heaven and Earth, the Most Gracious, the Most Merciful, the source of knowledge and giver of Life. He, on whom all depend, I proclaim and I admit that He is greater above all.

He is the unseen author of this thesis and to Him  
I am most grateful for His guidance and direction.

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Certification

I hereby certify that this work was carried out by Rashid Adewumi Aderinoye of the Department of Adult Education, University of Ibadan, Nigeria.

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## CHAPTER ONE

### INTRODUCTION

#### BACKGROUND

Since the introduction of the formal system of western education in Nigeria, the area of distance education has not been given adequate attention. Furthermore, research into various aspects of distance education has not been accorded necessary attention.

John W. Gardner (1971) says:

'nothing is more obsolete than the notion that education is something that takes place in a solid block of years between roughly ages 6 and 22. From now on, the individual is going to seek for formal instruction at many points throughout his career. Under such a system, much of the present anxiety over young people who quit school prematurely will disappear. The anxiety stems from the fact that today, leaving school signifies the end of education. Under the new system, there will be no end to education. Unfortunately, our institutional arrangements for life long education are ridiculously inadequate!

Educational opportunity is seen as encompassing the availability of a range of programmes suitable to the non-traditional adult learners, the provision

of student support services necessary for course completion and achievement; and relevance to the work place of the skills and knowledge acquired (Aniserf 1985).

Dennison (1988), Fortin (1987) and others argue that improving access to further education and training requires acknowledging the realities of working life. The personal situation of most adults with family and job responsibilities preclude their participation in traditional forms of learning. For them, some form of home-study is necessary. The rise to prominence of distance education in the educational field is a response to this need and a reflection of the communications technology now available for instructional delivery.

A number of recent studies have discussed the evolution of distance education design as a progression from first to third (and even fourth) generation system. Garrison (1985) described design in terms of three generations:

First generation designs are primarily print-based and dependant on the postal service for delivery and feedback on written assignment, although, some use is made of the telephone to link student and instructor. Second generation designs make much greater use of telephone links to establish dialogue amongst students and instructor. Typically, the degree of students' support is considerable with pre-enrolment counselling and study-skills training available. Third generation systems utilize all of the first and second generation by means of delivery but as well employ computer mediated communications technology to create an electronic or 'virtual' classroom.

These computer conferencing systems possess capabilities that allow extensive dialogue between students as well as between students and institutional advisors or tutors Hiltz (1986).

Thus distance education gives more access to learners. It also improves average participation rates and improving entry opportunities of particular groups in society who were previously inadequately served by the education system. Access as completion refers not only to graduation rates but also to the conditions needed to promote student persistence and achievement. Cross (1981) defines three barriers to post secondary access of entry:

situational, administrative, and dispositional. Situational barriers stem from the individual's immediate and personal situation and could be lack of study time owing to family, work responsibilities, perhaps geographic isolation. Administrative barriers are those policies and practices of institutions that work to impede student entry, such as the availability of relevant courses, their cost, or academic prerequisites to course enrolment. Dispositional barriers refer to the individual's motivational structure and include self-esteem level of aspiration, and attitude to learning.

Brindley and Sean Lous (1990) proposed a study that will include a sample of students from all three groups they identify: those most likely to succeed, those most likely to fail, and those perceived to be at risk; i.e. those that may drop-out. It is then necessary to highlight, develop, implement and effectively publicise the availability of adequate support services in order to reach and sustain those who would benefit from opportunities available at the National Teachers Institute (NTI). If distance education programmes are to achieve their potentials in terms of optimal accessibility, we may need to determine the model of student

support services; motivational factors and conducive environmental factors that would not only improve performances at examination but also the retention rates.

### 1.1 The Establishment of the National Teachers Institute (NTI)

Many countries including Nigeria have extensive further education facilities. These facilities may be better adjusted to individual maturity and motivational factors than the formal school system. It will be necessary to find methods of accounting for the contribution of further education in limiting the adverse consequence of second level drop-out. It will be necessary to find out the method of accounting for the contribution of further education in limiting the adverse consequence of second level drop-out in order not to exaggerate the incidence of wastage. However, until wastages can be expressed as loss to the society in terms of failure to reach target levels of achievement we may not be able to realise its

negative impact on the educational processes. It is highly necessary to find ways and means to prevent the incidence of wastage.

It is a fact that all students admitted to the first grade of an educational cycle do not complete the cycle within the prescribed minimum period. Some of them drop-out before the end of the cycle, and some repeat one or more grades before their dropping out or completing the last grade of the cycle successfully.

It is certain that proper control in the regulative sense calls for a clear understanding of the way in which the educational system works. This can better be understood by examining educational wastage and factors that are responsible for such, be it on the part of the managers or learners.

Bako and Rumble (1990) in their study of the National Teachers Institute gave the following as the background to the establishment of NTI, Nigeria currently has a population of about 88 million (1991) with an annual growth rate of 3.21 (1980-87). Population growth has been a major factor in the development

of Nigeria ever since the country gained independence in 1960.

Elaborating further on the implications of Nigerian population vis-a-vis primary education growth, Bako et al (1990) have this to say:

In 1965, there were under one million primary school enrollees. In 1974, over 4 million children were enrolled in primary schools faced by the continuing demand for education; the Federal Government proposed the introduction of Free Universal Primary Education (UPE) in 1974. NTI (1987)

As a result of the Free Primary Education introduced in 1976/77 there were over 8.2 million primary school enrolments. Primary education was made as a matter of policy compulsory in 1979. By 1988 the number of primary school enrolments was 12.2 millions. The increase in the primary school enrolment necessitated a corresponding increase in the strength of the primary school teaching force from 330,000 to over 310,000. But at the same time, there was an urgent need to improve the quality of the existing teaching force. A 1974 survey had revealed that 65,000 to 75,000 of the 330,000 teachers in Nigeria's primary schools lacked the official minimum qualification - grade II teacher certificate (TC II) required to teach at this level.

There was no possibility of the existing teachers' colleges meeting the challenges posed by this inadequate

number of trained TC II teacher. The teachers' colleges themselves were already faced with some problems.

Wali (1987). Among such problems were:

- (a) quality of their intake was generally lower than other post-primary institutions.
- (b) their teachers were less qualified than those secondary schools. Even many of those teaching in the secondary schools as at now are unqualified (this may be part of the reason why the federal government had already declared 1992 as the last year for uncertificated or unprofessionally qualified teacher to teach in secondary schools.
- (c) For many years what the college taught could not match the expectations of the external examining body like (WAEC), because the result was a high failure rate with 60-65 of the annual output from the Grade II teacher training colleges failing to pass the examination. Yet such unqualified teachers were still appointed as teachers under the CTR (training but uncertificated) or (Grade II referred).

As a result of this, the number of unqualified primary school teachers increased at a geometrical rate. Thus the existing colleges could no longer train the already high number of teacher trainees which was put at 38,000 in 1972 and by 1976/77 (144,500) student primary school teacher (Wali) (1989).

By 1978, the Federal Ministry of Education forecast was that the number of unqualified primary school teachers would by 1982 have nearly doubled to 180,000 (Bako) (1989). The number by 1991 had gone up to 230,000 Fafunwa (1991).

The Federal Military Government promulgated an enabling decree number 7 of 10 April 1978 in a response to the national shortage of trained teachers Bako and Rumble (1990) establishing the NTI as an institution charged with the responsibilities of training Grade II teachers through the distance learning system.

This was clearly stated in the hand book of the National Teachers' Institute published in 1989. According to the Handbook, The National Teachers' Institute was established among other things to provide in-service education for teachers through the distance learning system (DLS). As stipulated in Decree No. 7 of the Federal Military Government of Nigeria 1978, the institute was charged with the duty of providing courses of instruction leading to the development, upgrading and certification of teachers as specified

in the relevant syllabus using distance education techniques. It was also part of the responsibilities of the NTI to develop and produce self-instructional materials which can be distributed to students by the state ministries and their administrative arms in order to upgrade and improve the teaching competence of sub-grade II teachers. These materials would also be used to improve the teaching effectiveness of sub-grade II teachers and to upgrade other categories of teachers of higher level. The methods stipulated were most modern techniques of distance education including radio, audio tapes, films and television (Bako 1990).

The students enrolment for the NTI's DLS Grade II programmes between 1984-1990 is as shown below:

Table 1

NTI Students' Enrolment Between 1984 and 1990  
for the T.C.II

Year	NTI
1984/85	45152
1985/86	37620
1986/87	35373
1987/88	47131
1988/89	20237
1989/90	10178

Source: NTI's Records at Kaduna, 1990

## 1.2 N.T.I. Organisational Structure

The NTI is a parastatal organisation funded by the Federal Ministry of Education and Youths Development. The State's Ministry of Education are members of the NTI Council. The NTI's Council is the institute's supreme governing body, and its Director reports to it. The current organisational structure is shown below.

The National Teachers' Institute distance learning system is essentially drawn by the professional and field operations division, utilizing production facilities within the executive arm of the Directorate. The monitoring and evaluation are carried out by the Planning, Research and Statistics Division. The Examinations Division organises the examination of NTI's TC II. Candidates, and responsible for the conduct of those other examinations falling under NTI's jurisdiction. The organs of the Directorate, that is, Finance, Administration and Personnel Division, support the Institute's distance learning system along with its other programmes. Delivery is organised through the field centres and their dependent study centres.

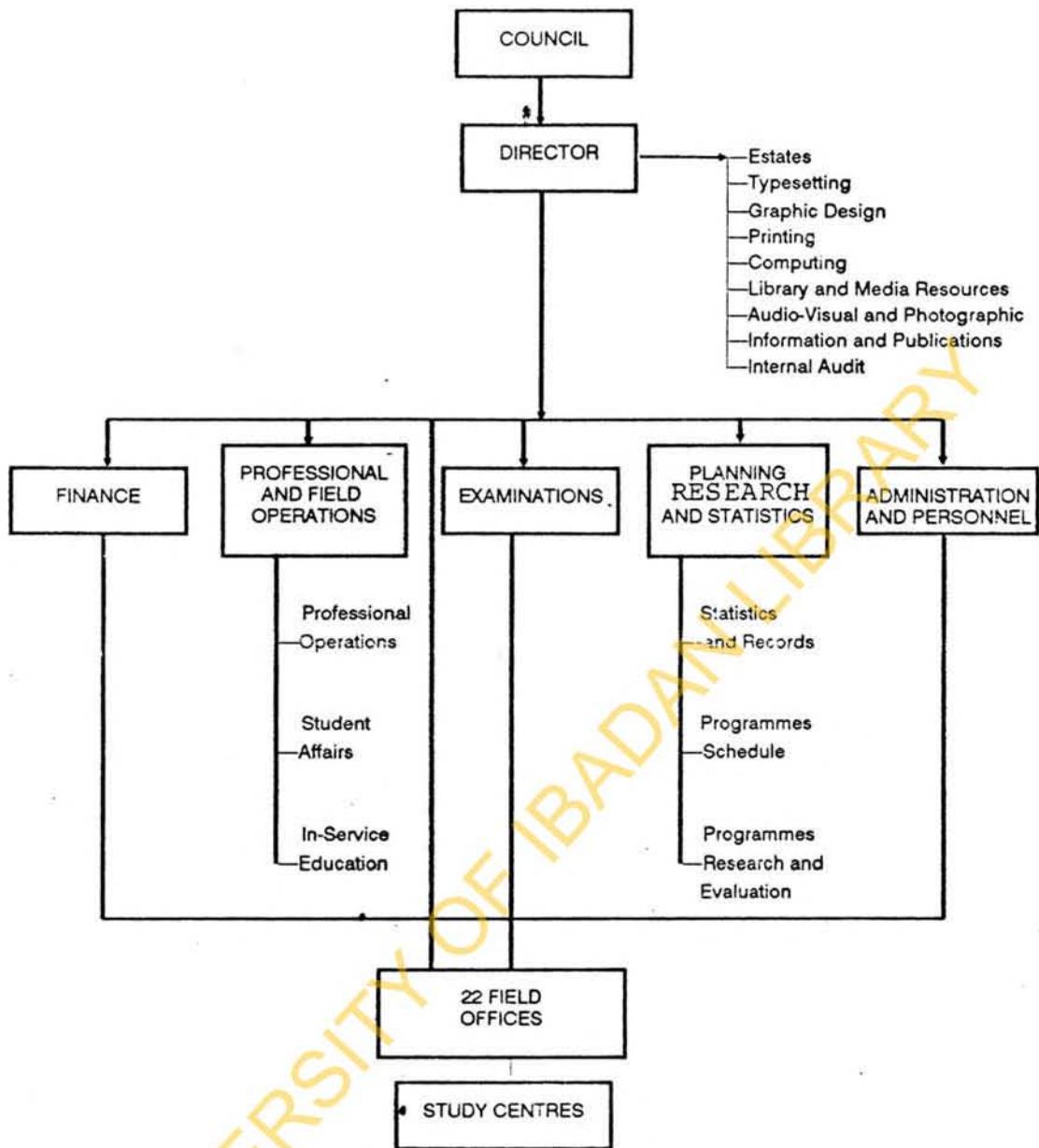


Figure 1  
NTI Organisation Structure

Source: NTI Planning Research and Statistics Section

#### 1.4 The Distance Learning System

NTI uses correspondence teaching methods supported by face-to-face teaching. Although, the Institute has for many years planned to use other method of media, in support of its distance education programmes, including television, video cassettes, radio and audio cassettes. Lack of financial support has hindered the output of audio visual materials. There have been problems of equipping the study centres, so most of the receiver and cassette players have piled up.

The institute's initial courses were prepared with the help of UNESCO (United Educational Scientific and Cultural Organisation) experts, but the responsibility for the preparation of materials were passed to some Nigerians. The curriculum for the TC II programme was based on syllabi prepared by NTI and approved by the joint consultative committee on Education (a committee of technical experts) prior to approval by the National Council on Education - the supreme federal decision making body on educational matters). The course texts (units) are written by

resident courses writers as well as consultants drawn from other institutions (universities, colleges of education, teachers' colleges etc). The process of writing is accomplished in workshops, where the various units authors come together. Authors normally write about 5 units on any of the course. Responsibility for co-ordinating writing rests with the professional operations section.

The writing materials are typed by the typesetting section, which is also responsible for paste-up, at which stage illustrations (Graphic Design Section) are incorporated into the texts. The audio-visual and photographic materials which are used by the graphic designers serve as guide for drawings. Proofs are checked by professional operations who use some contract editors to proof-read. The internal printer prints some but not all of NTI's course materials. The volume of materials is too large for the capacity of the existing and ageing printing machinery, external printers take on the excess load. Once printed, the materials are despatched to the Field Centres.

The Field Centres of which there are 22, one in each state of the federation and one in the Federal Capital Territory, Abuja (before the creation of the new states which now give Nigeria a 30 states' structure. Field Centres are responsible for registering students, location and organisation of study centres, distribution of students to the study centres selling of course materials, the appointment of supervisors and course tutors and their payment.

The student meet with their tutors and fellow students at study centres. The formal link between a study centre and the field centre is provided by the supervisor, who is responsible for delivering educational materials to the study centres. Collection of students' records of performances from study centres, monitoring the work of tutors, drawing up and maintaining a time-table of study centres activities, collection of fees and making payment to tutors are part of the responsibilities of the supervisor.

The main job of tutors is to guide students to make proper use of NTI materials. The tutor counsel

their students, give lectures, encourage discussions, correct their lapses. Tutors marked assignments and administer review tests and end of cycle tests.

In each study centre, one tutor is appointed in each subject area per 100 students. However, the number of students taking a course is generally less than 100. So that the tutor- student ratio in any subject at TC II level is nearer 1:50. Students have two hours of tutorial contact in each subject area. They are enrolled every Saturday during the term.

The NTI prepared a series of guidance and training notes for those who work in its distance learning system. Among these are guides for course writers, supervisors and course tutors, co-ordinators and prospective students.

These guidelines to course writers stress the loneliness of the distance students: the other commitment which they have and hence the limited time available for studying. The lack of facilities and resources available to traditional campus students, and the interruptions which distance students suffer.

The course writers are reminded to help students overcome these difficulties. Texts should be:

- a. self-instructional, using clear, simple and straight-forward language;
- b. self-contained, and not require recourse to text-books and resource persons;
- c. self-paced i.e. properly sequenced so that students proceed from one lesson to another steadily, logically and at their own pace.
- d. self-evaluating, containing self-assessment questions to provide feedback on progress and understand

In addition, the NTI made an observation which is worthy of note as regards course writers.

"Writers have a responsibility to ensure that their facts are correct, up-to-date, to the point, have clear and explicit objectives, are relevant to the learners' needs, capable of being put to immediate use by the adult learner in his or her own situation. They should also use techniques which reinforce learning and ensure that skills are acquired quickly through frequent repetition. Any techniques which provide and maintain interest and generate motivation are to be used. In particular, writers are to avoid rote learning and make students think for themselves NTI (1980)".

The guides to supervisors and tutors are less explicit, but stress the need for course tutors to

ensure that students make effective use of the materials, to help them with learning, and to counsel them NTI (1980).

### 1.5 Statement of the Problem

It is a dilemma from an institutional perspective, that many distance learners fail to either succeed in or complete a programme which they have chosen for themselves. This is typical of the National Teachers Institute where there is a strong commitment by the Federal government of Nigeria to upgrade auxiliary teachers to Grade II Certificate holders through distance learning. Nigerian government capital investment in the institution stems from the fact of ensuring that the quality of primary school teachers are improved.

It is pertinent to note that despite the efforts and facilities at the disposal of the learners, cases of failures, repetition and drop-out still characterise learners' performances at the institute's Teachers' Grade II distance learning programme.

A cursory look at the analysis of performance of the distance learners at the institutes' 1989-1990 TC II examination by subjects and by states revealed the extent of the percentage of failure, withdrawal and passes during these periods throughout the country.

Table 2

Percentage of Withdrawal and Failure  
Between 1984 Session to 1990 Session

Year	Total Registered	Total for Examinations	% of Withdrawal	% of Failure
1984/85	45152	13757	30	72.6
1985/86	37620	31300	83	56
1986/87	35313	25063	70	58.8
1987/88	47131	14739	31.3	61.2
1988/89	20237	14442	71	69.5
1989/90	20170	13100	64.9	40.8

Source: NTI Students Affairs Division.

Table 3.

Analysis of the 1989/90 TC II Results  
of the TC II/DLS Students by State

States	Centres	Total Entries	Total Passes	Percentage Age
Akwa-Ibom	T.T.C. Ifuho	49	26	59%
	G.T.T.C. Afaha	258	162	62%
	T.T.C. Ndo Eyo Eket	15	9	60%
Total		322	200	62%
Anambra	Onitsha	171	91	53.21%
	Enugu	259	169	62.25%
	Nsukka	24	13	54.16%
	Awka	94	20	21.27%
Total		548	293	53.46%
Bauchi	W.T.C. Kaltungo	73	20	27.40%
	G.T.C. Jama'are	123	74	60.16%
	T.C. Gombe	219	64	29.22%
	W.T.C. Azare	111	62	55.86%
	T.C. Toro	82	18	21.95%
	T.C. Bauchi	172	57	33.14%
	T.C. Misau	171	55	32.16%
Total		951	350	36.80%

Benue	HolyRosary, Adoka	107	11	10%
	Mary's T.C. Adikpo	223	83	37%
	Jesus College Otukpo	107	43	40%
	G.T.C. Vadeikya	135	70	51%
	G.C.C. Otonkom	189	42	22%
	T.G.C. Zaki-Biam	249	Result W/H	-
	G.T.C. Dekina	99	48	48%
	G.T.C. Idah	109	53	48%
	D.L.S. Anyigba	241	99	41%
	G.T.C. Abejukolo	166	75	45%
	W.T.C. Alloma	92	80	86%
	G.T.C. Makurdi	194	55	28%
	N.K.S.T.T.C. Nkar	262	120	45%
	G.T.C. Oju	130	30	23%
	G.T.C. Gbajumba	79	Result W/H	-
	G.T.C. Lessel	33	25	75%
G.T.C. Taraku	55	21	30%	
G.T.C. Emiguni	87	28	39%	
Total	2,229	883	39%	

Borno	G.D.C. Maiduguri	6	5	83.5%
	B.T.C. Maiduguri	3	-	0%
Total		9	5	55.6
C/Rivers	N.A.	666	666	Result Withheld
Gongola	F.C.E Yola	6	2	33.33%
	G.T.C. Shuwa	1	0	0%
	G.T.C. Jalingo	1	0	0%
	G.T.C. Jada	8	0	0%
	G.T.C. Mubi	3	0	0%
	G.T.C. Yola	3	1	33.33%
	G.T.C. Numan	3	1	33.33%
Total		25	4	16%
Imo	T.C. Umuahia	168	4	64.3%

	T.C. Minjibir	R/Cancelled		
	S.A.G. Kano	198	99	50.0%
	T.C. Wudili	101	30	29.7%
	W.T.C. Kano	38	9	28.7%
	G.T.C. Hadeja	76	38	50%
	G.T.C. Gosawa	94	30	31.9%
Kano	T.C.T/Wada	244	93	38.1%
	G.T.C. M/Madori	45	14	31.1%
	T.C. Roni	124	30	24.2%
	K.T.C. Kano	R/Cancelled		
	G.A.T.C. Hadeja	27	15	55.6%
	T.C. Magairi	79	52	65.8%
	G.A. T.C. Gwale	119	99	83.2%
	W.T.C. M/Madori	2	2	100%
	W.T.C. G/Galadima	11	3	27.3%
	F.T.E. (T) Bichi	59	32	54.2%
	W.A.T.C. G/Dutse	15	1	6.7%
	O.O.E. Kumbosho	109	54	44.8%
Total		1,341	601	44.8%

Katsina	W.T.C. Kabomo	19	7	36.8%
	T.C. Dusin-ma	37	10	27%
	A.T.C. Katsina	12	0	0%
	T.C. Daura	76	12	15.8%
	K.T.C. Katsina	46	12	26.1%
Total		190	41	21.58
Kwara	T.C. Lokoja (I)	82	69	84.15%
	T.C. Lokoja (II)	232	75	32.63%
	T.C. Okene	87	31	35.63
	T.C. Ogori/Magongo	2	0	0%
	T.C. Kebbi	53	19	35.84%
	T.C. Omu-Aran	119	36	30.25%
	T.C. New-Bussa	124	93	75%
	T.C. Egbe	Results	Cancelled	
	T.C. Lafiagi	130	45	34.61%
	C.A.I.S. Okene	Results	Withheld	
	C.A.I.S. Ilorin	271	183	65.53%
	C.A.I.S. Babanna	-	-	0%
Total		1,162	565	48.62%

Oyo	L.A.T.C. Osogbo	267	76	28.5%
	Baptist Iwo	205	128	60.5%
	L.A.T.C. Iseyin	67	14	20.8%
	U.M.C. Ibadan	10	3	30%
	D.T.C. Ipetumodu	264	91	34.5%
Total		813	312	38.4%
Plateau	G.T.C. Lafia	436	123	28.1%
	G.T.C. Amper	615	141	22.92%
	G.T.C. Keffi	370	257	69.45%
	G.T.C. Jos	825	343	45.57%
Total		2,246	864	38.46%
River	T.C. Okehi	116	45	38.79%
	T.C. Degema	27	9	33.33%
Total		143	54	37.76%

	C.E. Sokoto	63	33	52.38%
	C.A.A. Sokoto	168	22	13.09%
	G.T.C. Wasagu	171	62	36.25%
	W.T.C. Yelwan-Yauri	397	137	34.50%
	W.G.T.C. Bodinga	206	69	33.49%
	G.T.C. Zurai	377	96	25.92%
	Sultan A. Sokoto	71	9	12.67%
Sokoto	G.T.C. Argungu	422	112	25.92%
	T.C. Sokoto	334	103	30.83%
	W.A.T.C. Gusau	144	89	61.80%
	G.S.T.C. Bakura	158	47	29.74%
	G.S.S. Gumi	257	32	12.45%
	G.S.S. Gwadabawa	171	21	12.28%
	T.C. Birnin Kebbi	Result	Withheld	
Total		2,949	832	28.21%

Source: NTI Dept. of Planning, Records and Statistics, Kaduna.

Table 4

Summary of Analysis of Withdrawal at  
1989/90 TC II DLS of NTI

States	Total Registered	Total Entries for Exams	Withdrawal	% of Withdrawal on Total Registered
1	2	3	4	5
Akwa-Ibom	334	322	12	13
Anambra	639	548	91	15
Bauchi	951	454	497	52
Benue	2633	2229	404	15
Borno	195	09	189	95
C/River	666	No Record	No Record	
Gongola	594	25	569	95
Imo	168	168	Nil	Nil
Kano	1723	1342	190	22
Katsina	996	190	806	80
Kwara	1342	1162	180	13
Oyo	1850	813	1047	56
Plateau	2850	2246	604	21
Rivers	217	143	74	34
Sokoto	5812	2949	2867	49

Source: NTI, Department of Planning, Research and Statistics Records, 1990.

An examination of Table 4 shows that there is no state without any appreciable rate of withdrawal in the NTI T.C.II by DLS results. For example, while low rates of withdrawals are recorded in Akwa-Ibom, Kwara, Anambra and Benue which ranges between 12 per cent and 15 per cent, the reverse is the case in other states such as Katsina state (80 per cent) Borno (95 per cent) and Gongola with 95 per cent withdrawal rates.

This wide range of withdrawal rates between states of the federation in the NTI T.C.II by DLS result as in Table 4 requires an investigation on the factors responsible for the attritions rate in terms of failure, drop-out, or withdrawal of students of the NTI T.C.II by DLS programme. This will enable this researcher to make a policy prescription on how distance learners' interest and improved performance can be sustained in any DLS programme, and in particular the NTI T.C.II by DLS.

### 1.6 Objective of the Study

The purpose of this exploratory study is to determine the extent of wastages in NTI distance learning programme of the Teachers Grade II with a view to finding solutions to reduce the rate of failure, drop-outs and repetition.

The objectives of this study, therefore, include the following:

- a. To undertake an indepth study of the NTI distance learning programme of the teachers Grade II.
- b. To ascertain the extent of the Institute's success in its TC II distance learning programme since its inception.
- c. To establish the causes or reasons for failure and withdrawal.
- d. To design possible process of attaining optimum use of resources with a view to recording a better completion rate.
- e. Propose remedies for the identified factors of wastage in the NTI's DLS programme for better functioning of the institution and the nation in general.

## 1.7 SIGNIFICANCE OF THE STUDY

The acute shortage of qualified teachers at all levels of education is apparent in our educational system. Thus any institution charged with the responsibilities of upgrading the teaching force deserve academic research of this nature.

It would be of an assistance to the institution if the findings of this study are made available for possible adaptation for the National Certificate of Education programme of the institute which has already taken off.

Finally, the results of the study would be used to identify significant of factors which might have hindered the successful completion of the distance education process and propose of distance education which hitherto has remain inaccessible to distance educators.

Its practical importance for distance educators (tutors, counsellors, managers, editors, designers, co-ordinator) is another area of significance.

Because it would avail them with various developmental programmes that would move them from their level as

partial participants to that of professional distance educators.

It would avail managers of distance education the opportunity to identify areas where proper attention has not been directed.

A unique attribute of the study is its efforts in establishing factors that influence the wastage rate of distance learners rather than mere calculation of wastage rate.

This would in turn break new ground, offers valuable and useful insights into problem and prospect of distance education as an emerging field of study.

The study would also stimulate a greater interest and may eventually arouse the interest of intellectuals indepth research into this alternative programme of learning.

#### 1.8 Scope and Limitation of the Study

Much as the growing fields of distance education have not been given adequate attention by scholars in their choice of study, it will still be impossible to single handedly embark on a wide area of study in the field. And since what is

needed is a concise area of manageable proportion, this researcher has limited himself to the consideration of factors hindering the rate of retention and the increasing rate of failure.

The focus of the study is on the TC II distance learners that are spread all over the country with specific attention to a selected few from fifteen states of the federation. In doing this, the NTI as the provider, its field staff coordinators and counsellors inclusive were considered in addition to the selected learners.

However, certain limitations are inevitable. It is as a result of this that certain portion of the population the learners will not be reached and also certain state study centres. The researcher is also aware that the Institute has embarked on training teachers for the award of Nigerian Certificate of Education through DLS, this will also not be included in the present study. The scattered nature of graduands of the TC II DLS of the NTI and the lack of relevant information about their present

location will not make it possible to reach them for the purpose of this study. Rather the researcher sought the opinion of those that are currently on study. Only records of those that have graduated from the Institute from its inception are used for the purpose of this study.

#### 1.8 Operational Definitions

In this study each of these terms has the following interpretation.

Distance Education - is the quasi permanent separation to teacher and learner throughout the length of learning process.

Programme Learning - is a form of indirect teaching which has many similarities to distance education. It demand extensive preparation of learning materials, careful sequencing and tend towards the individualising of learning.

Open Learning - connotes open entry, individualised learning, self assessment, learner support, and self pacing.

Correspondence Study - is a correct designation of that sub-group of the print-based areas of distance

education in which the student contact is not encouraged.

Drop-out or School Desertion - leaving school before the completion of a given stage of education or leaving at some intermediate or non-terminal point in a cycle of schooling.

Repetition - a year spent by a student doing the same work in the same grade as in his previous years in school.

Educational Wastage - The proportion of students who enrol for course but who did not complete it successfully, either through withdrawing before taking the examinations or by failing the examination..

Failure - as it will be used in this study is the inability to pass examination set at the end of course work.

Retention - The rate at which students are made to sustain learning process without stopping or dropping out.

Attrition - The rate at which student drop-out at school.

Stop-out - a practice whereby a student stop learning only to start again.

- N.T.I. = National Teachers' Institute  
T.C.II = Teachers Grade II Certificate  
D.L.S. = Distance Learning System  
D.E. = Distance Education  
UNESCO = United Nations Education Scientific  
and Cultural Organisations.

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## CHAPTER TWO

THEORETICAL FRAMEWORK

This section discusses the concept of distance education theory to provide theoretical basis for this study.

The concept 'theory' has been defined and discussed by scholars. According to Gilbert Sax (1968) 'a theory is unified system of principles definitions, postulates and observations organised in such a way as to simply explain the relationships between the variables'. Nwankwo (1982) sees it as 'a systematic and deductive way of thinking about reality. It implies facts, models or law about a phenomeon. The establishment of a theory may suggest many applications of practical value'. John Dewey quoted by Nwankwo (1983) once said that 'there was nothing more practical than a good theory'. He observes that the main purpose of theoretical framework is to form the hub in which findings of the study and the discussion of such findings resolved. Without adequate frame of reference the results of investigation sound shallow and intangible.

## 2.2 Taxonomies of Distance Education

Hall (1982) described distance learning system under various models. As for Hall (1982), distance education could take the form of, degree by examination, open university, mediated instruction and university without walls.

- 2.3 Degree by Examination Model - This was pioneered by the University of London. More recent forms of degree by examination are represented by the Regents External Degree in New York State, U.S.A., Thomas Edison College of New Jersey, U.S.A. and the Correspondence Open Studies Institute of the University of Lagos, Nigeria. The University of Ibadan External Degree Programme recently reactivated takes after this model. The faculty role in the programmes of this model is limited to defining the knowledge to be mastered and certifying the students' performance. Outreach to the students is usually made via post, although students sit for examination in a proctored location. Among the advantages are the uniformity and consistency of the academic expectation of students and the objectivity of the assessment.

But there are serious disadvantages as well. Therefore examinations must be up-graded for each administration period, and strict security must be maintained. The programme is relatively rigid, providing a student far less choice than the traditional university.

2.4 Mediated Instruction Model - Apart from the normal class room setting, student are also exposed to the use of communication technology, ranging from radio, television and some other sophisticated interactive computerised instruction. These required extensive capital investment in high technology facilities and equipment, and further investment in academic course development. These alternatives have not usually appeared as free standing degree alternatives. Rather, they are employed as components of other models. For example, the British Open University makes considerable use of the BBC video-tapes which complement the printed course materials. The suspended National Open University of Nigeria made use of the

Federal Radio Corporation of Nigeria, Educational Services Unit before its demise. However, the range of course offering is severely limited, given the very high cost of producing a single course. Moreover, successful applications of these technological alternatives require a well-developed and reliable infrastructure, electricity, telephone, a broadcast and trained technicians. For many nations these alternatives cannot be reliably applied at the present time.

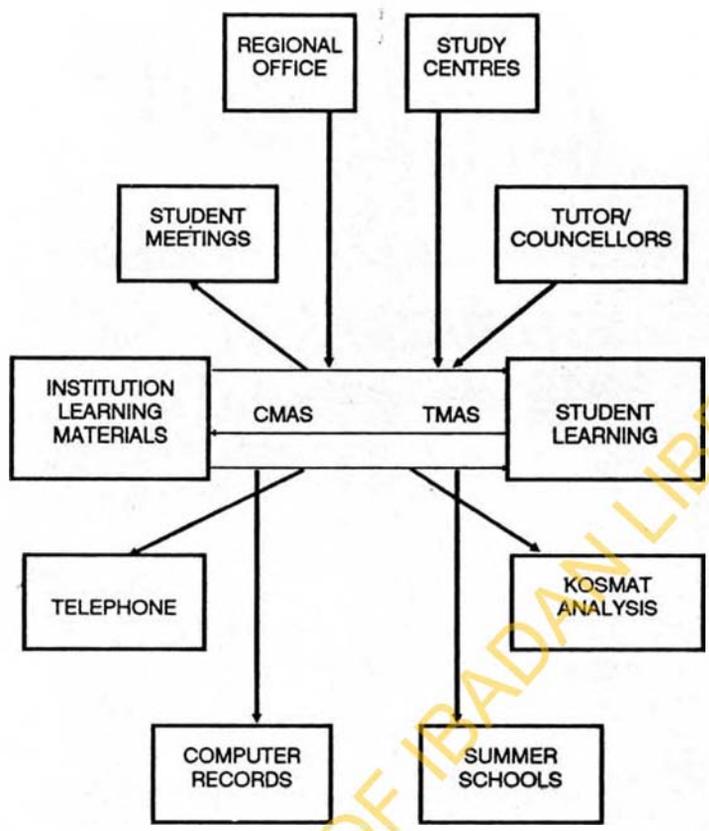


Figure 2: The Open University Model

SOURCE: Deniel et al (1982) Learning at a Distance

2.5 Open University - The open university model is another which addresses some of the disadvantages of the examination model. It is designed to meet the logistical needs of the hypothetical individual who tends a remote light house in the Orkneys.

In addition to performing the certifying function of the examining model, it provides the functions of instruction and library. The materials themselves are designed by the faculty to incorporate a conscious pedagogy, thereby replacing the absent classroom lecturer. The advantages of this model are considerable, for it brings the logistical flexibility of correspondence learning to a new level of sophistication. Consequently, it is today the most commonly found model for alternative university outreach, with major examples operating in Pakistan, Israel, Sri Lanka, United Kingdom, Venezuela, Costa Rica, Australia and Nigeria. This model is able to serve very large numbers of students, and so has tended to be developed on a national scale.

The open university model has its own demerits among which are the following:

A very large up front capital investment is required to create the courses, and it requires a large number of time to amortize their cost. This severely limits the number of courses which may be offered at any one time, and inevitably at the advanced course level. Local study centres must also be provided with counsellors and tutors if the open university model is adopted. This will in essence add to the cost of operation of the model in terms of maintaining the human and physical resources at the study centres

2.6 University Without Walls Model - This model of university outreach has some conceptual problems in a different way. This model defines a curriculum, sometimes uniquely, for each student, arranges for institutional or learning opportunities appropriate to the students' performance. Most programmes of this type also assess a students' knowledge and achievement at the time of entrance and may award advanced standing toward the degree.

Examples of this model can be represented by Empire State College (Summy) and Metropolitan University (Minnesota, U.S.A.).

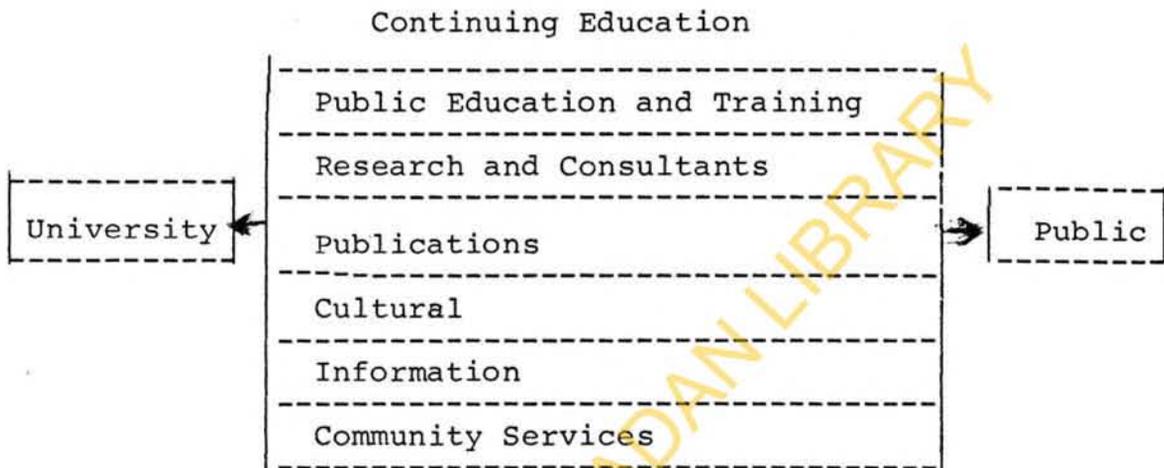
This model has some merits which include the high degree of choice for the student and the institutions flexibility in responding to the widely varied learning goals of heterogeneous students. The students of this model are not bound by the limits of the examination and open university models, although they usually have full recourse to the offerings to such models as well as occasional courses taken in traditional university classrooms. Maximum use is made of independent learning with tutor or mentor supervision.

This model, however, has the major problem of how to maintain reasonable academic consistency among all students. The model requires vigorous monitoring and controls by the faculties. Thus the relative validity of learning resources must be constantly revised to ensure that high standards are maintained. For the model to be maximally effective, programmes required a rich network of existing educational resources, a condition not found in many areas of the world most especially the developing countries.

University outreach models can still be patterned on some criteria based on the links between the university and the public. Models of relationship between university and public can be fragmented - each mediatory institution operating on its own; partly integrated - various organisms clustered together as their functions relate together; or largely integrated into one major cluster - a college of continuing education or similar institution. Otherwise the mediatory organisms can be divided by subject areas and operate from bases within each relevant faculty. At the same time, across-the board public educational programmes can be distinguished either by methodology or by type of course - credit or non-credit. These are explained below as in Figures 3, 4, 5 and 6.

\*  
Figure 3

Extension Services in a Collegiate  
 Structure of Outreach Model



Source: Akintayo (1990) in Commonwealth of Learning Fellowship p.

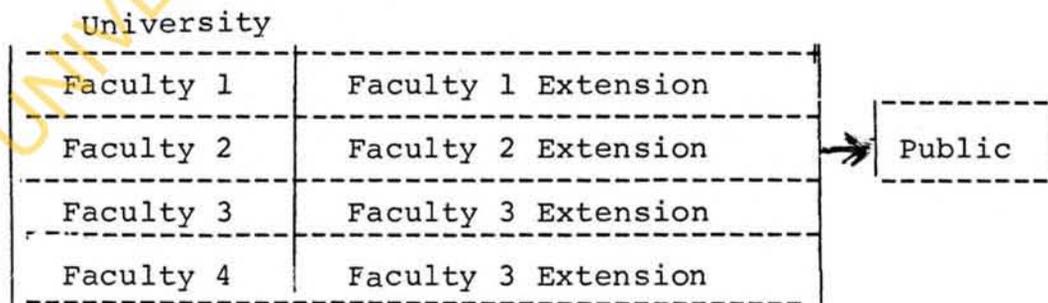
Table 3 shows the relationship between the public education, the universities and training services and the research and consultancy services. More often the cluster principle is extended and most services are brought together in the organism. This model fits the collegiate pattern of a university outreach. It is common in the United States.

The mediatory body comprising so many clusters may be called 'College of Continuing Education'. Sometimes, it is known simply as United College, to symbolise its wide-embracing nature. Community services, being sui generis, could not easily be brought into such a college, and some information services are likely to be retained in the University administration.

The opposite to this kind of clustering is when each mediatory service is divided by subject and remains within its parent faculty. Each faculty then has its own separate "extension" service, as show in Figure 4.

Figure 4

Extension Services in a Dominant Faculty  
Structure of Outreach Model



Source: Akintayo (1991) in Commonwealth of Learning Fellowship.

Figure 4 above conforms to some extent with the university outreach of University of Lagos through COSIT. Other Nigerian universities through their various faculties operate the model as in Figure 4. For example, the Centre for Cultural Studies of University of Lagos serves as an extension of the Faculty of Arts. The Human Resources Research Unit of the University of Lagos is also an extension of the Faculty of Social Sciences. The Institute of Education of the University of Ibadan extends its services to the outside community as examiners, moderators, co-ordinators and organisers of N.C.E. or A.C.E. programmes throughout the country. The Department of Adult Education of the same university is well established for its extension services through the Functional Literacy Programmes, Extra-Mural Studies and National Workshops on Labour Education.

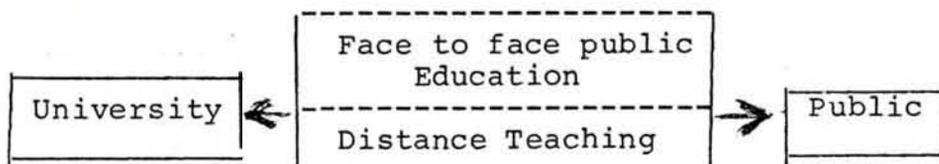
This is equally true of the Department of Religious Studies and Department of Arabic and Islamic Studies. Both Departments coordinate the academic activities of some institute outside the university walls and award their students degrees and certificates through the Faculty of Arts on behalf of the university.

The problem with this model is that across-the-board educational and training services do not easily fit in, and while each faculty may return some form of subject-linked extension services, the university still has to decide what to do about across-the-board services. If one leaves out the subject linked services like the Adult Education Extra-Mural programmes, what models are there for the general services? They may still be linked in a mini-college, or they may be divided according to other criteria.

Another vital issues with the outreach model is how to divide up the residual extension services like the general public education and training services. These could be divided by methodology. In this case, there will be need to distinguish between face-to-face teaching-residential courses and evening classes - and distance teaching - correspondence and radio.

Figure 5

General Outreach Education and Services  
Divided by Methodology Model



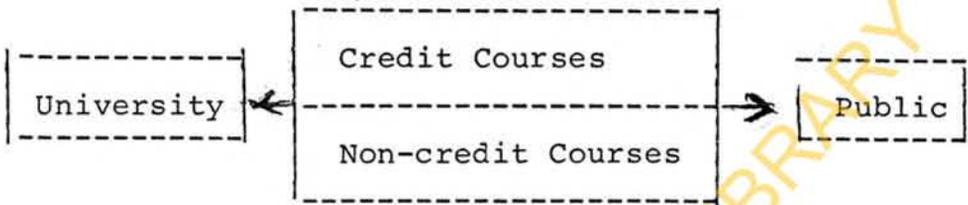
Source: As in Figure 4

Figure 5 reflects the university outreach model in which both the conventional face-to-face operation and distant teaching work are practised. This model involves a well equipped study centres for the distant students to benefit from face-to-face teaching at these centres as in the mother university. The major problem of this model is how to get standard study centres which will be well equipped like the university responsible for the distance teaching programme. In Nigeria, University of Lagos COSIT experience indicates that over 60 percent of the COSIT candidates prefer University of Lagos study centres to other study centres because of the quality of the materials and the staff or tutors at this centre unlike the study centres outside the University of Lagos where facilities are not always available Oguntade (1979). This is also true of the University of Ibadan External Studies programmes.

Another model of the university outreach is based on the kinds of courses offered - otherwise conceptualised as credit and non-credit of university outreach model. This is as shown in Figure 6.

Figure 6

General Outreach Educational Services Divided  
According to Level of Formality Model



Source: Same as Figure 4

This model involves a particular Faculty or Institute to coordinate the efforts or the activities of other faculties involved in part-time evening courses. The faculty or the institute coordinating these other faculties has the right to determine the existence or closure or stoppage of the evening courses if the programmes conflict with the others or merely serve as duplication of efforts of the University Outreach programmes.

## 2.8 The Danish Model-High Technology

This is a model that grows out of an interesting historical and socio-cultural context of the Danish philosophy of the 'group' and 'the living word' which, as it were militated against the growth of the whole theory and practice of distance education in Denmark. Admittedly, because of this historical and socio-cultural impediment, Denmark is a late comer in the practice of distance education, especially at higher education level. But since its entry, the country has made tremendous strides and contributed energetically to the growth of the theory and practice of distance education. What has been more impressive is their ability not to fight to alter that which for years acted as an impediment to distance education, but to instead, adapt and utilize it within the context of modern structures and technology.

Thus the Danish model being built on their 'Third Generation Distance Education' concept, as explained above, seeks to maintain the group structure and concept through computer conferencing. Given the fact that Denmark is a small country with a relatively

less scattered population, there is no reason to believe that the model will not take foot. The model's strength has in this that it has, in the main the support of both the private and the public sectors. They work hard to see that the 'Third Generation Distance Education' grows from what some may consider a somewhat bizarre and false dream to reality.

However, the only disadvantage about the third generation system is that is based on high technology. It is expensive, and therefore beyond the reach of many would be providers of, and learners in distance education programmes. As a central element rather than a learning aid in the distance education programme, computer conferencing smacks of more problems than solutions. Certainly, one cannot argue against computer conferencing where a one-off learning programme is concerned, such as a one or two day seminar or workshop. But when it is elevated to the level where it becomes the main stay of a distance programme, one becomes apprehensive.

## 2.9 The Norwegian Model-Co-operation

Rekkedal (1972) described this model as a product of Norway educational history. A relatively long and favourable history of distance education which to a certain extent, may be the reason for a seemingly cautious approach in their organisation, structuring and management of distance education provision. Cautious in the sense that despite the availability of and possibilities for using high-technology in their provision, the printed word remains central, and resources continue to be mobilized to support or supplement the printed word.

Norway has thus forged an approach to distance education provision correctly referred to as "Distance Education by Co-operation". The Norwegian Correspondence Schools (NCS) and The Norwegian State<sup>2</sup> Institution for Distance Education (NFU): characterise the Norwegian Model of Distance Education which was hammered out after much consideration of the British Open University Model. Thus the model does borrow some elements of the art, from the open university approach, one of these is the use of radio and TV. Nevertheless, in the Norwegian context the use of

these gadgets is different in that they are, instead, integrated into a wider context and planned as one part of the whole learning situation of the groups the provision is intended to reach.

The Norwegian model also shares with the Open British University the central managing and administrative organ. The issue of subject specialists in the planning process is yet another element that the Norwegian model borrows from the British model. The only thing is that the nominated specialists work on the programme in cooperation with others, including members of the target group.

The main advantage of the Norwegian model, as noted earlier on, is that available resources are utilized to the greatest possible extent. The economy and rationality of the model depends on the combination of existing resources and experiences; the use of academic resources from the colleges for development and distance teaching makes it possible to offer post-secondary distance study programmes throughout the country without establishing a new institution and engaging extra full-time academics. Besides, the economics of scale connected with the

administrative resources of a distance education providing institution, makes it reasonably cheap to establish new programmes, adding only development costs.

The Norwegian co-operation model gives greater flexibility than what is possible with other less democratic approaches. New distance education programmes can, unlike in over-centralised and less democratic approaches, be developed and offered in the shortest time possible. Further, the model makes use of both the course development experience and the educational administration resources of distance educational providing institutions, and content expertise from persons housed in other institutions or bodies.

Despite the advantages of the Norwegian model, it has its disadvantages. For instance, it is difficult to see where a satisfactory balance in the division of labour and responsibility between the core institution and the various single partners that have to work closely together, should be struck. Besides since cooperation among partners is based

on the extension of an invitation to and the acceptance and willingness of the cooperating partners decisions, even though taken collectively, do not have the force of law and now and again, some partners default in the execution of their responsibilities. Indeed, the Norwegian state institution distance education (INFU) can go no further, in the development and execution of a project, beyond the provision of the guide-lines.

The future will show whether the Norwegian co-operation model will find solutions to a few of these problems. On the whole, the model so far seems to work well. The Norwegian multi-media approach is destined to be a useful tool in obtaining equality in adult and distance education.

#### 2.10 Course Development

Consideration of courses under DLS deserve certain conditions. According to Gagner's (1983) instructional model, five important factors are to be considered.

These are:

1. The budget situation with regard to the project
2. Type of course (purpose, qualification or hobby).
3. Type of distance education (distance education only various forms of combinations with oral instructions).
4. Nature of the subject.
5. Target group.

The budget will have to be based on the course component. The audio accessories, imaginative typography and the layout.

The course, has to be determined whether it would lead to qualification or whether it is hobby related, for example motivation for qualification related courses will not be same with hobby related courses.

The type of distance education which may be pure or combined is another factor. In other words if distance education is to be combined with another medium of instruction and some element of tutoring involving direct contact with students, then there may be need to work out the pedagogical functions Seward (1983). DIS leading to qualification may take

the form of (cosit) correspondence open studies institute, external studies programme of University of Ibadan or the N.T.I.

The age and the educational level of learners are vital so that while considering the course work suitable, methods for arousing interest and motivating, selection of teaching aid, objectives and their presentation, possibilities of linking up with previous knowledge and experience will be considered along.

It has to be known that previous knowledge and habits of study of people with little education differ from those of people with more advanced educational background. Thus the actualisation of and linking up with relevant previous knowledge is of special importance in courses for people with inadequate educational background.

Also essential are the instructional resources for the development of a non-traditional programme, the choice of instructional model, determination of appropriate media for disseminations and delivery of the content.

At this point it may be necessary to incorporate the Gagne's instructional functions used during a series of seminar for Hermods editoorial staff in the Spring term of 1973. Seward et al (1983 listed the main heading of Gagne's models of activities to be followed while thinking of courses in DLS.

- Arouse attention and motivate (Gaming and Controlling attention).
- Present objectives of the instruction (informing the learner of expected outcome).
- Link up with previous knowledge and interest (stimulating recall of relevant pre-requisite capacities).
- Present the material to be learned (presenting the stimuli inherent to the learning task).
- Guide and structure (offering guidance for learning).
- Activate.
- Provide feed-back (providing feedback)
- Promote transfer (making provisions for transferability).
- Facilitate retention (ensuring retention)
- Appraising performance (through the correspondence tutor/instructor).

The above listed functions are to be performed by the materials, only the appraisal is that of the tutor. It is necessary to highlight this so that a distance

education course designer will not be designing in a vacuum as it may be in other form of any educational system. Knowles (1988) says knowing your learners is a must before drawing up your task. It is by doing this that some observations made by different authors at different time will be taken care of. While much has been written about the self-actualised adult learners, many are returning to formal education for the first time in many years, often with negative previous experience. Chesterton (1985) has observed,

"the separation of teacher and learner and the production of pre-packaged materials in distance education shifts the focus of curriculum decision making away from the students and move towards the institution and its staff".

Millard (1985) supported this view in his critique of what he sees to be a tendency at the British Open University to take decision for administrative convenience rather than educational effectiveness. This is the more reason why distance education could only be successful where the target groups have already identified preferably a unique professional group as it is suggested by Kate Seaborne (199 ). For example, the University of Manitoba negotiated a contract with the Department

of National Defence to provide a correspondence programme for Canadian service men in Europe. Another approach to designing course for unknown audience is to undertake the needs assessment simultaneously with the needs initial delivery of a course. This approach uses the course as a pilot and it involves a written survey. This was buttressed by Perkins (1990) when he saw the development in distance education in recent years as it affects professionals and he says:

The professions found themselves in an interesting alliance with many students in insisting on curricular change that would offer courses of study that better responded to the new students ambitions and requirements of the provisions. Here again, we can see the dynamics relations between students demand relevant, curriculum and market requirements for appropriately trained, university graduates.

The process of production of distance education materials is commonly described as the course design process. Feasly (1983) says the terms 'course design' and 'instructional design' are used interchangeably to describe the process involved.

Course design in distance education is eclectic no single approach dominates. Current practices range

from the 'deluxe' model which is the creation and hall mark of the open university of Great Britain. The practice of almost every institution is to adapt and refine whichever is appropriate to the needs of its students. This course design based on student needs is always the best unlike those based on administrative convenience.

### 2.11 Identification of Models

Three models of course design could be described. Most numerous institutions that are undertaking distance education course are the traditional campus-based universities and colleges where distance education is a marginal or, at best, integrated small scale function within the larger organisation. Examples of these are common in Canada, and also in Nigeria with specific reference to COSIT of the University of Lagos and the External Studies Programme of the University of Ibadan.

The second category includes those few institutions dedicated to the development and delivery of distance education. These include the Open Learning Institute of British Columbia, Athasbasca University in Alberta, the Open University of Great Britain and the National Teachers Institute of Nigeria all associated with 'Deluxe Model'.

The third category includes those associated educational institutions that is, the educational media - authorities and professional associations with a national student/client focus. Prominent among them are TV Ontario, Knowledge Network, The Canadian Bankers Association, Certified General Accountants and the Educational Television Unit of the Nigerian Television Authority.

Homsberg (1986) identified three approaches to course design and some common features in the development and delivery of distance education. These are: the planning stage, the course development stage and the definition of a course.

The planning stage generally involves programmes and course identification often in conjunction with needs analysis of potential audience.

The course development stage varies widely from institution to institution with approaches to instructional philosophy and design. Course development may involve systematic pre-production, planning, production in variety of media and formative and summative evaluation.

The definition of a course varies by institution. In a traditional university of college system, a distance education course is analogous to the credit course given on campus. At a dedicated distance institution, the

definition of a credit course is determined by the governing body but it tends to be parallel to that of a traditional university whereas in an educational media authority practices vary considerably. For example, in the case of Knowledge Network, Credit, courses are delivered through the media authority but are developed and accredited by a traditional educational organisation.

Approaches to course development could take the individual effort approach whereby a single teacher can develop a unit unaided as is commonly the case in internal teaching. Though the weakness in this is that a teacher or tutor or author is there to mediate between the course and the learner, to help the latter to adapt and apply materials to his or her own purposes and context. But university academics knowing that their courses are going to open to public scrutiny may overload their courses both in terms of volume and level of academic work, to ensure their academic credibility with professional peers. Thus it is very necessary to have an instructional designer and editor to check this tendency and to serve as students' advocates in the preparation of materials. Tutors should not confront students with badly written or poorly designed courses or voluminous text books which one is supposed to read and understand on one's own.

Another approach is the course-team approach whereby a group of subject specialist will come together to produce a course work. Ross Paul (1990) however made a reservation on course team. In practice while course team interaction can be very stimulating and productive, it is also time consuming and may sometimes produce bad compromises rather than a good resolution of the inevitable conflicts that arise among any group of academics.

The course team experience may be more stimulating than the actual course which results so that it is the staff rather than the students who derive the most benefit from the exercise.

Dedicated institutions in most cases tend to have developed the most comprehensive model of instruction which they provide to their content specialist or the course author. To facilitate the course development process, the open learning institute has created both course writers' manual and model blue-prints.

The course design is reviewed from time to time in some cases between four to five years or at the end of a cycle.

To illustrate what an independent distance educational system should look like, Erdos (1975) prepared a study for the International Educational Reporting Service of UNESCO. It is arranged as relevant to the current study. Pacey (1990) summarising the features of distance education students said:

Distance learners are adults: with professional responsibilities (jobs) with social responsibilities (family) who may have limited formal education or are a long time away from formal education, who are highly and intrinsically motivated and interested in practical results for career, occupation or lifestyle.

He observes that the philosophy of course design is learner-centred thus it has to bear the following in mind:

- Encouraging the learning to take responsibility for defining learning objectives, planning their own learning programmes and evaluating their own progress,
- Respecting the learners' life experience and giving them a chance to see those experience.
- Clear course structure and clear guidelines, especially for assignments.
- Concrete samples and examples.

- Curing positive and helpful feedback to give them an awareness of their attainment of progressive mastery.
- Expanded learner options for alternative learning styles.

While putting the distance education package together, there are four-phase development models to guide us:

- Development of an instructional blue print.
- The production phase of the instructional material.
- Evaluation of the material and delivery model.
- Revision based on the evaluation.

Despite the various aspects of distance education as traced in this theoretical framework, educational practitioners still record high wastage rate in distance education among the learners.

#### 2.12 Theoretical Model of Factors Affecting Retention and Failure

On the basis of previous studies, one can classify the factors contributing to failure and retention in distance education into three general models.

The first, is the predisposing model. This according to Powel et al (1990) consists of those

characteristics ideas students bring to the educational process at the time of entry such as educational preparation, socio-economic and demographic status, and motivational and perseverance attributes. These characteristics are either fixed or slowly changing throughout the duration of a students' involvement with a distance education institution. It thus exert a relatively constant influence on students' chances of failure or success or withdrawal.

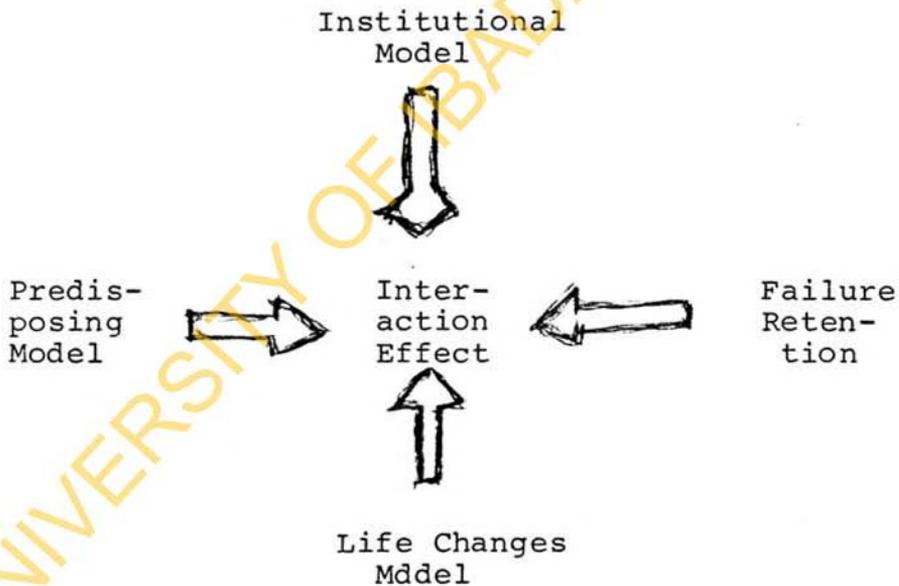
The second model according to Powell et al (1991) is the life changes model. It consists of changes in life circumstances that disrupt or in some way alter the goals expectations and commitment with which students begin their distance education studies. Such life changes as personal illness, relocation altered employment status, and family problems occur quickly and often unexpectedly.

The third model is the institutional model. This contains factors that can be termed institutional. This is so, because it is brought about by the authority of the institution providing distance studies. These include quality of instructional materials, access

to quality of tutorial support and the administrative and other support service provided. The relationship between these three set of models is portrayed in Figure 7.

Figure 7

A Multivariate Model for Factors Affecting Failure and Retention in Distance Education



Source: Powell et al (1990) in Journal of Distance Education p. 8.

These three models differ in their nature and in the types of influence they exert on failure and retention. Predisposing characteristics are antecedents predictors. That is they are present before and during students involvement in distance education. The framework suggests that life changes and institutional factors do not. In most cases, they act as direct causes of student failure or withdrawal. While they do influence the probability of student failure and withdrawal, they appear to do so primarily in interaction with predisposing characteristics. For example, the level of literacy (a predisposing characteristics) among students would likely be a more important predictor of failure for distance teaching organisations that rely on print-based instruction than for organisations using other modes of instruction.

Ideally, a comprehensive explanation of failure and retention in distance education would involve the systematic development and testing of valid and reliable measure within the context of such a framework. This is a formidable task; both in terms

of data collection and in statistical modelling. Fortunately, the analytical framework above does not require the concurrent investigation of all three sets of model for systematic progress toward a comprehensive explanation of students behaviour. The framework places predisposing characteristics first, both in terms of time and explanatory value. It is only when these characteristics are known and controlled for that the effects of the other two factors can be determined. It is for this reason that the emphasis of this research is on the establishment of the factors that affect the rate of retention and failure.

### 2.13 Theoretical Models of Retention

By far the largest portion of retention research consists solely of descriptions of causal factors attained through empirical research. However, there is now general agreement that what is needed are conceptual models of retention which recognise the complex inter-play of variables which interact over a period of time to produce success and failure.

These models lend themselves to multivariate and longitudinal path analyses which are required in order to isolate and measure the relative importance of various factors during the success and drop-out process. A few conceptual models have been introduced in the retention literature. Some of these are narrow, taking only one or a few factors into consideration. Others are much wider, encompassing the interaction of students, institutional and environmental factors. The latter tend to be more useful for research purposes and for planning retention strategies.

Spady (1971) is usually credited with introducing the first model of attrition. He used Durkheim's theory of suicide as an analogy for drop-out. His model described the assimilation process of a student into an educational institution, taking into account student characteristics and the institution's social and academic demands. Spady's theory was that if the student could meet the demands of the institution and felt rewarded in the process, it was likely that successful assimilation and persistence would be the result.

Tinto (1975) developed a theory similar to Spady's but went beyond description of the process to build a predictive model. Tinto viewed the educational institution as a social system into which the persisting student became integrated over time. He described the integration process as a series of interactions between the person and the social and academic system of the institution. The person entered with certain goals and institutional commitments which, over time, were modified by the quality and frequency of social and academic interactions. Depending upon whether the students' goals and commitments were strengthened or weakened by this process, they would drop out or persist.

A number of studies have tested the Spady and Tinto models. The best known of these are the validation studies of Pascarella and Terenzini (1978). They have found support for the Tinto theory in a variety of ways. In a study of freshman year students at one college, they were able to show, to some degree, that student characteristics and academic experience interacted to produce persistence or

drop-out decisions (Terenzini and Pascarella, 1978; Pascarella and Terenzini, 1979a). In another study, they were able to isolate student-faculty contact as a variable and showed how this contributed to both social and academic integration of the student in accordance to the Tinto model (Pascarella and Terenzini, (197b). They further looked at the construct validity of Tinto's conceptual framework and found support for it. Although they felt that Tinto overstated the importance of student characteristics, they opined that the model's two major constructs, social and academic integration, were significant in distinguishing between persisters and voluntary leavers. Pascarella and Terenzini (1980) also found support for the predictive validity of social and academic integration for attrition and completion by developing and testing a multidimensional measurement to assess the major dimensions of the Tinto model. They concluded that the model was useful for theoretical and research purposes, as well as for practical purposes of planning retention strategies.

Adult part-time students do not fit the Tinto model because they have much less interaction with faculty and fellow students than younger part-time students who spend much more time on campus. Hence, social integration as defined by Tinto does not contribute in the same way to their goals and institutional commitment. The significant factors in adult students' lives are usually the same ones they had before commencing their studies... family, friends, employer and co-workers. This is particularly applicable to distance education students who study in their own homes and have even less contact with faculty and other students than do campus-based part-time learners. Bean and Metzner (1985) developed a conceptual model of the attrition process for adult-part-time students. They proposed that withdrawal decisions were based on four sets of variables: 1) back-ground and defining variables of the student such as age, enrolment status, and gender: 2) academic variables such as study habits and course availability: 3) environmental variables such as finances, hours of employment, outside

encouragement, and family responsibility; 4) psychological outcomes such as perceived utility (of studies), satisfaction, goal commitment and stress. These sets of variables can contribute to the drop-out decision.

Bean and Metzner (1985) proposed that there were 'compensatory interaction effects' in the model as follows:

When academic and environmental variables are both.... favourable to persistence, students should remain in school, and when both are poor, students should leave school. When academic variables are good, but environmental variables are poor, students should leave school, and the positive effects of the academic variables on retention will not be seen. When environmental support is good and academic support is poor, students would be expected to remain enrolled - - the environmental support compensates for low scores on the academic variables.

Bean and Metzner (1985) described a similar relationship among academic outcomes, marks and psychological outcomes. They suggested that the older student might

persist despite low marks if the psychological outcomes were positive (for example, seeing the usefulness of their studies). The compensatory effects between variables in the Bean and Metzner year model are similar to those between social and academic integration identified by Tinto (1975) in his model of attrition. What is very clear is that the relative importance of variables in an interactional model of attrition is entirely dependent on the particular student population and what they perceive and experience as being important to their persistence. For example, using the Bean and Metzner model, if adult distance learners see their studies as being useful, have family support and academic capability, they will probably persist despite isolation from the institution. On the other hand, they probably will not persist if, in addition to being isolated, any of the first three conditions is not met. Hence, Bean and Metzner model may prove to be a useful starting point in developing a model of retention and failure strategies for adult distance learners. What is needed is more information about what these particular

students see as contributing to their persistence or withdrawal.

Other models of retention described by Lenning et al (1980) are discussed briefly here. These are not widely recognised in the literatuer and appear not to have been tested to the extent of the Spady and Tinto models.

Flannery (1973) described a theory of retention which considered student expectations and attainment.

In this model, students were seen to enter post-secondary study with certain expectation and, depending upon mitigating circumstances from three sources ---- the student, society and the institution --- their expectations might or might not be met. If their expectations were met, persistence was likely.

Alfred (1974) applied symbolic interaction theory to retention in developing a complex model in which he identified 52 primary factors involved in withdrawal decisions.

As well as describing models of retention, Lenning et al (1980) suggested two other well validated

psychological theories of behaviour which might be applied to retention and failure. They proposed that Holland's (1966, 1973) theory of vocational choice, which described six basic personality and environmental types and his measurement instrument, could be used to test a person/institutional fit theory of persistence. Finally, Lenning et al. discussed the applicability of Festinger's (1962) theory of cognitive dissonance to a person-environment model of attrition. This theory dealt with the individual's perceptions and knowledge of self, the social environment and his or her experiences. If there was a perceived dissonance among the elements, the individual would seek to lessen it. In applying the theory to attrition, Lenning et al (1980) suggested that students experiencing dissonance between their perceived needs and the institution's ability to meet them would likely remedy the situation by dropping out. Each situation would differ depending upon the nature of the individual and the institution.

There have been some attempts by researchers to develop a theory of retention strategy

based on an isolated variable. Two such models which apply specifically to distance education are reported here. Thompson (1984) proposed an attrition theory of cognitive style/institutional fit. Specifically, he suggested that field-dependent learners, because of their greater need for structure and support, were not well suited to the independent study required of distance learners. Thompson then recommended that field-dependent distance learners might benefit from increased opportunity for contact with academic staff and other students. Field-independent learners, because of their tendency to be more autonomous, should be ideally suited to distance education. Thompson concluded that drop-out should be investigated using models which reflected 'aptitude-treatment interactions' proposed by Cronbach and cited in Thompson (1984).

Disilvestro and Markowitz (1982) used the expectancy theory of motivation to propose the use of behaviour contracts to improve completion rates in correspondence study. Their idea was that, if the goal and path to the goal were clear to the student, the successful

completion would be the likely outcome. They concluded from the test study of their theory that the contract students were much more likely to have a prompt start but were no more likely to complete than their counterparts with no contracts. This result speaks of the inadequacy of single-factor theories and strategies in dealing with a complex issues such as retention.

Based on the various concepts and practices, the following research questions were employed in establishing the factors that affect the distance learners of the National Teachers Institute, Kaduna.

1. Are the TC II distance learners' rate of failure and retention affected by their educational background?
2. Do the course materials factors affect the rate of failure and retention of TC II distance learners?
3. Are distance learners' rate of retention and failure affected by the facilitator/tutor factor?
4. Do environmental factors play any significant role in the TC II distance learners' rate of retention and failure?
5. Does the financial status of distance learners affect their rate of retention and failure in their academic performance.

6. Does the level of TC II distance learners' social responsibility significantly affect the rate of retention and failure in their academic task?
7. Does the amount of motivation of TC II distance learners employers affect their rate of retention and failure?
8. Do the following factors, horedom, professional advancement, welfare of learners, external influence, and cognitive ability affect the rate of TC II distance learners; retention and failure in their academic task?

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## CHAPTER THREE

LITERATURE REVIEW3.1 Teacher Training, Failure and Retention in Distance Education

After a comprehensive analysis of the theoretical framework, on which this study is based, a literature review on the wastage rate in previous studies relevant to this study will be necessary. Thus the following represent what has been the practice in the area of retention and failure and reasons attributed to it in existing work.

3.2 Teacher Training by Distance

It is not an understatement to say that teaching is one of the oldest largest professions in the world. It should be accepted that informal teaching started as early as human beings started to communicate. Kaeley (1990) put teachers statistics thus; there were 12 million teachers in 1966; 18 million in 1968 and over 29 million in 1978 in the whole world. It is believed that by the year 2000 A.D., 60 million

teachers would be needed to cater for the world's growing population which will be reaching 7000 million (Ryffel 1969).

As a result of rapid expansion in the education industry and high growth in population since the middle of the present century, the shortage of qualified teachers has become acute throughout the world. This is so in the developing countries as there are not enough teacher institution to train the required number of teachers for the increasing number of students. And where there are training facilities, potential teacher training students are not interested in the profession because of poor remuneration. This is the case in the former western state of Nigeria (now Oyo, Osun, Ogun and Ondo States) where most of the teacher training institutions are being closed down. In a state like Ondo, they have all been turned into Unity Secondary Schools with the hope of making NCE the basic teaching qualification in primary schools. But there are still unqualified teachers in their primary schools. The shortage became more serious when a number of former colonies started offering universal primary education

to their children after becoming independent. Some examples of which are Perraton (1984) and Kenya Kaeley (1976). Still, a large number of primary school teachers in the developing countries are untrained and academically underqualified (Edstrom 1973). To over-come this situation, many countries started employing distance teaching techniques to train their teachers as from 1960s. They resorted to this because of the problem faced by potential students which discouraged them from attending residential based teacher training institutions.

Some of the problems according to Cross (1981) include the following: distance of learners to the institutions, inability to meet up with the institution time-table (time-constraint), inability to make regular attendance a routine, work and family responsibilities, transportation and child care problems.

Table 5

Reported Obstacles to On-Campus Courses

Variables	n = 100		
	Very Important	Some-What Important	Not at all Important
	%	%	%
Time Constraint	84	11	5
Work Responsibilities	65	22	14
Family	60	22	21
Distance from Campus	54	22	25
Transportation	38	25	37
Child Care	11	16	37

Source - Cross (1981) Journal of Distance Education, p. 51.

As a result of these militating factors on on-campus students, distance learning became a popular alternative. In Africa, there were only two countries employing correspondence courses to train teachers in the early 1960s, this increased to 11 by 1969. Kaswas and Kaunda (1973), Botswana and Swaziland in 60s and 70s established teacher training colleges

to train teachers through regular session and correspondence courses Perraton (1984). University of Nairobi set up the Correspondence Courses Unit (CCU) in 1965 to train unqualified primary school teachers (UQTS) Kaeley (1976). The introduction of the universal primary education in Nigeria, Tanzania and Zimbabwe gave rise to different distance education programmes to train primary school teachers for the increased enrolment of students. Thus the NTI came into being in 1978, and by now has trained 330,000 teachers Bunza (1991). Tanzania recruited and trained 35,000 teachers over five years, Zimbabwe set up Zintec programme after independence to train large numbers of primary school teachers (Perraton 1984).

Brazil employed sandwich courses and Guyana evening classes to supplement teacher training. The University of the West Indies offered teaching methods through correspondence courses to teachers (Brophy and Dudley (1982)).

### 3.3 The Teaching Components

To train teachers through distance education the following approaches have been employed by various countries.

The first category of institutes are those which offer the trainees one academic subject. The Correspondence Course Unit (CCU) of the University of Nairobi in Kenya is an example which taught the Junior Secondary School subjects to those unqualified teachers who successfully completed the professional part of teachers training from the Kenya Institute of Education Kaeley (1976).

In the second category are the distance teaching set-ups which offer courses only on teaching methods. An example of this type of institution is the University of the West Indies, which offers correspondence courses to teachers on teaching skills (Brophy and Dudley 1982).

The third category of institutions handle both the academic subjects and techniques of teaching. The teacher training colleges in Botswana fall into this category as they teach both the academic subjects

and teaching skills to the trainees Perraton (1984).

Another category is the distance teaching of all subjects to be taught at the primary level of education to unqualified primary school teachers. This is the NTI approach (Dudley 1982).

### 3.4 METHODOLOGY

Different countries use different distance methods to train their teachers. There are some countries that offer courses to teachers by correspondence only, while others supplement them either with face-to-face teaching or with radio and or T.V. lessons. Skill, others employ three way teaching - combining correspondence courses, radio/TV lessons and face-to-face sessions Kaeley (1978).

There are a few institutes which do not use correspondence courses, but employ other distance teaching techniques to train teachers.

The institutions of the first type i.e. pure correspondence teaching set-ups are found in Burma. Dahomey and West Indies (Brophy and Dudley, 1982). They went further to affirm that correspondence

teaching is supported by face-to-face sessions in the third types of distance teaching schools. Examples of such institutions are found in Jamaica and Zambia.

The large majority of distance teaching set-ups are of the fourth type which employ three way teaching. This is the integrated use of correspondence courses, radio/TV lessons and face-to-face session (Kaeley 1980).

### 3.5 Distance Education

The term distance education, is sufficiently different from other types of education as to merit recognition as a separate field of study, has had proponents in several quarters. It differs from descriptive research in its attention to underlying principles, and from application of other disciplines in its independence (overtly; at least from the concepts of other fields of study). Keegan (1980) introduced the new breed of distance educator to the ideas of Otto Peters (elaborated in Peters 1983) and put forward a definition of distance education as an industrialized process with unique qualities.

Holmberg (1982) who has documented the progress of distance education research, argued that distance education can be considered as a separate discipline on the grounds that it has an established research tradition and a curriculum of study. Perraton (1987) enumerated propositions concerning distance education in the areas of teaching, administration and assessment, in a style that writes empirical test. Henri (1985) outlined the differences between distance and traditional models. Some of those most closely associated with identification of the distinctive characteristics of distance education may well agree that the constructs of other fields of study are relevant. Another group, using concepts derived from sociological theory is emerging with arguments for independent development of constructs. Garrison (1987) in an analysis of the dropout question, suggested that researchers should work to identify basic principles before looking for applicable theories. This view is suggested of the general approach of grounded theory - Glaser and Strauss (1967) which uses observation to generate theory from data.

Discussions about a separate discipline may be relegated to the archives as we move from a concept of distance education to one of open learning. Farrel Hauchey (1986), Foks (1987), Smith and Kelly (1987) noted convergence between distance education and the mainstream in teaching-learning systems and clientele for education, and predicted that this convergence would grow. However, this does not preclude the possibility that focussing directly on the distinctive features of distance education can contribute substantially to our understanding of educational processes by raising issues that typically are ignored by most educators. Writers continue to debate definitions of distance education (Thompson 1986; Garrison and Sahle 1987), and themes that stand out as particularly important may be treated as independent topics or viewed in the context of such broader subjects as adult learning, communication and information technology as this study will reveal.

The nature of distance education, with its separation of teachers and learners Keegan (1980)

emphasises certain issues in the educational process. For this reason, distance education settings provide a good medium for studying these issues and the result of systematic investigation may be expected to contribute to broader understanding. Holmberg (1986) described distance education as covering the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of tutorial organisation. Loi and Juillet (1971) see distance education as education which either does not imply the physical presence of the teacher appointed to dispense it in the place where it is received or in which the teachers is present only on occasion or for selected tasks. The advanced and sophisticated definition as argued by Otto Peters (1973) said distance teaching/education (Fernunterricht) is a method of imparting knowledge, skills and attitudes which is rationalised by the application of division of labour and organisational principles as well as

by the extensive use of technical media, especially for the purpose of reproducing high quality teaching material which makes it possible to instruct great numbers of students at the same time wherever they live. It is an industrial form of teaching and learning. Moore (1987) added his own definition thus: distance teaching may be defined as the family of instructional methods in which the teaching behaviours are executed apart from the learning behaviours, including those that in a contiguous situation would be performed in the learners' presence, so that communication between the teachers and the learner must be facilitated by print, electronics, mechanical or other devices.

Following the various definitions and descriptions of distance education, the following concepts will be presented from the various distance educationists point of view.

### 3.6 Wedemeyer's (1977) Theory of 'Independent Study'

Among the various theories associated with distance education, we have the following:

1. The Wedemeyer theory of independent study.

Wedemeyer made three distinctions within his theory. These distinctions are:

- a. autonomy of the learner;
- b. distance between the teacher and the learner; and
- c. structural system.

These have since become the very bases of the overall concept of distance education.

It is Wedemeyer's writing which popularised the expressions 'independent study', 'open learning' and 'distance education'.

According to him, independent study find a student learning in his own environment free from the constraints of 'inappropriate class placings' and developed in himself a capacity and maturity that enables him to carry on 'self-directed learning'.

It could be noticed from Wedemeyer explanations of independent studies, that its purposes are:

- i. It consists of teaching-learning arrangement and these arrangements have various forms. The special feature of these arrangements is that the teachers and learners stay away from each other and didactic communication takes place in various ways, and

- ii. to facilitate learning activities of both the on-campus and the off-campus students.

The immediate pedagogical implication of such a philosophy is that we look for unorthodox means and modes of educating all those who are willing to be educated. If one cannot go away from one's place of work or residence because of one's economic or physical conditions, if one cannot attend a class because the classroom atmosphere is psychologically or sociologically hostile to one, or just because of compelling social commitments one cannot fit into the traditional school, college, or university modes of education, the state must bring the education of one's choice to one's door steps. This is possible, only, if the basic characteristic of that unorthodox system is to allow the teachers and the learners work apart from one another.

This model according to Wedemeyer has a prestige which is the result of centuries of socially acceptable practice, it is a universally accredited socio-academic norm. But he argued that there has been a gradual social evolution which has built viable alternatives to this potent cultural artefact.

1. The invention of writing broke down the absolute monopoly of speech as the medium of communication: besides, writing made it possible to record communications and transfer them over space and time.
2. The invention of printing broke down the monopoly of single-copy-written communications. Printing allowed the same communication to be passed on at the same or different time(s) over distances to as many receivers as one wanted to.
3. The development of telecommunication collapsed the dimension of time and space and when applied to education. Telecommunication opens up hitherto unknown possibilities of teacher-learner contacts.
4. The development of democratic philosophies broke down the monopoly of elitist and sectarian forms of education.

From the diagram below, it may be understood that the essential components that comprise a teaching-learning process are the teacher, the learner, the subject-matter, and the mode of teaching. If the obsession about face-to-face educational communication is shaken off, i.e. a judicious variety of communication is adopted and perfected for purposes of being pedagogically effective, the confines of the classroom can be broken; and it will be possible for the learners to learn on their own, away from their teachers, and for teachers to teach even when they are away from the learners.

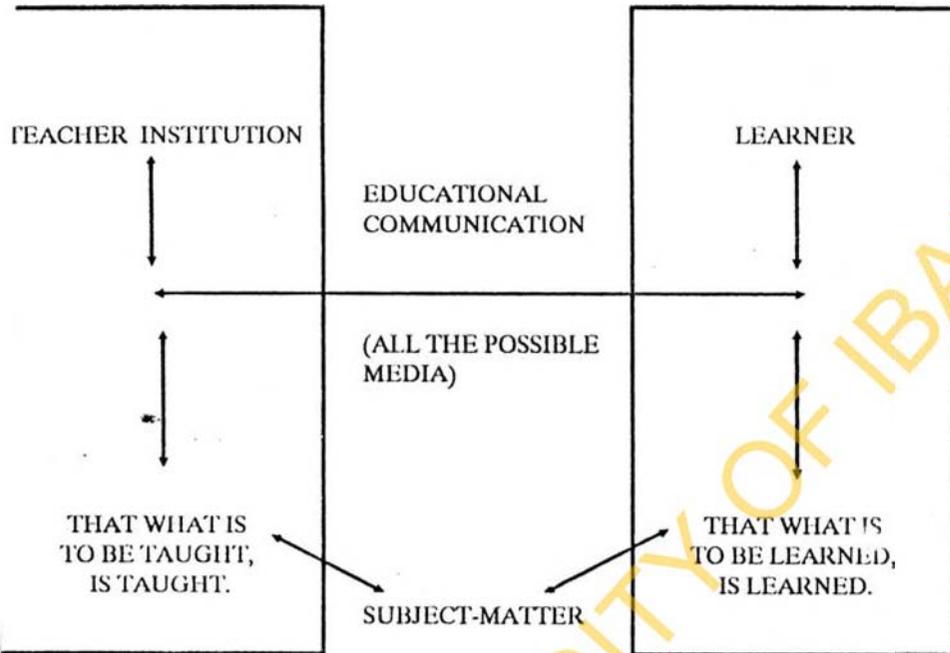


Figure 8

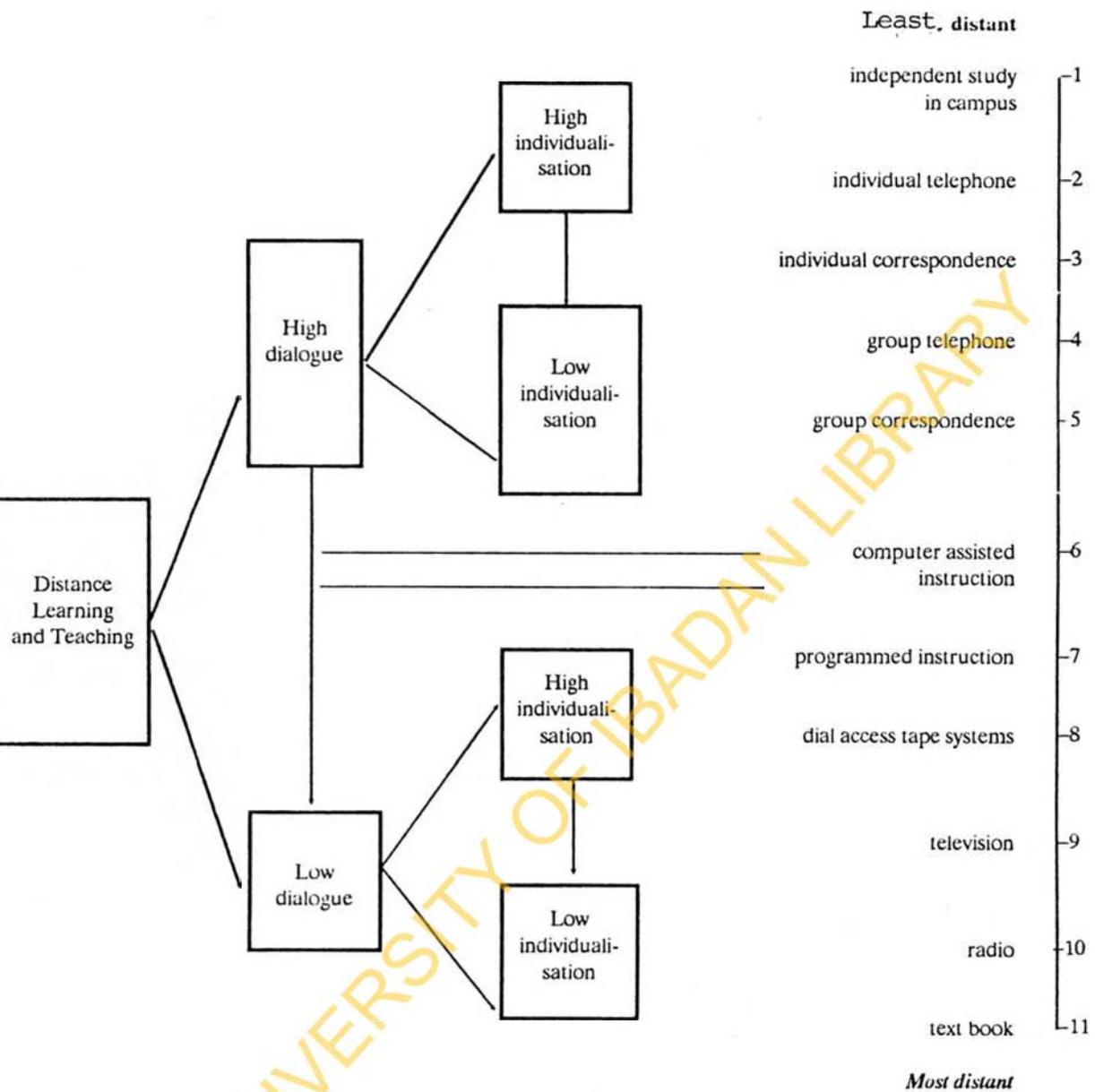
A departure from the formal classroom situation  
 Source: Growth and Philosophy of Distance Education page 24.  
 (IGNOU)

Thus distance as advocated above will bring about the following advantages.

- a. the learner has the freedom to start, pace, and stop his learning activities;
- b. the learners is not necessarily turned away from his environment - physical, socio-cultural or geographical;
- c. media other than the spoken word such as the printed word, audio-visuals, etc. are exploited for the benefit of both the teacher and the learner;
- d. learning can be made more and more relevant to individual needs and it is the learning activity which becomes more significant than the teaching effort.

### 3.7 Michael Moore Concepts of 'Dialogue and Individualization

Michael Moore (1977) concept of distance education is seen through what he called 'dialogue and individualisation in Figure 9.



9 Continuum of 'distance' in terms of "dialogue" and 'individualisation'

Source: *Philosophical foundation of IGNOU*, P. 28

He says that the actual distance between the learner and the teacher/institution should not be measured in terms of the spatial distance between the two, but in terms of the degrees of dialogue and individualisation which the academic programmes offer. On the basis of the differing degree of 'dialogue' and 'individualization', the continuation of 'distance' may be represented as shown in Figure 9.

This classification of distance teaching/learning methods on the basis of variability of 'dialogue' and 'individualisation' makes it clear that the term 'distance' is not to be confused with the degree of physical 'contiguity'. A learner X may be physically farther removed from the source of teaching than Y is from that source, depending on a particular combination of the degrees of 'dialogue' and 'individualisation' arranged for X. For example, learner X may be 400 miles away from his distance teaching institute and learner Y just 4 miles away from him, but there are arrangements which make it possible for learner X to interact with his institute and/or the teachers by telephone as many times a day as he would like to,

as against learner Y who has to depend entirely on text materials sent to him by his institute which does not make any arrangements for additional academic interaction. In such a case, it could be said that relatively learner Y is more distant from his institute than learner X. Thus 'distance' in this context is to be seen as a function of 'dialogue' and that of 'individualisation'. That is to say that the higher the degree of 'dialogue' and 'individualisation' the less distant the learner is from his teacher/institute, and the lower the degree of 'dialogue' and 'individualisation' the more distant the learner is from his teacher/institute. Apart from the above concept of distance education, Moore has another concept based on learner autonomy.

Learner autonomy is derived from the concept of a learning materials decided by a process whereby its objectives, methods, materials and evaluation (all the four curricular components) are determined by the learner himself or conversely a 'learner determined' programme may be said to allow 'learner autonomy'.

Thus from Moore concepts of distance education 'physical distance' alone is not significant in conceptualising 'distance education'. What matters, besides, are the variables of 'individualisation' and 'dialogue'. For Moore, dialogue is a measure of the degree to which the communication medium in a distance education programme permits learner-teacher interactions and individualisation is a measure of the extent of the responsiveness of an individual learners' programme: Thus an educational programme, in which the learning programme occurs separately in terms of time and place from the teaching programme allowing the learner control (of varying degrees) over the objectives of learning, learning tools, methods and evaluation, is an 'independent study' programme. Thus we can see why Moore prefers 'independent study' to distance education.

### 3.8 Otto Peters View of Distance Education

Peters (1973) made his major contributions to the theory of distance education through a book titled (in German). The Didactical Structure of Distance

Teaching: 'Investigations towards an industrialised form of teaching and learning'. From his surveys, he concluded that distance learning/teaching was an industrialised form of teaching and learning'.

Peters was the first Vice-Chancellor of the Fern University (the Open University) whose concept of distance education was influenced by the highly developed nature of the societies. As a result of this, he argues that there is vast variety of needs for education, new approaches have to be explored, new techniques developed and made available for application - all these have to be 'industrial' in character as the very need for them has arisen as a result of industrialisation.

He said that when all variables involved in conventional educational system namely, 'intention', 'content', 'methodology', 'choice of medium', 'personal characteristics' and 'socio-cultural situation', applied to the process of distance education show that distance education is a phenomenon that is very different from conventional education.

He elaborated further that:

- a. The didactical intention of a distance teacher is bound to be of a higher degree in the cognitive domain, but lower in the psycho-motor and affective domains.
- b. The choice of content cannot be as vast and varied in distance education as it may be in the conventional system (face-to-face components have to be introduced, if practicals of various types constitute parts of the content).
- c. Teaching methodology and the selection of media also undergo major changes as very many conventional methodologies cannot be used at a distance.
- d. Differences in personal characteristics and socio-cultural background of the learners are also non-conventional. First generation learners compete with traditionally elite groups and middle aged learners find themselves grouped with younger learners.

Based on the above elaboration, he concluded that conventional didactic structure are not adequate for analysing the structure and/or process of distance education and proposes to analyses distance education with the help of categories taken from 'individual' theory and practice.

Industrial Characteristics of Distance Education.

### 3.8.1 Division of Labour

The production of teaching materials for purposes of distance education is an industrialised process. A whole range of experts from subject specialists, course writers work on industrial lines to produce materials which are to be used in ways different from those that are used to learn from conventional books. This basic illustration is based on the principles of division of labour which is not only applicable to the production of teaching materials but also to the rest of the pedagogical process.

### 3.8.2 Mass Production of Teaching Materials

Secondly, when looked at from an historical point of view, clear parallels are identifiable between industry and distance education. For example, the growth of industry is seen from individual labour to group effort and manufacture to mass production to meet higher demands. So has been the case with the emergence of distance education.

### 3.8.3 Systematisation of Work Procedure

There are identifiable parallels between the consequences of industrialisation and those of distance education. For example, it has been realised that as an industrialisation, as in distance education too, success depends to a great extent on:

- . 'planning' which has to be scientific in nature
- . formalisation of procedures
- . standardisation of products
- . systematisation of the overall process
- . mechanisation which has implications for social and attitudinal changes in the manpower used for the purposes; and
- . heavy dependence on centralisation.

Peter rated these parallelisms so high in his theorisation of distance education as an industrial type of education, that he predicted as early as the 1960s, that if distance teaching universities were established in the near future they, like industrial establishments, would eliminate small educational units by monopolizing education (the fact that the British Open University is the largest educational publisher in Britain today bears out Peters' prediction to a considerable degree, thereby lending immense support to his theory).

iv. Layout - it may appear trivial to find a parallel even in the design of buildings, yet it is vital. What we are driving at is that the campus of an Open University is markedly different from that of a typical traditional university. In the former, the structures are more or less similar to those of an industry in the sense that it has separate sections for 'production' and 'design'. And the role of teachers, more often than not, is similar to that of managers.

Thus in summary Peters philosophical foundations of distance education are:

- i. educational communication is artificial as the system is broken up into components - print, audio and video.
- ii. Teacher is more of a 'manager' than a repository and the sole interpreter of commentator of information as in the conventional system.
- iii. Most learners in distance education have had their grounding in the conventional system of education. They find distance education attractive because it affords them their own way - the instruction is not time-bound, placed-bound, nor person-bound.

### 3.9 Guided Didactic Conversation of Borge Holmberg

Holmberg (1982) is the one who propounded the concept of 'guided didactic conversation'. Holmberg (1981) is of the view that the core of education is learning by individual learners. Having taken this stand, he believed that distance education should be accepted as an appropriate mode of education particularly suitable for individual learning as it makes it possible for the learner to depend on his personal work which is essentially independent of face-to-face direct teaching. The distance learner is free to choose from the various support facilities made available to him - radio and TV programmes, audio and video cassettes, telephone and computer, and classroom teaching in contact programmes.

Holmberg (1982) outlined this notion of conversation and says:

"A kind of conversation in the form of two way traffic occurs through the written and telephone interaction between the students and the tutor and others - This style of presentation simulates activity and implies, reasoning, discussion for an against, referring to the students' previous experience and thus avoiding commissions in chains of thought.

Thus the theory of 'guided conversation' of Holmberg is centred on 'real' and simulated conversation which can be diagrammatically represented as figure 10.

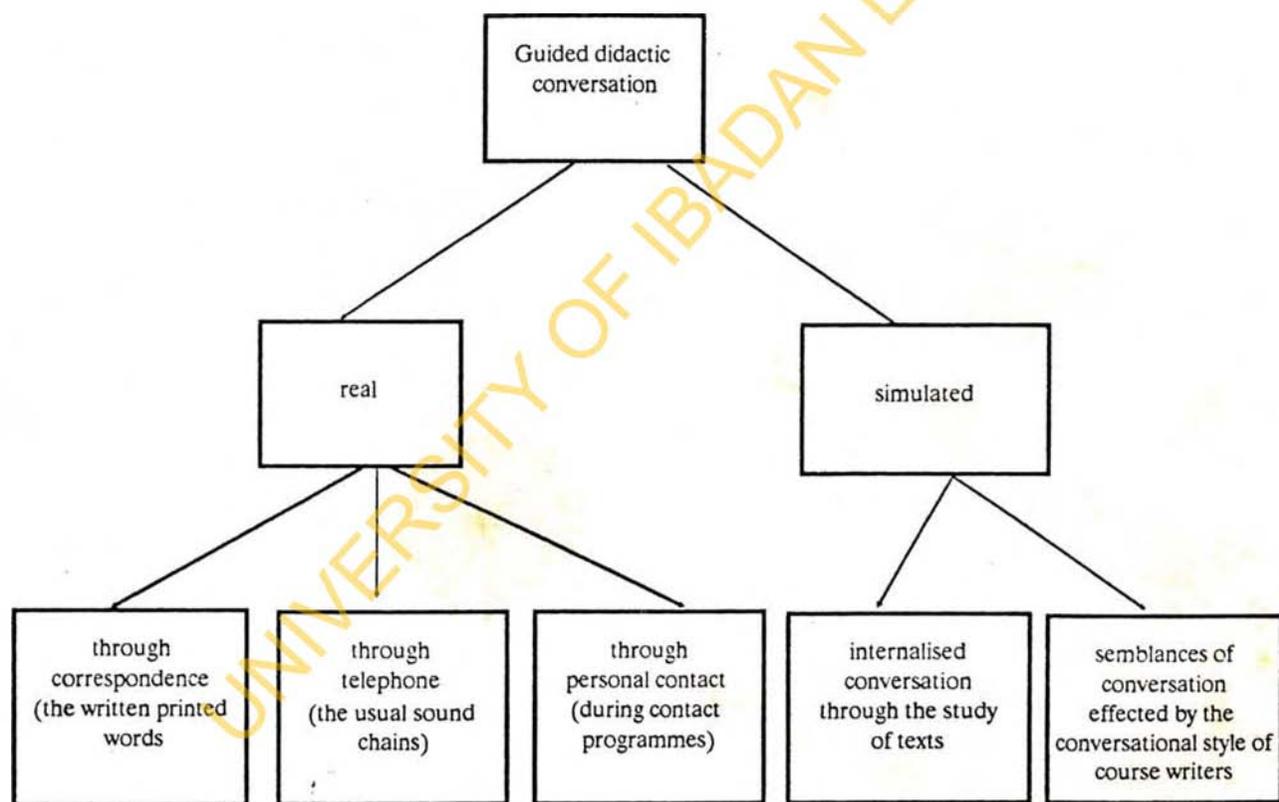


Figure 10: Guided didactic conversation

Adapted from philosophical foundation of IGNOU, p.3.

Holmberg summarises his theory as follows:

The stronger the characteristics of guided didactic conversation, the stronger the students' feelings of personal relationship between them and the supporting organisation.

The stronger the students' feelings that the supporting organisation is interested in making the study matter personally relevant to them, the greater their personal involvement.

The stronger the students' feelings of personal relations to the supporting organisation and of being personally involved with the study matter, the stronger the learning.

### 3.10 Two-way Postal Communication - Concept of John Baath

John Baath (1982) of Sweden's concept of distance education is not much different from that of Holmberg. He has two-way postal communication as his concept but he believes that correspondence tutor could stimulate his students to meet remarkable improvements by means of constructive criticism, encouragement and personal involvements in the individual students learning problems Baath (1980) pedagogic significance of Baath 'tutor-comments'.

Baath (1985) emphasises the need for such tutor and comments thus:

It is obvious that in correspondence education tutor's comments pertain to assignments meant to be worked on by the distance learners. The suggestion is that for bringing about "most remarkable improvements" in learner performance, the tutor-comments play a very significant role in distance education. Thus tutor-comments constitute a highly desirable pedagogic component of distance education. But tutor-comments do not find a place in the overall plan of the 'industrialised' kind of academic support provided to the distance learner. Tutor-comments may come in only as a link in a chain of two-way communication; which is started by the correspondence/distance institution through the course materials.

### 3.11 Human-Elements in an 'Industrialised' Form of Teaching and Learning: The Concept of David Sewart

Sewart (1978) argues that distance education institutions are essentially institutions of mass education, and a particular package of materials is served to hundreds of students; in many cases, to thousands of them. Can such a single package perform all the functions of a teacher (who in the worst situations has to adjust his reach to see about

a hundred or more students) on the one hand, and cater to the vast variety of the needs and the idiosyncracies of distance learners on the others? Sewart answer to both the questions is a clear 'no'.

If a package of materials with such qualities is to be produced, it will be formidably expensive, and it will have to display all the interactive processes which obtain between the teacher and each of the individual learner. The implication is that, however sophisticated, the design and vast, the reach of such materials may be, the learner body will always need additional human support which alone can match the infinite variety of problems that non-contiguous teaching/learning give rise to.

Based on the above philosophical foundations, Sewart (1978) addresses himself to the following:

- i. the lack of immediate feedback, and
- ii. near total absence of peer group interaction.

It is not as though other thinkers have not considered these issues, but they have not chosen to be so emphatic about their pedagogic significance as Sewart is. It is primarily on the bases of the

attitudes towards the issues which Sewart has been emphatic about that the educationists are divided into two camps, viz:

- i. those who are not ready to recognise a system of education that is crucial in any process of learning; and
- ii. those who are all out for distance education and would like to reduce the human element in distance education to the minimum.

Above all, Sewart like to provide:

- i. the infinite variety of learner problems;
- ii. immediate feedback; and
- iii. peer group interaction.

Keegan (1986) views could be summarised as follows:

- i. The separation of learner and the teacher from each other is the central characteristics of this form of education.
- ii. Distance education is an institutionalised kind of education system. It is therefore, distinct from private study which may result from private reading or watching TV or attending a talk.
- iii. Distance education makes use of the various technically advanced media such as printing and telephone.
- iv. It is two-way communication because the student is able to respond through response sheets or other media and therefore can receive feedback. The student can enter into dialogue with the institution.

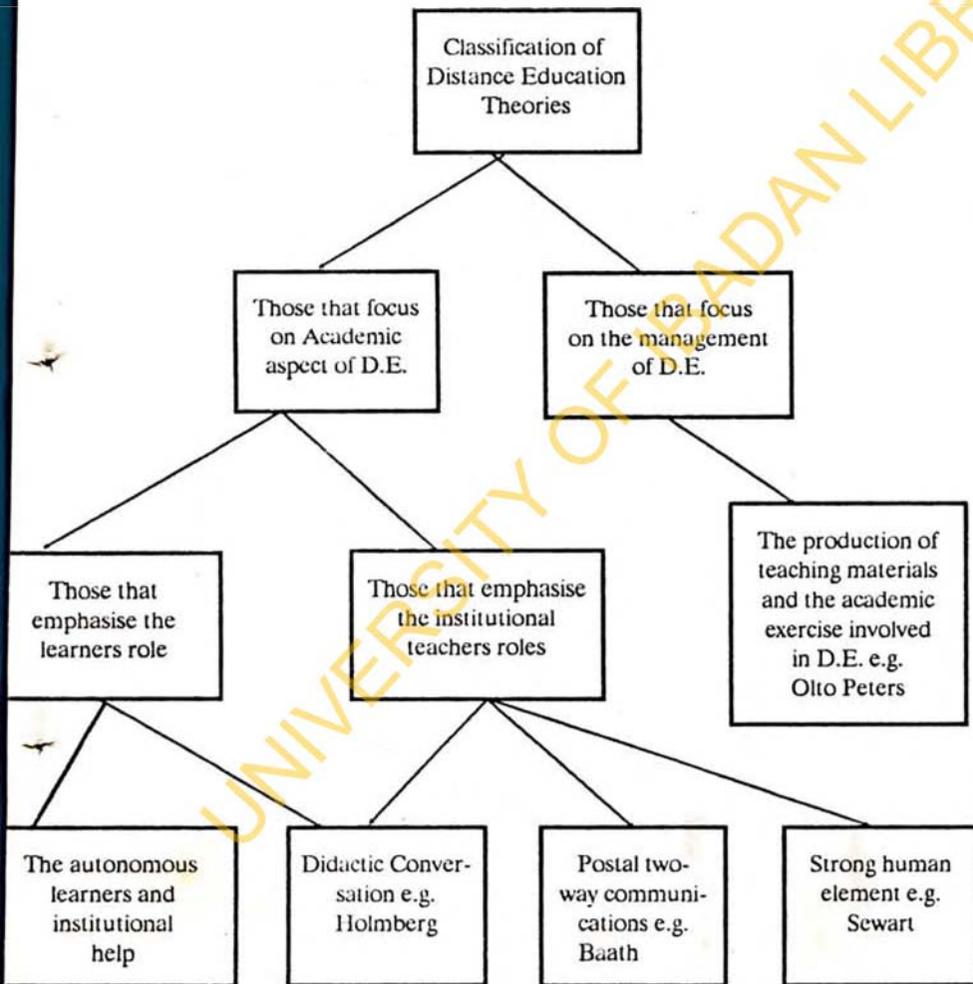
- v. Each student is separated from his peer group, in the sense that although the learners form a fairly sizeable population they do not have face-to-face encounters among themselves. Thus distance education becomes highly individualised of all learning systems. In this sense, it remains one of the most individualised of all the educational systems. Even though study groups may be formed under Distance Education learning programmes, these may not be compulsory as the learner is free to work entirely on his own.
- vi. Distance education is a specific answer to a specific need. It is the modern industrial society that has created a need for a more capsular kind of education. At the same time, it is the industrial society that has developed the necessary technology to be able to structure an educational system that will cater for such a specialised kind of need for education.

In that sense one can say that distance education is a specifically industrial development. Thus Keegan (1986) define distance education as that field of educational endeavour in which:

the learner is quasi-permanently separated from the teacher throughout the length of the learning process. The learner is quasi-permanently separated from the learning group throughout the length of the learning process, a technological medium replaces the inter-personal communication of conventional, oral group-based education.

Finally, one must recognise that the concept of distance education is basically a democratic idea. This is perhaps what makes it unique. What a lecturer says as part of his oral and spontaneous communication within the classrooms are in many ways private. At least, it is restricted to a definite and small number of persons and cannot be captured in any medium for review or revision. On the other hand, the information that is communicated in a distance education learning programme is something that is open to public inspection. Such learning resources, therefore, can be publicly criticised and can be reviewed and revised by saying that the democratisation of the educational process is possibly achieved in some measure by the evolution of distance education.

Fig. 11: Classification of Distance Education Theories.



### 3.12 The Course Tutor or Facilitator

The role of the tutor has to be seen as collaborative. He belongs to an existential situation in which he is an objective to the learner's subjectivity. He can influence the process of learning only to the extent he can reach out to the learner's subjectivity. Teaching may be thought of as a process of clearing the way, a kind of illumination. What is not quite visible is made visible through the process of teaching. It is like enabling the learner to see a reality that he had missed seeing earlier.

Since all teaching and education has to reach out to the learner, the goals of teaching and learning should be enmeshed in the psychology of the learner.

The above concept is in keeping with the broad and universally accepted view that human beings are not empty tablets that can be merely filled with

knowledge. They have basic interest and work within tacit frame-works with which they structure experience.

### 3.13 Tutor's Comments

Tutor's comments play crucial role in most schemes of distance education. The distance students face-to-face contact with their tutors being relatively minimal, teaching will have to be carried out mainly be means of 'comments' on assignments responses. To elaborate, unlike a student in the conventional educational institution, usually it is difficult for a distance student to meet the tutor just when he wants to.

Most of the help which a distance student gets in terms of academic support is the tutor's comments, on his assignment - responses. If the tutor is unable to write didactic comments (i.e. the comments which effects learning) the written word may fail to serve the purpose. Conversely, the written comments may easily yield to misinterpretation and the consequent academic havoc is inevitable.

The most significant role of a distant tutor, who is to help the learner, is that he should not

rest content with his scribbling a grade on the top of an assignment-response. He must find ways to communicate with the student and help him to communicate with the course-units. By not writing any comments on the assignment - responses, inspite of his having graded them, he ceased to be a teacher tutor. In such a case, he exists to be a mere examiner who grades assignment response and is not called upon to explain his stand. Tutor comments are of three types (a) academic communication (b) personal communication and (c) supplemented communication.

### 3.14 Academic Communication

At the academic level, he reads the assignment response, he writes the comments on the answer and evaluates answer for grading. His comments are borne of his attempt at correlating and comparing his own interpretation of a particular course-unit with the corresponding learner response in terms of both

- i. correct his student and guide him where he may have gone wrong;
- ii. elaborate on what he may have attempted summarily;
- iii. point out and confirm the acceptable aspects of his response; and
- iv. assess the level of his achievement and explain the basis of that assessment so as to ensure better student performance in future.

#### 3.14.1 Personal Communication

An assignment response is a product of the learner's reaction to the course-unit. It is, therefore, a manifestation of his which the teacher/tutor is expected to recognise. Distance students, by and large, are inclined to hide their weakness. They do not like to look small. Then there are others who would like to look big.

At times, a cringing may spend valuable time and effort in eulogising the teacher/tutor, his comments or the course-units.

Such attitudes might be genuine, but they can prove to be real hurdles in distance education,

for example, such a cringling's comments may lead the tutor to think that the student is trying to flatter him in order to gain better grades. Further roots of such attitudes may be traced back to the learner's social status, family background, occupation and previous academic achievements.. No distance student can avoid being influenced by the factor that he interprets the course-units in terms of his own experience, and his answers carry a stamp of his personality.

One of the most obvious ways of modifying his approach to distance studies is to influence his attitudes towards the teacher/tutor, the course-units, the distance institution, and his learning strategy.

Thus there is need for a non-academic level of tutor-comments which will dispel the learner's misgivings and mould his attitudes to reform his concept of role of the teacher/tutor, the course unit, the distance institution and his own learning strategies.

The tutor will have to find occasions when he can show himself as the most sincere 'confidant'

of the student, the most dependable exponent of the course and the one who has a comparatively superior understanding of the academic issue at hand: He will have to present himself as one whose prime aim is to assist the learner in his studies. His written comments must compensate for the mannerisms - peculiar gestures and smiles and tilts of the brows, which accompany and take away the sting from the teacher's remarks in a classroom situation, so that the teacher/tutor-comments may not hamper the motivation of the distance learner. The comments, therefore, will have to be well thought out, deliberate, palatable, precise and pedagogically purposeful.

#### 3.14.2 Supplemental Communication

Communication at the academic and personal level gives rise to a third level of communication which may be called the 'supplemental level' of communication. Such communication may emanate either from the learners, or from the teachers/tutors. In the former case, a learner may like to question a

particular comment written by a teacher or ask for an explanation regarding a grade awarded or a remark recorded on the assignment-response. In the latter case, a tutor discover that a particular assignment is difficult; and most learners need help in handling that assignment. In such a situation, model answers or such hints as would help students must be prepared and made available to them.

On supplemental comments, institutions should check tutors' work so that they would give constructive suggestions that will aid effective learning.

### 3.15 Classification of Tutor's Comments

The fact that most distance study institutions the world over use written course-units as the major channel of transmission, warrants a certain degree of sophistication in formalising the 'comment-types'.

#### 3.15.1 Harmful Comments

Comments like horrible language .... You have beaten about the bush.... are harmful in-so-far as they put off the distance learner. Such comments are

rude by themselves - they fail to build and purposeful rapport between the distance learner and the course tutor.

3.15.2 Hollow Comment - Take for example a comment of this type. Go through the lesson again and also the question on the assignment. The meaning itself is hollow. For one cannot make anything out of it.

Misleading Comments - At times tutors write comments which put the learner on the wrong track. For example, 'please read the lesson again and re-do the assignment' This does not point out what exactly the learner should note about the lesson or the assignment.

3.15.3 Null Comment - The comments which do not confirm or reject or question, illustrate or explain, refute or approve of anything are called null comments.

3.15.4 Negative Comments - Comment like "you have failed to give a single illustration" is an example of negative comment. Corrective comments are most needed by distance learners, tutors should endeavour to give positive comments rather than negative comments.

3.15.5 Positive Comments - Comment like your argument about situations/themes and illustrations are acceptable and good. This do not negate what the students have written,

3.16 Withdrawal, Failure and Retention

Openess and accessibility, the hall mark of many distance teaching institutions seem to be associated with significantly lower rates of successful completion of courses and programmes of study than campus based institutions. Richard Powell et al (1990) however, described success and failure as having both theoretical and practical importance as distance education moves from a marginal to an integral role in overall education provision. Over the past decade there has been a number of studies examining student failure and retention in distance education.

There is a great body of literature regarding failure and withdrawal. Four of the most recent and comprehensive reviews have been carried out by Tinto (1975), Pentages and Creedon (1978), Lenning, Beal, and Sauer (1980), and Bean and Metzner (1985).

The first three reviews focus on younger full-time students at residential campuses. The latter review by Bean and Metzner looks at older, part-time and commuter students. All are extremely useful in providing theoretical frameworks, criticism of research methodologies, summaries of the major findings and conclusions about them, as well as suggestions for improving retention.

Research and writing about failure and withdrawal of adult part-time students, particularly those studying at a distance, is a relatively recent phenomenon. One of the reasons for this is that high failure and withdrawal has been both expected and accepted as a characteristic of distance study. As Daniel and Marquis (1979) noted, "... when correspondence schools began, the idea of survival of the fittest was more acceptable than it is today..." However, more traditional publicly funded educational institutions, such as universities, have now entered the field of distance education. These institutions

have a vested interest in student retention, and have directed resources toward studying and solving the failure/withdrawal problems. Retention of students has become one of the leading issues for distance education practitioners, and a number of studies have been carried out over the past few years.

### 3.17 Defining Withdrawal and Retention

The main body of research and literature regarding withdrawal and failure refers to dropping out of a programme of studies. Definitions of retention most often refer to completing the programme of study in the prescribed amount of time Lenning et al (19990). In the same study, Lenning argued that this definition is obviously inappropriate for any student who is not studying full-time in a programme. A new term 'stopping out' is used to describe the behaviour of a temporary withdrawal who later complete a programme longer than the prescribed time.

With the increasing numbers of part-time adult students; it is necessary to develop new definitions

of retention. Bean and Metzner (1985) in an attempt to provide a definition for 'withdrawal' appropriate to adult learner described it as someone who but does not enrol the next semester and has not completed his or her formally declared programme of study. But still this will not differentiate stop-out from complete withdrawal.

Lening (1980) proposed a generic definition of retention as "success in achieving some goal or objective. This definition, while it more clearly explains what retention is, is not very useful for research purposes. Obviously, goals and objectives of students will differ by institution, and by individual because some institutions have developed their own definition of retention and withdrawal based on institutional and student characteristics.

Richard Powell et al (1991) chose a range of variables to measure factors predisposing students toward success, withdrawal and failure in their first Athabasca University course. These variables which include marital status, need for success, need for support, Literacy level, financial stability,

concrete study, gender, and rating of previous education, children age with their composition were based on a 5 Likert scale of measurement. Although this set of discriminating variables was developed in the light of existing literature on student success in distance education. Not all factors were addressed because of difficulty in measurement.

The variables which were included in the discriminant model can be used to construct a reasonably detailed profile. Profile of potentially successful and unsuccessful students. From the study, students who rated themselves highly on various measures of persistence were more likely to succeed in their studies than students who rated the consequences of not passing as serious were more likely to pass their first course. Successful completers tended to rate their channel of succeeding in their studies higher than those who eventually withdrew from or failed their course. Respondents who indicated that they needed support from others to complete difficult tasks

and who said they found it important to discuss course work with other students were numbered among the unsuccessful group. Student literacy as measured by a close test was also related to student failure and withdrawal. In addition, respondents who rated themselves as well organised in terms of time management skills and said they generally had the time to do what they intended to do were also likely to succeed. Similarly, students who rated the value of their formal and informal learning as high in terms of preparing them for university studies tended to succeed and persist in their study. Female students were more likely to succeed than male students. However in a previous analysis when we mean completion rates of the course chosen by students in the model, was included, gender ceased to be a significant predictor variable. This suggests that gender differences in completion rates are, at least partly, explainable by course choice.

The set of factors that predict student failure and retention among a particular population would

not necessarily apply to other population of distance learning students and other institutions. Indeed, the analytic framework as proposed in predisposing model vary according to institutional factors and life changes. In an institution where students do not meet in classes or tutorial, premium is placed on independent study, organisational ability and the existence of outside support structures in predicting failure and retention.

Thus the discriminant model classified 69 percent of the respondents correctly in terms of their success and retention. The study indicated that a substantial amount of the variance of completion behaviour is explained by predisposing model. However the explanatory value, though significant, does not account for all of the variance in completion. Therefore, the interaction of institutional factors and changes in life circumstances, with student predisposing characteristics should provide a clearer picture of student retention and failure. The model becomes most useful to determine factors that could affects students' failure and retention.

In a study carried out by Sloan (1969) at the University of Kentucky where 135 students an approximate one-third of students in that institution discontinued their distance studies subsequent to enrolment and prior to completion. The most frequent reasons for enrolling in the first place were to meet a degree requirement for self-improvement, and for certification purposes. A small number of (10) were repeating because of failure or low grade and a few scattered additional reasons were given. Major reasons given for non-completion were job interference with study, lack of time, taking residence classes at same time and loss of interest, (found correspondence study uninteresting) although only 12 students gave response.

In response to a request to reduce failure and withdraw responses were limited. Twelve students suggested time extension, eight asked for reduction in number and extent for reduction in number and extent of lessons, eight asked for more through

response from instructors and eight asked for more lesson detail and explanation.

Pulley (1971) at the University of Missouri also studied the failure and withdrawal situation. He surveyed 243 students who had discontinued their correspondence study enrolments at that institutions. The principal reason for enrolling to satisfy degree requirements and self-improvement, were the same as in the study of Sloan. The same is true of reasons given for discontinuing.

1. Employment interfered with time for study.
2. Lack of direct contact with instructor and too much work.

In another study carried out by Elizabeth (1971) student reacted to questionnaires sent to three groups of students, namely those who had enrolled but never started, those who had started but had done no work for some time, and those who were progressing well. Returns were received from 358 students. Principal reasons for registering for corresponding instruction instead of classroom instruction were (1) in military

service (2) working (3) finished all other requirements for graduation and (4) distance from campus. Students in the two groups including students who were not progressing gave as reason (1) job (2) lack of time (3) residence work took too much time and (4) I am working on the course as reasons for non completers. Only 22 responses were made concerning what the study centre could do to help the students most. The most frequent response was that the course was quite satisficatory as it was. Next in order were requests for better directions, more comments on papers, more information about final examinations and extension of time.

### 3.18 Benefits of Failure and Withdrawal Prevention

Analysing the economic benefits of a vocational training organised to prevent failure withdrawal, Arthur J. Corazzni (1986) argued that benefits to be measured are the marginal increase in life-time income which result from graduating from high school rather than dropping out at the tenth or eleventh grade level. These increases in lifetime income

are only the direct benefits associated with the investment in education.

Thus his conclusion was that if public decision-makers are willing to consider vocational education an investment in failure/withdrawal and to count every vocational graduate as having been saved from failing or withdrawing from schools, the investment is worth undertaking.

### 3.19 Methods and Technique of Establishing Wastages

UNESCO (1970) defined educational wastages as failure/withdrawals and repeaters, and described three methods of measuring them: namely, apparent cohort method, reconstructed cohort method and true cohort method. Apparent cohort method uses either cross sectional year-class data, (enrolment in all classes in a single year) or a time-series data (data on enrolment in successive classes

in successive years) on class-wise enrolment (without repeaters). The method provides only a rough estimate of educational wastage, for it does

not make the assessment of repetition of classes possible. The constructed cohort method is based on successive year-class data on enrolment and repeaters which are given a full cycle of cohorts. Then drop-outs, repeaters, and promotion rates are calculated. Through this method one can calculate the unit cost of wastage, the input-output ratio and the index of internal efficiency. The construction Cohort Method is an improvement over the Apparent Cohort Method. Yet, the Reconstructed Cohort Method presents only estimated and not actual wastage pictures. The true cohort method calls for a longitudinal study of a group of pupils from the beginning class to the final class. Through the method, answers are found to the following questions:

- (a) How many pupils leave a school, and at what point?
- (b) How many pupils transfer in and out of school?
- (c) How many pupils migrate to other countries?
- (d) How many pupils die?
- (e) How many pupils repeat classes and with what frequency?

- (f) How many pupils rejoin a school after dropping out?
- (g) How long do all those who ultimately complete the course successfully take to do so?

Through most scientific, the True Cohort Method is time-consuming and expensive to operate. It requires the use of continuous record cards by a teacher, who must compile detailed information on every pupil in a cohort. Perhaps as a result of its expensive nature, the True Cohort Method is not popular with UNESCO. For instance, UNESCO (1982) conducted a statistical evaluation of wastages in primary education in 33 African member states, using Apparent and Reconstructed Cohort Methods. The study depicts changes in the internal efficiency of a given country educational system over time. However, the result could not be compared for all countries, due to diversity in the educational systems and practice. Nigeria was not included in the study due to lack of required data.

Sapara (1972) carried out a review of methodologies for computing educational wastages, highlighting strengths and weaknesses of each method. He added an Asian Model, and illustrated his points with the calculation of repeater, dropout promotion and graduation rates, through progression process, as pupils move from a beginning class to a final class.

Like the Reconstructed Cohort Method, the Asian models lead to estimating wastages. Thus the model provides an alternative strategy to the Reconstructed Cohort Method. Myers (1962) described voluntary (e.g. due to unemployment) and involuntary (e.g. an account of illness) drop-outs with regards to elementary and secondary education in the state of Oregon (USA). Having studied the magnitude of the problem for the period 1947 to 1963, he showed that pupils attention rates diminished, but at a much slower pace than enrolments increased. His work failed to take repeaters and transfers into consideration. Myers discusses the characteristics

of potential dropouts which are useful for studying the causes of the problem.

Other writers took repetition into consideration. Maleche (1960) did not only describe repetition but also presented a statistical analysis of the causes of retardations and wastages in Uganda grant aided primary schools. UNESCO (1967) surveyed causes of dropout and repetition in Asian primary schools, and received selected studies in some countries. The UNESCO conference of Ministers of Education in the member states of Africa (1982) also considered the development of education in African with focus on wastages.

Pauli and Brimer (1971) defined wastages, and examined their causes internationally. Furthermore, they evaluated the knowledge acquired by a pupil who dropped out of school at a given stage.

On the national scene, Calcott (1967) computed the extent of dropouts in the former Western Nigeria primary schools. He failed to include transfers

and repeaters as did many scholars. On the international scene. However, he identified major reasons which attributed to the dropout problem.

Okedara (1971) reinforced Nwagu's work by presenting a conceptual scheme of adult education programmes, aiming at eliminating or minimising the drop out rate and truancy in the adult literacy classes run by the former Eastern Nigeria Government. In another study Okedara (1979) went further to classify school withdrawals as dropouts, repeaters and transfers from one school to another. He compiled rates of withdrawals for all generations of pupils between (1955-1974) and compared urban and rural rates for Ibadan. He examined the wastage factors and offered useful suggestions for overcoming them.

Yoloye (1975) improved upon Calcott's work of (1971) by undertaking a longitudinal pilot study of primary school dropouts in the city of Ibadan. Yoloye's went further in his study to include repeaters; dropouts, transfers and those who gained

admissions into secondary schools prior to completion of primary six in his wastage concept. He further examined the relationships between the rate of dropouts and background variables (e.g. sex, religion, parents occupations and the incidence of polygamy among families).

Nwaqwu (1974) specifically defined dropouts, discussed their causes in Nigeria, and suggested continuing education programmes that could be planned for those who became dropout.

Okedara (1981) highlighted some of the factors contributing to educational wastage as illness, finance, and learning difficulties.

Oguntonade (1979) in his study titled "Distance learners, socio-physical conditions of study" examined the following factors as they affect distance learners performance. These include:

- (a) conditions of work and rest,
- (b) home/family structure and conditions.
- (c) types of living accommodation.

- (d) time devoted to university studies
- (e) physical and resource facilities for study
- (f) location and distance from study centre
- (g) sources of distraction

Summarising his findings, he associated himself with McIntosh's (1971) remarks about open university students. She said:

Most of these students are doing a job as well as studying with the university. A commitment to study on this scale is likely to shape, and also to be shaped by other major areas of the students' lives, notably their work, their family life and their leisure. In order to obtain a degree, changes and sacrifices will almost certainly have to be made by individuals both in their work and in their leisure. They may have to forgo promotion, for example or give up special interests' open university students need to restructure their non-work time in very specific ways. Time previously available for leisure or family life may have to be reallocated to study in particular to serious reading and to disciplined television viewing and radio-listening, or to spending time on home experiments. The open university is asking its students to change previous patterns of leisure and media consumption. In many cases, students families also have to make adjustments and sacrifices; and there may be significant repercussion with the family group.

These words are no less true of the National Teachers Institute Distance Learners.

Oguntonade's study is very much relevant to the current study even though his was at the university level. But one could deduce from the study that whatever level of distance learning process, the factors affecting the learning process is similar all over.

Reading through the National Teachers Institute (1990) report on the TC II distance learning process certain factors militating against the programme were enumerated as follows. Lack of accurate record, for example, it was stated that 201,555 courses books were distributed to seventeen states whereas there were TC II DLS in fifteen states by other report.

Another factors mentioned was the introduction of the NCE/DLS; this has greatly affected the operation of the TC II/DLS. The resultant effect of this is that some of the tests were not done in some states.

A great majority of students only paid registration fees without buying the course books. In addition,

they did not attend the contact sessions. It was then argued that:

it will therefore, not be proper to regard a teacher who simply paid the registration fee, collected the form, but failed to buy any of the relevant course books as an NTI students. Equally, his performance at the grade II examination will not be expected to have been influenced by the experience gained from the programme because he neither bought nor read the course books nor participated in the contact session. The situation has, therefore, made it extremely difficult to evaluate the programme.

The non-availability of cycle four books was another serious problems.

There were about five thousand students in Sokoto State in the 1989/90 session and more than two million naira was realised from the programme in the state during that session. The stoppage of the programmes in the state, therefore meant a great loss of revenue to the institute.

Late payment of honoraria to course tutors and supervisors was another factor militating against the programme.

The problem of delay in settling supervisors' and course tutors' claims still persists. Right now, supervisors and course tutors in Benue State are yet to be paid for the job they did in 1990.

The above were revealed in the annual report of NTI.

If these problems as enumerated above could be facing an institution of NTI status what hope do we have in our various institution of learning.

Infact the result of the NTI TC II DLS for 1989/90 session constituted a matter for concern.

Going by the NTI report, of the 20,178 students that registered for the programme, only 13,000 registered and sat for the examination. Out of this, only 5,112 or 39.0% passed all the subjects they registered for. Others either failed all or some of the subjects.

Analysis on state basis shows that Imo State has the best result with (64%) pass rate followed by Akwa Ibom ( 62%), Anambra (53.46%). The worst result was that of Gongola State with (16%) followed by Katsina (21%) and Sokoto (28.21%). On centre basis W.T.C. Aloma in Benue State recorded the best result with 86%, followed by T.C. Lokoja with (84.5%) and G.T.T.C. Maiduguri with 83.5%. The following centres on the other hand recorded zero %. G.T.T.C. Katsina, G.T.C. Jalingo to mention a few.

On the whole, the result could not be regarded as being very good, based on the above review of literature through which the various efforts of training teachers by distance at both international and local institutions had been visited. Also reviewed were the various definitions of distance education as given by various schools. The issue of wastages and the factors leading to such were discussed. This was even viewed in relation to the National Teachers Institute and as it affects its academic operations.

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## CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY4.1 Description of Reserach Methodology

This study was conducted using the descriptive survey research approach. Others like the rationalistic, naturalistic and historical approaches were not considered because Dodds, Lawrence and Guiton (1984) and Owens (1982) already stressed the weaknesses of these approaches. These weaknesses include that certain parts of the real world, which are called variables may be singled out (literally or through statistical manipulation) from reality for study or treatment while controlling other parts of the setting. Thus the only popular instrument that fits into it is the questionnaire. Whereas Owens (1982) uses a similar format to characterise the naturalistic design when he put one of its characteristics thus:

"In the real world, events and phenomena cannot be teased out from the context in which they are in extricably embedded and understanding involves the interrelationships among all of the parts of the whole".

Thus it is illusory to suppose that interaction between inquirer and subject might be eliminated indeed. The

naturalistic design rely so much on interview in carrying out its investigations.

And if research design as puts by Kerlinger (1966) will be a thing to go by then there is need to look for a broad based design. Kerlinger describes research design as the plan, structure and strategy of investigation conceived as to obtain answers to research questions and to control variance. Nwankwo (1984) puts three major purposes of research as:

1. To provide answers to research questions or problems.
2. To control variance in such a way that the variables under investigation will consistently vary in accordance with the research questions to ensure that extraneous factors or variables are controlled, and to control the errors that could arise from randomness or measurements;
3. To ensure that the plan and procedures of strategies are systematically followed, objectively examined, and appropriately displayed.

This study adopts the descriptive survey research approach, which is based on the relevant purpose of descriptive research, which is to describe systematically the facts, qualities of characteristics of a given population, event, or area of interest as factually and accurately as possible, and to answer

the questions asked by the problem under investigation.

Isaac (1972) drawing from Van Dalen and Mayer (1966)

has summarised this purpose as:

- (a) to collect detailed factual information that describes existing phenomena.
- (b) to identify problems or justify current conditions and practices.
- (c) to make comparisons and evaluations.
- (d) to determine what others are doing with similar problems or situations and benefit from their experience in making future plans and decisions.

According to Van Dalen and Mayer (1966), in most cases descriptive research design is often referred to as survey studies.

Steps involved in carrying it out include:

- i. Defining the objectives in clear, specific terms, what facts and characteristics was uncovered?
- ii. Design the approach by asking: How will the data be collected? How will the subjects be selected to ensure that they represent the population to be described? What instruments or observation technique are available or will need to be developed? Will the data collection methods needs to be field-tested and will the data gathered need to be specifically tested?
- iii. Collect the data and systematically analyse them in such a way that they give the picture needed for the problem.
- iv. Report the results.

#### 4.2 Population

The population for this study is 12,660. This comprises all the TC II registered students of NTI through the Distance Learning system. They were all serving auxilliary teachers in fifteen states of the federation as at 1989/90 session. The states involved were those where uncertificated teachers were still in the employment of the teaching service of the states listed in Tables 6 below.

Table 6

Distribution of Student Population for NTI  
TC II by DLS 1989/90 Session

<u>S/No.</u>	<u>State</u>	<u>Total Registered</u>	<u>Total entries</u>
1	Akwa-Ibom	334	322
2	Anambra	639	548
3	Bauchi	951	454
4	Benue	2633	2229
5	Borno	195	09
6	C/River	666	501
7	Gongola	594	25
8	Imo	168	168

Table 6 contd.

S/No.	State	Total Registered	Total Entries
9	Kano	1723	1342
10	Katsina	996	190
11	Kwara	1342	1162
12	Oyo	1850	813
13	Plateau	2850	2246
14	Rivers	217	143
15	Sokoto	5812	2949
Grand Total		17,970	12,949

Source: NTI Department of Planning, Research and Statistics Records 1990.

#### 4.3 Sample Size

This researcher applied cluster sampling method to determine the sample size for this study. This was adopted because of the varying degrees of students enrolment in the states involved in the NTI TC II distance learning system. Thus table 7 below shows the analysis of the sample size for the study.

\*  
Table 7Sample Size

Range of Student Population	No. of Subjects Per State	Total Sample Size
0 - 500	10 x 7	70
501 - 1000	20 x 2	60
1001 - 1500	30 x 2	60
1501 - 2000	40 x -	-
2001 - 2500	60 x 2	120
2501 - above	80 x 1	80
Grand Total	15	390

Source: Adapted from table 6

Thus a total of 390 distance learners were randomly selected from the population used for this study.

#### 4.4 Sampling Procedure

The clustered random sampling method was used for this study, using a range of 500 interval and considering the population of the students under study. 390 students

were randomly selected from the fifteen states that were involved in the NTI TC II distance learning system for the 1989/90 academic session.

The selection took into consideration the possibility of all the students being singled, and the sexes being considered. This is to ensure effective generalisation of the findings of this study. The following tables show the demographic distribution of the subjects sampled in terms of marital status, No. of children, extra curricula activities and others.

Table 8

Distribution of Learners by Marrital Status

1 Mental Status	2 Respondents	3 % of Sample
Singled	10	3
Married	300	94
Divorced	10	3
Separated	-	-
Total	-	100

Source: Data collected through appendix 3.

Table 9Distribution of Respondents by No. of Children

<u>Respondent</u>	<u>No. of Children</u>	<u>%</u>
180	Above 6	56
100	5 - 6	31
22	3 - 4	7
8	0 - 2	1.5
10	-	4.5
320	-	100

Source: See Appendix 3.

Table 10Distribution of Respondent by Extra Curricula Activities

<u>Types of Activity</u>	<u>No. of Respondents</u>	<u>%</u>
Trading	110	34
Farming	120	37.5
Transporter	40	4.5
Spiritualist	15	5
Tailoring/Sewing	16	3
Petty Trading	10	3
Total	320	100

Source: Appendix 3.

#### 4.5 Instrumentation

The following instruments were used for this study.

1. A determination of rate of failure and retention questionnaire.
2. Records from the National Teachers' Institute Kaduna at its Department of Record, Research, Statistics and Planning.
3. Schedule interview with facilitator/tutors and co-ordinators.

The determination of rate of failure and retention questionnaire was divided into four parts.

Section A: Consisted of demographic variables such as sex, age, marital status, educational background annual salary, official status and working experience.

Section B: Sought information about the learners' view of the TC II DLS programme as it affects instructional materials, learning centres and the learning environment.

Section C: of the questionnaire sought information about the adequacy of the various variables involved in the TC II DLS programmes. These include the

workload, the tutors, the centres, motivational materials, the adequacy of the language of instruction, domestic responsibilities, peer group, financial status, feedback issues, course books and the residential face-to-face programme.

Section D of the questionnaire sought information about, and how any of the following five variables affect or influence students' performances. These are boredom, professional advancement, welfare factor, external influence, and cognitive ability. The statement in the questionnaire were drawn and placed on 5 point Likert Scale of measurement and weighted as follows:

	Weight
1. Strongly Agreed	5
2. Agreed	4
3. Undecided	3
4. Disagree d	2
5. Strongly Disagreed	1

However, responses to some questions did not required the use of the Likert Scale but only used to provide bases for some of the findings.

#### 4.6 Validity

A number of techniques were used to assess the validity of the instruments and the findings. The principal techniques were triangulation and peer consultation.

Triangulation - According to Guba (1981) triangulation concerns the cross-checking and verification of data through the use of different information sources. These include a variety of data sources, investigators, theoretical models, and research methods. Obviously stronger conclusions can be drawn from comments made by more than one interviewee. Also conclusion drawn from the interview data was compared to the results obtained from separate interview administered to various respondents involved in the study.

4.6.1 Peer Consultations - According to Owens (1982) peer consultations aims to give researchers opportunities to check and test their findings as they unfold. The consultation, was amongst qualified, interested peers who were able to adequately assess the conclusions that were reached. This was among departmental staff and research assistants.

Another approach for the validity test was the Borg and Gall (1976) approach. They both asserted that it is the degree to which a test measures what it purports to measure. To ascertain this, four types of test validity were recognised. These were content, construct, concurrent and predictive. Its sometimes grouped together as criterion validity. The instrument used in this study was tested for content and construct validity.

4.6.2 Construct Validity - is the extent to which a particular test can be shown to have measured hypothetical-constructs. Hypothetical-constructs are psychological concepts like intelligence, attitudes, anxiety which are not directly observable but rather are inferred on the basis of their observable effects on behaviour. On this intellectuals in the field of psychology were consulted for validation.

#### 4.7 Reliability

A data collecting instrument is regarded as reliable if it would provide identical data when administered twice or more times under the same

circumstances. This is afforded by the method of Test - Retest Reliability by comparing each persons response on both testings. The relationship between the scores on both tests (computed in correlation coefficients) would give the reliability coefficient of the test.

It is recognised however that this retest method is not a pure proof of reliability because the items that constitute the test may not be the only ones of many such items in such tests that would have yielded the same responses from the test. It was adopted none the less because it was a sure way to determine the consistency of a test over time.

It was after the above mentioned approaches had been carried out that the questionnaire administered was subjected to some statistical analysis, that is coefficient of correlation to confirm the validity and reliability of the instrument, and to establish the content, construct, predictive and face validities of the instruments.

The final draft of the instrument was then administered on the subjects of the study.

#### 4.8 Administration of the Instruments

The questionnaire was administered through the Head of Department of Planning, Research and Statistics, to the various state co-ordinators. These in turn were administered to their students. After completion they returned them to the NTI Headquarters for the attention of the Head of Department of Planning, Research and Statistics. All other investigations were conducted through the Department for easy access and continuity.

#### 4.9 Data Analysis

The Data collected through all the instruments were analysed and computed with the aid of the computer. Different statistical measures were adopted.

In all, the statistical measures of Chi-square and analysis of variance were employed. The research questions were tested at 0.5 level of significance.

CHAPTER FIVEDATA ANALYSIS

This chapter deals with the analysis of the data collected in the course of this study. For easy reference, the data is presented in tables taking into consideration the research questions.

5.1 Research Question 1:

Are Distance Learners' Rate of Failure and Retention Affected by Their Educational Background?

Table 11

Influence of Educational Background on the Rate of Retention/Failure of TC II DLS

1 Type	2 SA	3 A	4 D	5 SD	6 Total
Arabic Certificate	(66.56) 55	(79.87) 126	(42.7) 15	(18.8) 12	208
Grade II Certificate	(23.04) 2	(27.65) 8	(14.78) 50	(6.53) 12	72
Primary Six	(30.3) 64	(36.48) 10	(19.5) 12	(8.6) 10	95
Total	120	144	77	34	375

Interpretation: There is effect of learner's educational background on their rate of retention and failure.

$\chi^2 = \text{Value } 277.96$

The degree of freedom = 6

The critical value is 12.96

The significance level is  $P < 0.05$

To determine this, a chi-square analysis was employed to process the data gathered. The result showed that differences in educational background of distance learners greatly affect their rate of retention and failure.

## 5.2 Research Question 2

Does the course material factor affect the rate of failure or retention of Distance Learners

Table 12

Influence of Course Materials on the Rate Retention/Failure of TC II DLS

1 Type	2 SA	3 A	4 D	5 SD	6 Total
Item I	220	35	15	45	
Work-Load	(127)	(30.45)	(40.65)	116.85	315
Item II	(122.9)	(29.52)	(39.35)	(113.15)	305
Course Book	30	25	65	185	
Total	250	60	80	230	620

$X^2$  value is 262.4

Degree of freedom 6

Critical value 7.82

$P < 0.05$

Interpretation - That course materials tremendously determine the rate of distance learners' retention/failure in their academic work.

### 5.3 Research Question 3

Are distance learners' rate of failure/retention affected by the facilitator/tutor factor?

Table 13

Influence of Facilitator/Tutor on the Rate of Retention/Failure on TC II DLS on Academic Task

1 Item	2 SA	3 A	4 D	5 SD	6 Total
Subject Mastery	200 (209.75)	60 (42.6)	12 (17)	40 (42.6)	320
Tutor Demeanor	240 (215.12)	40 (43.69)	10 (12.48)	30 (43.69)	320
Head Role	200 (215.12)	30 (43.69)	30 (17.48)	60 (43.69)	320
Total	640	130	52	130	960

$\chi^2$  = value 34.4

Degree of freedom 6

Critical value: 12.59

$P < 0.05$

Interpretation - That Facilitator/Tutor greatly affect distance learners' rate of retention/failure in their academic exercise.

5.4 Research Question 4:

Do environmental factor play and Significant role in the distance learners' rate of retention and failure?

Table 14

Influence of Environmental Factor on the Rate of Retention/Failure on TC II DLS on Academic Task

1 Item	2 SA	3 A	4 D	5 SD	6 Total
Sitting of Learning Centre	260 (235)	20 (15)	30 (35)	10 (35)	320
Nature of Learning Centre	210 (235)	10 (15)	40 (35)	60 (35)	320
Total	470	30	70	70	640

$\chi^2$  = value 45.52

df = 3

Critical value 7.82

P < 0.05

Interpretation

That the environmental factor significantly influence their rate of retention or failure.

5.5 Research Question 5

Does the financial status of distance learners affect their rate of retention/failure in their academic exercise?

Table 15

Influence of Financial Status on the Rate of Retention/Failure on TC II DLS

1 Item	2 SA	3 A	4 D	5 SD	6 Total
Low Income	(173.45) 210	(33.2) 8	(32.2) 18	((61) 64	300
High Income	(181.5) 145	(34.77) 60	(35.75) 48	(63.92) 61	314
Total	355	68	66	125	614

$X^2$  value 64.91

df = 3

Critical value 7.82

P 0.05

Interpretation - That the financial status of learners significantly influence their rate of retention or failure.

5.6 Research Question 6:

Is the level of distance learners' social responsibility of any significant effect with regards to their rate of retention/failure in their academic task?

Table 16

Influence of Social Responsibility on the  
Rate of Retention/Failure on TC II DLS  
Academic Task

1 Item	2 SA	3 A	4 D	5 SD	6 Total
High	(158.2) 180	(69.9) 60	(28) 15	(63.79) 65	320
Low	(151.79) 130	(67) 77	(26.92) 40	(61.2) 60	307
Total	310	137	55	125	627

$X^2$  value 26.67

df = 3

Critical value 7.82

$P < 0.05$

Interpretation - That learners' level of social responsibility affects their rate of retention and failure in their academic task.

#### 5.7 Research Question 7

Does the amount of motivation of distance learners affect their rate of failure/retention?

Table 17Influence of Motivation on the Rate of Retention/Failure of TC II DLS

1 Item	2 SA	3 A	4 D	5 SD	6 Total
Peer Factor	(108.15) 45	(30.9) 55	(86.86) 70	(94) 150	320
Feedback on Assignment	(105.45) 210	(30.12) 20	(84.69) 18	(91.72) 64	312
Stability	60 (104.4)	15 (28.96)	165 (81.44)	60 (82.2)	300
Total	315	90	253	274	932

$$\chi^2 = 378.56$$

$$df = 6$$

$$C.V. = 12.59 \quad P < 0.05$$

Interpretation - That the level of motivation of learners affected their rate of failure and retention.

### 5.8. Research Question 8

Do boredom, professional advancement, welfare of learners, external influence and cognitive ability affect the rate of distance learners' retention and failure in their academic task?

Table 18

Analysis of Variance on Factors that  
Affect Rate of Retention and Failure  
of Distance Learner

Source of Variation	Sum of Square	Degree of Freedom	Mean Square	F	P
Between Group	121646.7	4	30411.67	12671.5	0.001
Within Group	3835.8	1595	2.4		
Total	125482.5	1599			

$$F = 12671.5$$

$$df \begin{array}{l} \text{BG } 4 \\ \hline \text{WG } 1595 \end{array}$$

$$P = 0.05$$

Interpretation - That each of the factors variedly affect distance learners rate of retention and failure.

CHAPTER SIXDISCUSSION AND POLICY IMPLICATION

This chapter focuses on the discussion of the findings and necessary recommendations for effective running of distance education with the view of reducing the rate of failure and promoting high rate of retention.

The research questions as analysed in chapter five will now be taken one after the other for the purpose of discussion.

Question 1: Are the TC II distance learners' rate of failure and retention affected by their educational background?

Subsequent to the chi-square analyses of the result of the data collected on the above research questions, the finding of which was clearly illustrated in Table 11 with degree of freedom of 6, PV 0.05. It shows that the educational background of the learner significantly affected their rate of retention and failure.

Thus the unequal level of entry qualifications into the teachers' grade II programme of the NTI has

actually affected the level of performance. This was so because the educational requirement of the NTI allow for varying degree of pre-entry qualifications. This is contrary to the recommendation of the deluxe model. The deluxe model recommended a uniform entry for all. Lenning et al (1976) in a study of dropout from military academy, Department of Defence found precisely pre-entry qualifications quite an important factor in success and failure at examination. For example, students with a higher qualification at entry persist and succeed in military academics than those with low qualification. Kenedy and Rowel (1976) lend credence to this in their study of dropouts at the open university in Britain where they also maintained that uniform educational qualifications would help to promote high rate of retention and success rather than varying degrees of pre-entry qualifications. They proposed a two-dimensional model to look at how students with high and low qualifications might react to varying circumstances.

Although some scholars have recommended raising admission standards as a method of lowering attrition and failure. Most authors agreed that this was not an acceptable solution. Rekkedal (1981) pointed out quite accurately that, in the long-run, this only lessens accessibility and widens the existing educational gaps within the society.

From the view points of scholars, the issue of educational background as it affects distance learners need to be uniform rather than being of varying degrees as it is in the present study where according to demographical information, 21% of the respondents were primary six holders, 25% as Grade II failed 14% were school certificate attempted and about 32% were holders of Arabic Certificate. It is therefore glaring from the information available that in situation where the entry qualifications is of different types for a particular study programme, one could not but expect poor performance particularly where majority of the learners were of lower qualifications. For example, the primary six holders and

the Arabic Certificate holders which constituted about 53% of the learners would surely have problems in the language of expression which is English. It is a known fact that Arabic certificate holders are always very sound in Arabic but this could not be easily adapted to an English class. Thus they will need more time to meet up with those holders of Grade II failed and attempted school certificates.

Question 2:

Does the course materials factor affect the rate of failure or retention of TC II distance learners?

Going by the research findings, under table 12 the result shows that the course materials greatly affect their rate of retention and failure.

As could be seen in the educational background factor, that understanding of course materials will greatly be influenced by the level of language understanding. Thus the band-wagon effect of language barrier on the part of the students will surely affect the understanding of the course work.

In addition to this, it was revealed during literature review that because of the financial problem of most of the learners, most of them could not purchase course book and like it was argued in the record of the institution that "a great majority of students only paid registration fees without buying the course books".

Thus lack of understanding of the course book combined with inability to buy the course book will surely affect the performance of learners.

Brindley (1987) in a study reported that more than twenty three percent of the students reported incidents in the 'course content'. This include subject matter as opposed to the design of the course and thus has to do with the level of interest. This course content as related to the students' level of interest has been mentioned as a factor in persistence and failure in distance education.

Disilvestro and Merkowitz (1982) reported on the relationship between learning contracts and correspondence study, showed that strict contracts

consistently helped students to get a prompt start but did not influence completion rates. Thus the result of the study showed that the presence of deadlines were reported as having a positive effect, but were a significant factor only for the successful students. It may be that those who failed did not know how to schedule their studies along with course work.

Woodlay and Parlet (1983) referred to badly designed course packages "as contributing to success and failure at the open university in Britain, and Bartels (1982) addressed the issue of the distance education course author's tendency to 'overwrite' the package because it would be seen and judged by colleagues. Thus the findings established that badly designed course book would always affect the retention and failure rate of distance learners. Mary Thorpe (1979) said "we should begin from the assumption that course materials are not the course; rather that the course is an annual process of

interaction between students, the materials and the tutors and that, in this sense, tutors and students produced course as well as course teams.

Question 3:

Are distance learners' rate of retention and failure affected by the facilitator/tutor factor?

The answer to this question according to the research finding as illustrated in table 13 of chapter five shows that the facilitator/tutor factor affected the distance learners' rate of retention and failure.

It was part of the findings during the investigation of this researcher that mastery of the subject matter by tutors, negative use of language and inability to impress on adult learners the need to see tutors as partners in progress contributed negatively to the rate of performance of adult learners. Thus it was obvious that most tutors lacked the basic tenets of psychology of adults and basic need

of distance learners. This was confirmed by Rekeddal (1981), and Sweet (1982) both of whom declared that tutor interaction is important to retention and success in distance education. However, it should be noted that not all interaction is perceived as positive.

The study went further to show that instructional support from the tutor is a powerful factor in persistence. It also showed that the effect can be negative as often as it is positive. Tutors' instructional support and feedback on assignments could be hindering when the tutor is perceived as not caring for the learner. Sweet (1982) discussed the need for instructors to be responsive and supportive in their interactions with learners. He said comments and marks on assignment are part of supportive materials. Where tutors comments are positive and encouraging, the learners feel wanted and would like to continue with studies so also is when the marks on assignment are encouraging.

Having agreed with the fact that distance tutors as well as distance institutions staff need to know more about characteristics of distance learners Ross Paul (1987) declared:

"If one accepts the assertion that working in distance education universities poses a number of major conflicts for incoming academics who have not had previous experience in such a milieu. It follows that the institutions have responsibility to provide orientation and staff development programmes. It has been suggested that the adjustments faced by incoming academics confronted with highly integrated systems which challenge traditional notions of academic autonomy and freedom are major and that it takes a considerable length of time for them to adjust to the distance education environment. At least in theory, the shock of this adjustment should be lessened by a well developed programme which forces incoming academics to examine their own orientation and those prevailing in distance education institutions".

A comprehensive staff development programme as advocated by the Commonwealth of Learning (COL) will be proposed at the end of this study.

Question 4 Do environmental factors play any significant role in the TC II distance learners' rate of retention and failure?

The research findings as illustrated in Table 14 of chapter five shows that environmental factors affected

the subjects of the research significantly. The various variables considered include the location of the learning centres, and nature of the learning centre and other environmental variables. Apart from what the chi-square analysis revealed, the educational infrastructure as available at the centre did not augur well for adult learners. Most of the furniture at the learning centres are meant for traditional school children. Thus comfortability of the adult learners was not considered. The distance of the learning centre for learners from the rural setting was another factor. It should not be an over-statement that such environment will not be conducive to adult learners since what motivate children to learn are not the same as those of adult.

The need for a good learning environment was corroborated by the studies of Panteges and Creedon (1978) Lening et al (1980) when they advocated a match between student personality needs and the institutional ability to meet with the students needs and to present an image suitable to the students' personality. Also in Tinto's (1975) theory of students attrition, dropout was viewed as individual's interactions with both academic and social system of an institution as determinants of personal goal commitments as well as commitments to the

educational institution. The individual's experiences in the system continually modify his or her goal and institutional commitments in ways which lead to persistence and to varying forms dropout.

Spady (1971) also proposed a model of retention which emphasised institutional characteristics. He supported earlier researches which spoke of an 'environmental press' referring to the demands which an institution places upon a student. In Spady's (1987) view, "full integration into common life of the centre depends on successfully meeting the demands of both its social and academic system.

Oguntonade (1987) in his study revealed that because of the uncomfortable nature of most study centres, students advocated for their cancellation. The argument in support of this is that most learning centres outside the base of the institution offering distance learning is not always good as that of the institution. They concluded that if study centres established all over the country are as adequately equipped as that of the institution's base then, study centres can be retained. It is of paramount importance to make the learning centres interesting spots of learning for learners.

Question 5

Does the financial status of distance learners affect their rate of retention and failure in their academic performance?

The findings of this study established that the financial status of the learners greatly affected their performance. This was clearly illustrated in chapter five with table 15.

Demographic information about the learners revealed that most of the respondents were male with heavy financial responsibilities. 75 percent of the learners were male. Out of these 56% of them had more than six children and infact only 3% of the learners were still single.

Considering the monthly earnings of the respondents who were broadly grouped into high income and low income indicated that to both groups, the monthly earning can hardly take care of their financial responsibilities. It is then not surprising to see most learners not being able to meet up with the financial demand of the programme.

It was discovered during the course of investigation that a group of students from one of the states were to withdraw from the programme because of their inability to provide registration fees. It was not until a group of philanthropists came to their aid with about the sum of thirty thousand naira before they could proceed with registration.

In another development it was discovered during the review of literature that some learners in some states could not afford to buy the course books due to financial incapacitation. It is then not surprising to state that financial factor is one of the factors hindering the rate of retention and failure of these set of learners.

Oguntonade (1989) argued in favour of distance learners to show that the financial burden placed on them is heavier compared with full time students. He said, not that full time student has no children to cater for, but he is much more likely to secure assistance of other relations because is more readily recognised as a student than the distance learner who is seen

primarily as a worker. Indeed, in the Nigerian society, the worker is more likely to have the responsibilities of other children and relations shifted on his shoulders. Thus one can see the plight of distance learners as regards their financial commitments.

Other studies that cited lack of financial support as a reason given by drop-outs from distance education courses was that of Woodley and Parlett (1983) Rikkedal (1981) even enlarged 'financial' to read economic reasons as one of the most frequently cited factors for discontinuation of correspondence studies at NKI-Skolen in Norway. Bean and Metzner (1985) noted that older part-time students reported financial concerns as reason for withdrawal and failure.

#### Question 6

Table 16 shows that social responsibilities of learners greatly affected their rate of retention and failure. So many variable came under close examinations under this factor. The range from demographic distribution of learners as illustrated in Tables 8, 9 and 10 explained this. These factors

affected much of the social life of adult learners. These include time, hours of study, extra-curricular activities, time for leisure, marital, and child rearing.

The tables revealed that 94% of the learners were married, only 3% were single. This would certainly affect the learners because only 3% of the learners could be taken to have enough time for study.

Another implication of this is that out of the married adult learners, 56% of the total respondents had not less than six children. What this means is that a lot of responsibilities is saddled with this group of learners. In an attempt to meet up with their domestic demands, all of the adult learners had an additional job in addition to the teacher's Grade II programme. For example in addition to teaching, 34% of the learners were traders, 37.5% farmers, 4.5% transporters, 5% spiritualist and 3% engage in petty trading.

The above varying degree of commitment of distance learners, the social burden that marriage will bear on each learner and domestic duties, we know, is a significant source of dissipation of time and energy, a social factor which of necessity reduces the spare time available for studies. Shopping, gardening, sowing etc could be regarded as part of relaxation when they are done occasionally but when they are done with the intention of making it another source of income they become more of a burden. The whole problem of family responsibilities, domestic chores, extra-curricular activities may even be

further complicated by an hostile working environment of learner. Where the situation described above is applicable to most learners, the result is what we have in the present study where the social responsibility of learners significantly affect the rate of retention or failure of learners. Though this would have not been so if the financial earnings of learners is commensurate with their domestic and other social responsibilities.

#### Question 7

Does the amount of motivation of TC II distance learners' employers affect their rate of retention/failure.

Table 17 as in our analyses established that the amount of movitation affected the academic performance of learners significantly.

In discussing this table 17 certain areas of the programme as they affect employers, the peer group, the immediate environment, the institution and the counsellors are considered.

To start with the area of employers, there had not been enough motivation to warrant the quick completion and success of the programme. The condition of service remains stagnant. There had been no book subsidy, there is no bursary or any allowances that

will serve as incentive to learners. Infact, to facilitate quick completion and success, the employer ought to reduce the work load, rather the work load is increasing term after term.

To show how learners were engaged in their various schools apart from adequate record keeping and some outside engagements.

In most cases, majority of the respondents taught in over-populated environment where already there were shortage of teachers and classrooms. Burdened with this heavy task, the government at the same time want uncertificated teachers to run the distance studies without any incentives.

The institution is another area of attention. The NTI has not been caring enough. Part of what it is supposed to provide is pre-entry motivation which include, pre-enrolment counselling, and academic advising, identification of 'high risk' career counselling, study skills assistance, remediation services and exit interviews are all necessary for

distance learners. All these are not forthcoming from the NTI. Though this is not common to NTI alone but to nearly all distance institutions. For example, Rounds (1984) declared that most distance learning institutions failed in providing pre-entry services to their distance learners. That was one of the main reasons why Sweet (1982) Rekkedal (1981) recommended a better training program for faculty and tutors which incorporate counselling skills. Infact, the practice in Indra Gandhi National Open University is highly encouraging Narayanan (1990) described the counselling assistance thus.

"The counselling is done by part-time tutors/ counsellors, who are drawn from the institution where the study centre is established. The tutor/counsellor will guide the students in regard to difficulties, if any, experienced in the instructional material; mark the assignments submitted by the students. The students are given feedback of their performance

in the assignment with guidance for improvement".

This kind of assistance as practiced by (IGOU) distance education programme deserve commendation.

Another source where learners expect motivation was the nucleus and the extended family unit. But in most cases such motivation had not been offered. The reason for this is not far-fetched. Teachers in most cases constituted majority of bread winners in most homes, both rural and urban. Thus this group of people are looked upon as the local champion who need not go further again in their educational career.

The belief is that the moment such a person improves educationally, he may desert the rural or local environment for urban or elitist area of the society. Thus, assistance in any form is always impossible.

Tutor as source of motivation too is very important. However, some of them were not giving it not because they are not interested but because

of their lack of orientation programme in distance learning.

These lack of motivation is common in most institutions as earlier on said and it has greatly affected the rate of retention and failure of distance learners.

Fern Universitat Bartels (1982) reported that students cited one of the most important factors in persistence and success as having the ability to choose a major subject according to interest. Emphasis was put on interest, that institution and government should let learners be interested in distance programme and courses. Bean and Metzner (1985) classified interest or lack of it under the broad general heading of 'satisfaction'. They noted that if satisfaction level was high, the competing demands for the older students' time might not have had such a negative effect on retention and success.

#### Question 8

Do boredom, professional advancement, welfare of learners, external influence and cognitive ability affect the rate of TC II distance learners' retention and failure in their academic performance?

Table 18 of chapter five shows that the effect of cognitive was of no significant effect it weighted 3.4 followed by boredom which has a weight of 7.73. The factors that have serious impact on the performance of learners in order of importance are professional advancement, welfare factor and external factor.

There were glaring reasons for this, auxilliary teachers as those unqualified teachers are called cannot be motivated by boredom or cognitive ability but the urge to become a professional teacher which may lead them to a higher status in the teaching professions is of paramount importance. Moreso when there exist now another opening for the attainment of NCE through distance studies and infact through the NTI, the institute which is currently, training them for TC II.

This will not only improve their professional status, but it will enhance more pay. Thus the issue of welfare comes in. Infact, the basic fact that attainment of Grade II Certificate can, in addition, serve as pre-requisite qualification for other opportunities satisfied the external expectation factor. It may be for the purpose of politics, business involvement , establishment of nursery primary school and appointment to government board and parastatals at retirement. This probably butressed the retention of most learners. Even when they record failure at the first attempt, the urge to continue is apparent.

Thus it is worthy of note to acknowledge the role of professional advancement, welfare factor and external expectations play in retention of learners and its roles too in sustaining learners' interest when they have to repeat before finally attaining success.

## 6.2 Implications for a Conceptual Model

It is clear from the findings of this study, and the review of literature, that the retention and

failure process in a distance education system is a complicated mix learners, institutional and environmental variables which interact over time to influence retention and failure decision. So far, the conceptual model which appears most relevant in describing factors affecting retention and failure seem to be the Powell et al (1990) multivariate frame work where predisposing characteristics, institutional factors and life changes interacted together to produce failure and persistence.

This model proposed that failure and retention decisions were based on three major categories of variables: The first set consists of those characteristics students bring to the educational process at the time of entry, such as educational preparation socio-economic, demographic status, and motivational support. The second category consists of changes in life circumstances that disrupt or in some way alter the goals, expectations, and commitment with which students begin their distance education studies.

Such life changes as family problems, personal illness relocation, financial and social responsibilities. These sometimes occur unexpectedly.

The third category contains factors that can be termed institutional, that is under the control of the educational provider. These include quality and difficulty of instructional materials, access to, and quality of tutorial support and the administrative and other support services provided.

There were direct effects between variables or between variables and outcomes, such as non-understanding of course contents and the educational backgrounds of students. So also the financial status and the inability of students to buy course book.

There were direct effects presumed most important such as the impact of study centres, tutorial support and motivational material. To crown it all, there was the compensatory interaction effects among sets of variables.

From the analyses of the findings, it has been shown in multivariate model has important factor on retention and failure. A few of the conceptual model of retention recognise the complex interplay of factors affecting retention. These include the Spady's (1971) model, Tinto (1975) and Bean and Metzner (1985).

Spady's theory is that if the student could meet the demands of the institution and felt rewarded in the process, it was likely that successful assimilation and persistence would be the result.

Thus Spady's model only rested its argument on academic and student characteristics variables as major factors influencing retention and failure in distance education systems whereas other scholars identified more variables.

Tinto model viewed the educational institution as a social system into which the successful student integrated over time. He described the integration process as a series of interactions between the person and the social and academic systems of the institution.

It is these social and academic variables that are modified over time influencing the goals and commitments of students.

These models failed to recognise and incorporate other variables that played significant roles in failure and retention decisions. The Bean and Metzner model was another model reviewed.

Bean and Metzner (1985) proposed that, when academic, environmental, social, external and financial variables were favourable to success the student would continue, and, if both were unfavourable, the students would most likely fail or withdrawal. However, if academic variables were favourable but environmental variables were not, adult students would still likely fail or withdraw because the academic would not compensate for poor environmental support. On the other hand, if there were favourable environmental conditions but poor academic variables, the adult students would likely persist because, for them, environmental support could overcome the

academic variables. This argument is perfectly in order with the findings of this study.

It will then be in the interest of distance learners if the factors which were reported as being critical to success in this study can be used to modify the Bean and Metzner (1985) model to reflect the assistance education students' needs. For example, there is serious need to improve the various infrastructure so that adult learners will have all these variables (environmental, academic and psychological, financial and motivational) favourable.

Thus there is the need to modify the Bean and Metzner model in favour of what our local environment demands. The student population and the environment where Bean and Metzner operate is an advanced society whereas our own environment where this study is carried out as a developing society where all variables needed for the success of educational system would have to be maximally achieved.

Once the Bean and Metzner model has been modified it could then be adapted to the need of the developing

country distance education system and could then be used to examine empirically the relative significance of variables which are associated with retention and failure in the distance education literature.

### 6.3 Implications for Retention Strategies

The emphasis in retention research should be on prevention, not prediction, once significant factors affecting persistence have been identified for a given population, then retention strategies can be developed.

Recommendations for retention strategies would affect almost all areas of the institution and learners. The emphasis in this section would be on those concerning student support services, government policies, finance, institution's inadequacies, motivational services and staff development.

CHAPTER SEVENRECOMMENDATIONS AND CONCLUSION

This chapter summarizes the recommendation that emerge as a result of our findings from this study. This is with a view to sustaining the distance learners' interest and improved performance in their studies.

### 7.1 Adequate Orientation Programme

Learners were neither made to undergo an orientation programme nor introduced to some basic aspects of attributes of distance learning medium. The institute should provide opportunity for learners to find out information about themselves, (in-term of what it takes to run the course, the duration, and finances). Information about the institute should be provided too.

This helps the learners to see how well his or her characteristics could match the institutional demands. Sometimes, adjustments can be made to enhance the fit. For example, if an adult learner is returning to school for social reasons or their learning style is one which requires interaction, then distance education may only be a study group. Orientation should address ways in which the learners can adapt their learning resources to fit their needs.

7.2 Reduction in the Cost of Course Materials - The Cost of Materials is more than the learners can cope with. More than 65% of the respondent income is so low that hardly could they cope with their financial and domestic responsibilities, and their quest for education through the D.L. programme of the N.T.I. Thus there is need for a downward review of the cost of course materials. The tuition fees too should be reviewed to reduce the financial burden of learners. It is necessary to mention here that the centre for Distance Learning and Continuing Education (CDLCE) of the University of Abuja should learn a lesson from the N.T.I. The centre should review the various amount proposed as tuition fees for its pioneer students.

The amount credited to the Director Prof. A.O. Ozigi is not realistic in the Nigerian situation, where domestic and socio responsibilities of adult learners are enormous. The fees as published in Concord of March 3rd, 1992, thus,

N6,000 per session for degree in law  
 N3,000 per session for other degree  
 courses and N2,000 for diploma in law  
 while a total sum of N600 is also  
 payable for registration.

Going by the NTI learners experience it may discourage potential distance learners rather than encourage them.

Infact the distance learners of the external studies programme of university of Ibadan are still struggling to cope with the ₦500.00 tuition fees which is for less than what the (CDLCE) is about to charge.

### 7.3 Equal Educational Background for Learners

It was discovered that there were different educational background possessed by the learners. This is not in line with one of the most important aspects of distance education. That is, equal educational background. There is the need for the programme planners to carry out a study of the educational background of their clientele so that the course work will be based on the common educational experience of the learners. As it is here there are about 30% Grade II referred holders, 53% primary six and Arabic certificate and 5% of S.75 holders.

### 7.4 Assignments and Feedback Issues

It is noted that there were few assignment for the D.L. This must have been so because facilitators had not done enough on feed back issues going through the work done by learners. For example tutors/ facilitators comments on assignments were not always

given adequate place. It is therefore necessary to award grades on assignment objectively and comments on learners assignments should present explanations to justify the grades awarded. Besides, the comments, should be encouraging, explicit, positive and less critical and ambiguous.

#### 7.5 Support for Studies

It appears that most distance learners look for some kind of assistance to keep them up with their studies because of the expensive nature of distance education. About 60% of the respondents in the present studies ran into financial crises. There is serious need for motivation and encouragement from their homes, families, peer groups and philanthropists and governments. There is need for people who understand the plight of distance learners to come to their aid in solving most of the problems confronting them and a times distance learners should be encouraged by all to see why he/she should try and in the face of all odds persist in his/her study and succeed.

It was discovered that a group of philanthropists came to the aid of some of the respondents to the tune of thirty thousand naira in solving their financial problems. This is very encouraging. But this problem could be reduced if the state government or federal government can give bursary awards to the learners as in the case of Ogun State distance learners of the University of Ibadan external studies programme who were given N500 each as book subsidy even though the learners are workers.

#### 7.6 Simplification of Study Units

One of the major factors that contributed to failure and withdrawal of the learners was that they found some of the courses difficult to understand. Thus the trainees reaction to the print medium in general is considered to be difficult. Some find reading itself difficult and learning from written materials seems difficult for some.

Some think that the listening and watching which are the significant aspects of conventional teaching/learning process are missing in distance education.

For this, distance learners need to learn what reading consists of, and how one may derive the best out of printed materials. Distance learners must possess, reasonably developed study skills in order to benefit from materials. This should form part of the contact session.

Multi-media approach should be incorporated in the teaching learning process of the institute as soon as practicable. There is an urgent need to establish the media unit of the institute.

The human elements should be reinforced. The regional/study centres where the facilitators meet the learners in face to face teaching and counselling should be well equipped. Infact these centres should be chosen among existing institutions that are well equiped. There is need to take care of astetic needs of learners, thus decent, neat and beautiful learning centres need to come into focus. This will make learning more interesting and elicit their interest. Career planning helps learners to clarify their long-term goals and to see how their study fits into

their plans. Crisis counselling, with emphasis on teaching coping strategies, can help learners through unforeseen circumstances such as marriage breakup, employment lay off or illness.

#### 7.7 Inadequacy Number of Course Books

It was noted that students in Sokoto state withdrew for non-availability of cycle four course books and this apparently showed that the NTI management is poor in projection. The state had more than five thousand learners at the time. This is not due to students financial problems but that of the NTI. It is then necessary for NTI to quickly correct this managerial fault so that it may not affect other states of the federation.

Another important problem associated with course books was the fact that majority of students in some states did not buy course books. Take for example out of 540 registered studentss of Anambra state only 142 books were supplied on English circle 1 and so for other subjects. This was also true of other subjects. Thus where

students lacked course books under distance learning system, such students could not said to be serious. The next thing that will happen is failure at examinations. To sustain students interest and to improve success rate students should be made to buy books. To achieve this the cost of books should be drastically reduced or students could be assisted through book subsidy scheme to be arranged by the Federal Ministry of Education since policy matters on primary education is between the federal and local governments. This will also help to reduce wastage on the part of the NTI. This is very necessary because apart from the social responsibilities of students which did not allow them to have enough money, the take home of learners at the end of the month could not adequately maintained them and members of thier family. Thus they need serious financial assistance.

7.8 Payment of Honoraria to Course  
Tutors and Supervisors

It was noted too that the management of the NTI did not take the welfare of part time staff seriously.

For example our findings revealed that some staff in some states did not receive their honoraria at the appropriate time. This does not augur well for effective participation of staff in the system. Specific mention must be made of a place like Benue and Imo states where studentss performances in some centres were very encouraging. This performance must have been through the hard work of staff. Thus failure in the payment of their allowances as revealed in analysis on the payment of honoraria to tutors and supervisors should stop and the NTI should find a way of boosting the morals of staff rather than killing it. The federal government should give more money to NTI rather than the NTI relying on fees collected from learners in paying its staff.

#### 7.9 Effective Co-ordination between the Monitoring Unit and the Field Staff

It was established that the monitoring unit of the NTI staff have been relating well with the field staff at state and study centres. Findings revealed that series of meetings were held with field staff where progress of the TCII DLS were discussed and

problems militating against the programme were also discussed.

7.10 The Introduction of NCE DLS and its Impact on TC II DLS Programme

The TC II DLS programme was launched in 1984 and it went smoothly till March 1990 when the NCE DLS was launched. With the advent of the NCE DLS programme, additional responsibilities now accrued to NTI and this has affected its primary functions of upgrading unqualified grade II teachers through DLS. The institute now find itself running two distinct programmes to two distinct group TC II and NCE. Borne out of these, some test that are normally carried out for TC II like review and end of cycle tests were not done in some states as before. This eventually affected performances of students and their retention.

It also affected the number on roll because there had been a sharp fall in the number of TC II students because of lack of adequate attention by staff.

The NTI need a kind of proper planning to make sure that the industrial nature of distance learning

is effectively utilised. The two programmes supposed to be complimentary to each other. This will even help in making sure that the graduates of the TC II DLS eventually register for the NCE DLS with pleasure.

It could be seen that the hope of student persisting and improving is very high but the NTI need to make effective use of its human and materials resources. In addition the federal government should make more fund available to the NTI so that if students failed to pay at the right time the fund available could be made use of before students payment.

In addition to the various recommendations, the additional submission of the Daily Champion Editorial of November 3rd 1991 could be carried along.

"to achieve the goal of making teaching more professional and respectable, the Federal Ministry of Education must necessarily concern itself with fashioning out policies aimed at retaining the good hands it has. It is an open secret that, on account of poor financial rewards, only people who cannot get a job elsewhere stick with teaching. In addition

to improve conditions of service, therefore, the ministry ought to plan regular and meaningful refresher courses to ginger teachers up. It should also design reasonable awards for excellence to give them a sense of pride in themselves and their work. Teachers must not be made to feel that their reward are not available to them here on earth".

### 7.11 Conclusion

The roots of distance education lies in correspondence tuition which originated in the last century. In the later, courses very similar to those of conventional educational institutions, are prepared and sent to students through mail. The students will study the materials, work on assignments and send them to the distance teaching institutions for evaluation. Evaluated assignments are sent back to the students, while the students later sit for the final examinations.

Of late, it has been widely suggested and accepted that in spite of the high quality of self-instructional materials, distance learners do need human support at

one or the other stage during their academic pursuits. Today distance education has achieved a status of its own. It has been accepted by educators as a discipline and treated on par with conventional education.

It is as a result of this that it is very necessary to bring about a process whereby people involved in the field of distance education be exposed to various training opportunities to be able to project and produce sound graduates of distance education.

Staff development for distance education has a history of its own. The training of course-term, educational technologists, policy makers, planners directors, managers, course writers, designers, editors and researchers has been taken by different institutions emphasising different needs and providing related training to meet these needs. Thus the NTI is not an exception.

All categories of staff in distance education institution be it dedicated or partial institutions should be trained. It is perhaps useful here to comment on the term training. We use it to describe

the acquisition of knowledge and skills that people who work in distance education need. But the term may not be entirely satisfactory. Many academics, who are distinguished scholars in their field, become involved in distance education as course writers, and find unwelcome the idea that they need training.. Activities under the name 'orientation' or 'professional development' writers workshop may be more palatable. Training however remain the most appropriate term for general use.

Those coming to distance education without an academic background will not only need orientation to distance education but they will need training in writing, editing and the use of technology - narrow casting, broadcasting and the use of computers. Academic staff may also need training in administration, tuition at a distance and adaptation to distance learners behaviours and needs.

It is therefore recommended that there should be training facilities in the following areas for distance staff.

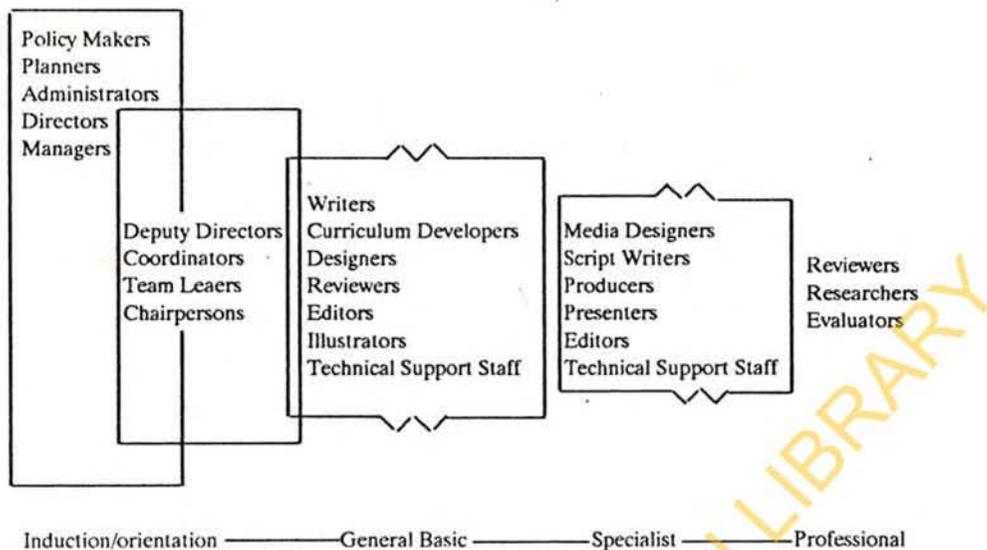
- . Course planning
- . Development and production of materials
- . Part-time course writer
- . Curriculum designers
- . Course Co-ordinators
- . Tutor etc.

Peter Kinyanjui (1990) proposed a training model for distance educators and Janet Jenkins (1990) proposed the functions.

Thus the Commonwealth model (1990) training programmes for various categories of staff in distance education system is hereby recommended. They are indicated in Figures 12 - 20.

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Fig. 12 A Training Model of Distance Educators in Different Settings



*Source:* Adapted from Peter Kinyanjui. The Training of Staff for Distance Education System; A continuing Process in; Perspectives on Distance Education of the Commonwealth of Learning. Vancouver 1990

Figure 13**The Training Model Functions, skills and training needs for distance education**

<i>Personnel functions</i>	<i>Stage 1 Basic expertise</i>	<i>Stage 2 Educational application</i>	<i>Stage 3 Distance education application</i>	<i>Stage 4 Specialised extension</i>
1. Planners managers, administrators	management or administration a	educational administration	distance education systems	personal function
2. Course designers				
a. academics and writers	subject knowledge	curriculum design and materials development	design of self instructional materials	teaching own subject at a distance
b. editors and instructional designers	copy editing and design	editing and design of educational materials	editing self instructional materials	specialist text design skills
c. media producers	media production	production of educational programmes	multi-media education	production for subject specialisms
3. Tutors and counsellors	subject knowledge	teacher training and adult education	teaching at a distance	discipline related teaching techniques
4. Researchers	research techniques	research in education	research in distance education	specialist skills

Source: Perspectives on Distance Education Commonwealth of Learning (1990) Vancouver.

Figure 14

**Tasks and training needs of policy makers, planners,  
administrators and researchers**

<i>Personnel</i>	<i>Tasks</i>	<i>Training needs</i>
1. Policy maker and planner	1. Within the framework of national priorities, needs and constraints etc. conceives, plans and guides in the execution of distance education programmes	1. Overview of distance education system, its strengths and weakness, its social need and economic viability 2. Knowledge of developmental plans in other sectors so as to relate education to the overall development of the country
2. Administrator	1. Overall manpower planning 2. Institutional management 3. Co-ordination and supervision of institutional programmes 4. Popularizing the distance education system 5. Some other specific tasks related to services in the field as under: (a) Appoints tutors, allocates students to tutors (b) Deals with students and tutors problems (c) Responsible for efficient tutor functioning (d) Arranges staff and equips study centres 6. Schedules face to face sessions 7. Arranges other uses of study centres 8. Disseminates information to students 9. Supplies feedback to institutions 10. Collects marked assignments from tutors 11. Sends samples for monitoring 12. Conducts examinations, sends results to institutions 13. Regional publicity 14. Helps in admissions	1. Knowledge of distance education and its operation at grass roots level 2. Knowledge of institutions, programmes and procedures 3. Knowledge of distance education institutions working within the country as well as abroad and communicate with them 4. Student and tutor problems 5. Training in management and supervision of supporting staff 6. Understanding of local conditions and problems 7. Skills in establishing rapport with community at grass roots level 8. Skill in human relationships
3. Researcher	1. Design and carries out research in identified problems of distance education 2. Analyses and interprets data 3. Makes recommendations based on research findings 4. Compiles final report 5. Disseminates research	1. Understanding of distance education and its strengths and weaknesses and problem areas 2. Orientation towards various educational research designs 3. Sampling techniques with reference to distance education 4. Techniques of constructing instruments for data collection, analysis of data 5. Report writing 6. Dissemination skills

*Source: Asian programme of Educational Innovation and Development (1984)*

Figure 15

## Training For Part-time Course Writers: Objectives, Contents, Strategies

Objectives	Contents	Strategies
1. To explain the basic features of distance education.	Difference between distance education and other systems of education; philosophy of distance education and its implications	A handbook on distance education sent along with the offer to the writers; lecture-cum-discussion and a general overview through a video.
2. To identify the unique characteristics of distance learner.	Knowledge about target learners; knowledge about characteristics variations in and psychology of	A handout on adult psychology and adult learner.
3. To describe the features of the IGNOU systems	A brief history, organisational structure and academic activities of the IGNOU	distance learners and adult learners Copies of the IGNOU Act and brochures (the relevant ones) to be sent; face-to-face interaction.
4. To explain the rationale behind a particular course structure.	Level of the target group-their previous knowledge and standards assumed; outline of the course.	A handout with relevant course outline (sent beforehand) and face to face interaction with the faculty
5. To explain what unit design is.	Principles of SIM (self instructional materials) and its pedagogic implications; features of SIM and functions thereof; variations in format; house-style of a particular programme; level and scope of content; how to pretest and incorporate the feedback in the unit and idea of concept mapping	A prepared self-instructional unit (with explanations) to be sent; face-to-face explanation by DE expert (could be supplemented with a video) and faculty experts highlight the house style decided on for a particular course. A workshop - produce a unit and get it evaluated.
6. To explain the role of simple language and conversational style.	Need for using simple words, active verbs, simple sentences and addressing the learner directly to relate the material to the affective domain of learning.	Distance education experts talk about the features of conversational style - to be supplemented by subject experts. (Specific examples may be picked up from the material sent or the writers could be asked to pick up examples themselves).
7. To prepare assignments	Purpose, functions and types of assignments; academic communication 7 evaluation; scope and number of assignments, frequencies, etc.	Studying and handling of sample assignments and discussion followed by a video on two-way communication. Subject-specific instructions to be given.
8. To describe the assessment system	Types of evaluation; purpose of various types of evaluation; grading - its advantages, issues involved, weightage, etc.	Lecture-cum-discussion (Illustrations are essential).
9. To describe the role of multi media package in the IGNOU.	Functions and limitations of various media and the choice of media in the context of a subject.	A lecture on multi-media approach demonstrating the use of audio video for various disciplines.
10. To identify areas in need of audio and video programmes.	Notion of 'briefs' and academic notes and how to write them; identification of areas which need audio and/or video programmes, duration of programmes.	Samples of 'briefs' & academic notes; discussion with faculty experts; discussion with producers (hopefully with a grounding in the subject) who must be present throughout the session
11. To write for practical/field based courses (School-specific).	Outlining and designing of practicals & field trips and relating them to theoretical inputs, reporting on practicals and field trips and evolving methods of evaluating the practicals	An outline of practicals should be sent before hand to the writers; A one-day workshop: In the morning session, on experiments innovatively designed for the IGNOU students and demonstrations may be discussed and in the afternoon session a lecture on how to write for practicals including discussion on how to tabulate results may be organised.
12. To adhere to work schedule	Explain the importance of working according to schedules and outlining the shedule itself.	A manual.

Source: Koul, B.N. and K Murugan, eds., Training Trainers: Needs, Contents, Strategies - A Workshop Report, New Delhi: IGNOU, 1989, pp 41-2).

Figure 16**Tasks and training needs of programme and curriculum designers**

<i>Tasks</i>	<i>Training Needs</i>
<ul style="list-style-type: none"> <li>● Assess distance learners' needs</li> <li>● Situational analysis</li> <li>● Conceptualise and design appropriate needs-based curricula</li> <li>● Integrate media, face-to-face discussion and practical components of curricula</li> <li>● Prepare comprehensive course outlines</li> <li>● Define suitable learning activities</li> <li>● Prepare 'learning outcomes' (objectives)</li> <li>● Participate in evaluation of curricula</li> <li>● Data management and course planning</li> </ul>	<ul style="list-style-type: none"> <li>● Overview of distance education systems</li> <li>● Defining target groups and their problems</li> <li>● Assessing resources and needs of distance education and the institution</li> <li>● Defining learning activities</li> <li>● Knowledge of teaching strategies</li> <li>● Curriculum designing skills</li> <li>● Using various media in distance education</li> <li>● Research and evaluation in circular areas</li> <li>● Applied computing</li> </ul>

Source: Perspectives on Distance Education Commonwealth of Learning (1990) vacouver

Figure 17**Tasks and training needs of course coordinators**

<i>Tasks</i>	<i>Training Needs</i>
<ul style="list-style-type: none"> <li>● Ensure smooth course development</li> <li>● Prepare learner and tutor guides, assignments, tests marking guides, etc.</li> <li>● Arrange review and testing of materials</li> <li>● Communicate with learners and tutors as required</li> <li>● Monitor tutors' assignment marking</li> <li>● Arrange workshops and practicums</li> <li>● Write test and examination items</li> <li>● Train tutors</li> <li>● Data management and course development</li> </ul>	<ul style="list-style-type: none"> <li>● Orientation to distance education</li> <li>● Writing skills</li> <li>● Coordination skills</li> <li>● Course development/production processes</li> <li>● Workload scheduling</li> <li>● Management and communication skills</li> <li>● Testing and evaluation</li> <li>● Test item development skills</li> <li>● Training skills</li> <li>● Applied computing</li> </ul>

Source: Perspectives on distance Education Commonwealth of Learning (1990)  
 vacouver

Figure 18

## THE ROLE OF COURSE DEVELOPERS

Course developers who may or may not be course coordinators depending on the nature of the development task and overall workloads, are the primary managers of course development. Detailed course planning, or blueprinting, involves decision making about the overall structure of study material, the statement of objectives and the identification of a course assessment approach. Once plans are approved and resources allocated for course development, course developers see the project through to completion. Course development tasks and their training needs are shown in the table below

Tasks and training needs of course developers

<i>Tasks</i>	<i>Training Needs</i>
<ul style="list-style-type: none"> <li>● Prepare blueprints for developing material and organise systems material</li> <li>● Write study units in collaboration with other course team members</li> <li>● Supply ideas for visual design</li> <li>● Revise drafts</li> <li>● Work with reviewers, editor and illustrators in preparing materials</li> <li>● Test and evaluate materials</li> <li>● Review and revise galley proofs from printers</li> <li>● Prepare feedback questionnaires, pretests and post-tests</li> <li>● Computer-based course development</li> </ul>	<ul style="list-style-type: none"> <li>● Orientation to distance education systems</li> <li>● Writing and receiving skills</li> <li>● Knowledge of target groups and their problems</li> <li>● Knowledge of learning processes, teaching strategies and subject matter</li> <li>● Locating resources and materials, etc.</li> <li>● Knowledge of multi-media course material production</li> <li>● Testing and evaluation skills</li> <li>● General Knowledge of design, editing and printing processes</li> <li>● Applied computing and electronic Publishing</li> </ul>

Source: Perspectives on Distance Education Commonwealth of Learning (1990) Vancouver.

## THE ROLE OF TUTORS 221

The tutors' role in the DL system is to provide academic support of learners and, thereby, attain the objectives of the course. Their main support task is to provide feedback and motivation by correspondence. This is achieved through tutor-marked assignments. Assignment questions are determined by course coordinators, or obtained from the originating institution. Tutors grade learners' answers and assign marks according to standards set by course coordinators. A key task for tutors lies in offering constructive teaching comments on submitted assignments, highlighting learners' weaknesses and suggesting remedial activities. Course coordinators monitor tutors' marking and grading to ensure good teaching standards and comparability of grading between tutors. Tutorial staff have input into assessment activities through the course evaluation process.

While the main demands on tutors are in the area of non-contiguous 'teaching', they are also expected to provide individualised telephone tutoring and face-to-face tuition in group sessions. Tutors keep records and provide up-to-date information on all their learners to course coordinators and DL. They are also encouraged to provide academic counselling when it is requested by learners. The next table summarises the role of DLS tutors and their training needs. This training is to be provided by the Distance Less Installation through the use of self instructional material, workshops, and briefing and debriefing sessions.

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**Figure 19**

### Tasks and training needs of tutors

<i>Tasks</i>	<i>Trainig Needs</i>
<ul style="list-style-type: none"><li>● Correspond with learners</li><li>● Conduct face-to-face sessions</li><li>● Provide prompt, accurate and constructive feedback to learners on their progress</li><li>● Mark assignments and remit results</li><li>● provide guidance and counselling to learners</li><li>● Provide feedback on learners problems and procedural difficulties</li><li>● Maintain academic records</li><li>● Communicate with learners</li></ul>	<ul style="list-style-type: none"><li>● Orientation to distance education systems and the tutors' role</li><li>● Course evaluation</li><li>● Knowledge of subject matter</li><li>● Knowledge of programmes, schedules, regional services and facilities</li><li>● Skills in communicating with learners</li><li>● Counselling and human relations skills</li><li>● Record keeping</li><li>● Computer-based communications and data management</li></ul>

Source: Perspectives on Distance Education Commonwealth of Learning (1990) Vancouver.

## THE ROLE OF PUBLISHERS

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Even though the Institute imports most of its courseware, learning packages delivered to learners normally contain 30-50 percent OLI-produced material. This may be due to extensive adaptation, development of supplementary material, or, in a number of cases, recasting text and other media of suit both house style and normal standards of layout and design. We find, through critical examination of materials from a variety of sources, including long-established distance teaching institutions, that design leaves much to be desired. A publishing department with relatively inexpensive technology, in partnership with competent course coordinators can transform poor originals into good interactive texts. Qualities that we expect in course materials include:

- an uncluttered and a readable style;
- interactive self-instructional material with consistent visual cues, practice exercises and feedback;
- error-free text;
- user friendliness including, where possible, a sensitivity to users for whom English is not a native language;
- a well designed approach to learner assessment where assignments and examinations follow logically from stated learning objectives and the presentation of subject matter;
- stimulating design and content, and self-pacing mechanisms;
- strong visual design and a sensible use of mnemonics;
- consistent typography;
- well integrated print and non-print media; and
- media design and layout that follows instructional design norms.

Publishing departments may also have the responsibility to obtain rights to use intellectual property. It is becoming an increasingly complex and expensive task that can retard rapid development of courses, especially those where the originating institution has itself centered into contracts which define the limits of their use.

Even though the scope of publishing may be perceived to be limited at the Institute, our experience seems to indicate otherwise. Well trained and skilled staff must respond to a variety of demands. Currently, no provisions exist for training needed in publishing departments. This is an area where immediate action would prove most useful. The next table summarises these tasks and their training needs.

**Figure 20**

**Tasks and training needs of publishers**

<i>Tasks</i>	<i>Training Needs</i>
<ul style="list-style-type: none"> <li>● Text editing and mark up</li> <li>● Collaborate with authors to remove content ambiguities and confusions</li> <li>● Language editing</li> <li>● Adjust readability, logical flow, sequencing and presentation of materials</li> <li>● Visual design and illustration</li> <li>● Proof-reading</li> <li>● Ensure that printed text is appropriately related to non print media</li> <li>● Contract printers</li> <li>● Arrange copyright clearance</li> </ul>	<ul style="list-style-type: none"> <li>● Overview of distance education</li> <li>● Knowledge of distance teaching techniques</li> <li>● Editing skills</li> <li>● Presentation, Layout skills</li> <li>● Marking-up manuscripts for printing</li> <li>● Proof-reading skills</li> <li>● Knowledge of different media and their role in teaching</li> <li>● Knowledge of printing stages</li> <li>● Copyright clearance laws and processes</li> <li>● Electronic publishing</li> </ul>

## 7.12 Limitation and Suggestions for Further Research

The sample for the study was representative of the population of National Teachers Institute distance learners of the TC II

It will then not be practicable to generalise the result of this study to all distance educational institutions in Nigeria. The study also addressed the bulk of the auxiliary teachers in the nation's primary schools only and not those who have graduated from the institute and those in other institutions beside NTI and from selected states of the federation.

It is for these reasons that future researchers should focus on other institutions involved in distance education to determine the factors that are affecting the DLS causes of attrition, in the various distance learning institution.

Future research could also confirm or reject factors found to be significant to retention and failure to determine their relative importance. For example, evaluative research is needed to test the efficacy of the suggested retention strategies.

The National Teachers Institute NCE's programmes deserve researchers' attention in all its facet.

## 7.13 Summary

This study sought to establish a retention strategies for the distance learners of the National Teachers' Institute Kaduna. It identified various problems faced by the distance learners.

These problems include those originating from the

the institution, which bother on administrative procedure tutor/staff performance , high cost of books, and inadequate learning resources. Those that were associated with the learners include, poor educational background, inadequate financial support, heavy social responsibility and lack of adequate support from work place. Infact, the tutor/staff could still be seen from independent perspective. They contributed a lot to the learners' problem because they too lacked the basic knowledge of characteristic of adult learners and the methodology of distance learning.

Chapter two of the study dealt extensively with the theoretical framework. Here, certain models of distance education process and retention that are considered relevant to the study were discussed.

Chapter three reviewed relevant literature on distance education practices. In the course of the review, certain established retention strategies are considered for their possible adaptation to our environmental needs.

Findings from the study revealed that:

1. the educational background of TC II distance learners were found inadequate and it greatly affects their retention and failure rate.

2. the course materials, significantly affects the learners' rate of retention and failure.
3. the facilitator/tutor factor significantly affects the rate of their retention and failure.
4. the environmental variables were not conducive to learners' need and this significantly affects the TC II distance learners' rate of retention and failure.
5. the financial inadequacies of the distance learners grossly affects the rate of retention/failure of distance learners.
6. the distance learners are burdened with too much of social responsibilities and this invariably affects their rate of retention and failure.
7. the motivation available to learners was not adequate and it thus affects the rate of retention.
8. that factors like boredom, professional advancement, learners' welfare, external expectations of learners and their cognitive ability variedly affect the TC II distance learners.

The results contain some revelations which educators will find useful in reconstructing their thinking about distance education. From literature available, this study is likely to be the first in the area of retention and failure with emphasis on factors affecting performance in distance education.

Accordingly, it emphasised the importance and confirmation of the need to provide for increased learners-tutors interaction and improved environmental, academic, and social support. This has to be so if we are to make distance education programmes attractive and conducive to broader range of learners.

It is also likely to provide encouragement to would-be distance educators as necessary training programmes package that will make it an interactive process are contained.

It will be incumbent upon distance educators to utilize cost-effective strategies to increase student-tutor interaction and to get the message out to distance education students, that distance education programme is a dynamic alternative to the traditional face-to-face systems.

It is proposed that those educators who are responsible for the design and delivery of distance education programmes should carefully examine the balance between learners educational background , the course design and resources at the disposal of learners.

Finally, it is hoped that government and non-governmental organisations that are involved in the management and provider of distance education institution would have a lot to adopt for the effective running of distance education, particularly in growing society like Nigeria. This will certainly enhance an improved patronage of distance education.

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Date: October 14, 1991

TO WHOM IT MAY CONCERN

The Bearer, Mr. ~~Mr. Aderinoye~~ R. A. ADERINOYE is a student in the Department of Adult Education and is currently working on some aspects of the development of Adult Education in Nigeria, Industrial Education, Social Welfare and Community Development.

He ~~she~~ needs to consult relevant files in archives and other institutions interested in Adult Education.

I should be grateful if you would kindly allow him ~~her~~ the use of your facilities, documents and, if necessary, grant oral interviews.

Thank you very much.

*W. S. Smalls*  
Head of Department

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UNIVERSITY OF IBADAN.

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# NATIONAL TEACHERS' INSTITUTE

P.M.B. 2191, KADUNA

Telephone: (062)

Telegrams: TEACHERS KADUNA

Our Ref: NTI/PRS.66/CM/169

Your Ref: \_\_\_\_\_

Date: 4th Nov., 1991

Mr. R. A. Aderinoye,  
Department of Adult Education,  
University of Ibadan,  
Ibadan.

Dear Sir,

RE: APPLICATION FOR PERMISSION OF ACCESS TO  
INFORMATION RESEARCH PURPOSE

We refer to your letter of 14th October, 1991 and the attached copy of your questionnaire on the above subject. We are happy to inform you that after due consideration of the purpose of your application, the Management of the Institute has approved your request.

You are however expected to let the Institute have a copy of your research findings for the Institute's record and library.

Thanks.

Yours faithfully,

Dr. F. O. Akintayo  
for: The Head of Department  
Planning, Research & Statistics

## Appendix 3

### Questionnaire

#### Determinants of rate of failure and retention

This questionnaire is designed for the purposes of research. All information given will be treated in strict confidence and for the purpose of research only, please spare part of your precious time to fill in the questionnaire.

Fill in your response where there are spaces provided and mark 'X' in the box where alternative answers are provided. You can write where necessary

#### SECTION A

1. Sex Male ( ) Female ( )
2. Age groups
  - 21 - 30 ( )
  - 31 - 40 ( )
  - 41 - 50 ( )
  - 51 - 60 ( )
3. What is your marital status
  - Single ( )
  - Married ( )
  - Separate ( )
  - Divorced ( )
  - Widowed ( )

4. Your highest educational attainment

Primary school completed ( )

Modern Three ( )

Arabic Certificate ( )

School Certificate failed  
or S.75 ( )

Grade II C.T.R. ( )

5. In which of the following monthly income  
bracket are you?

Grade Level 3 ( )

Grade Level 4 ( )

Grade Level 5 ( )

Grade Level 6 ( )

6. Present official status

Grade III ( )

Grade II CTR ( )

Arabic Certificate ( )

Auxilliary teacher ( )

7. Your years of working experience is

1 - 5 years ( )

6 - 10 " ( )

11 - 15 " ( )

16 - 20 " ( )

21 - 25 " ( )

SECTION B

Please give responses to the following questions as arranged below.

1. When did you first register for this courses?  
..... 19.....
2. Did you stop at anytime? Yes ( ) No ( )
3. If yes,,state year ..... 19.....
4. If yes,state reasons why you stopped?
  - (a) .....
  - (b) .....
  - (c) .....
5. Did you re-register? Yes ( ) No ( )
6. If yes state year 19.....
7. If yes state reasons:
  - (a) .....
  - (b) .....
  - (c) .....
8. When are you expected to finish this study? 19....
9. Would you like to recommend this course to a friend? Yes ( ) No ( )
10. If yes state reasons
  - (a) .....
  - (b) .....
  - (c) .....

11. If no state why no

(a) .....

(b) .....

(c) .....

SECTION C

Please indicate by ticking the appropriate response on how you feel about the following aspect of your course.

KEY: SA - Strongly Agree, A - Agree, U - Undecided  
D - Disagree, SD - Strongly Disagree

	SA	A	U	D	SD
1. The work load is too much					
2. Facilitators masters' their subject.					
3. FACilitators respect the Culture of learner					
4. Distance of Learning Centres from home affect my studies negatively					
5. Motivational materials Suitable					
6. Language of expression too difficult to understand					
7. Domestic responsibilities serve as hindrance to my studies.					

8. Co-workers not encouraging metto persist in my studies
9. Condition of my present work is not ccondusive
- 10 The learning centre is well equipped for studies
- 11 The counsellors assistance are relevant to my needs
- 12 The feed-back issues are equally good
- 13 The text book language is easy to understand
- 14 The residential face to face programme is greatly of help
15. Facilitators polite in their approach

SA	A	U	D	SD

#### SECTION D

#### Motivation for Workers' Education Participation Scale (MWEPS)

The following are some of the different reasons why workers decide to participate in the distance education programmes of the NTI.

Read each reason carefully and indicate how important it is in determining why I have decided to pursue this present course of study.

In the appropriate columns,  
 Circle 5 if the reason is of extreme important  
 Circle 4 if the reason is of considerable important  
 Circle 3 if the reason is of average important  
 " 2 " " " " little "  
 " 1 " " " " " No Important

in determining my reason to further my education.

Factor I	No IMP 1	Little IMP 2	Ave Imp. 3	Con. Imp. 4	Extreme Imp. 5
<u>Boredom</u>					
a. the low level of my qualification					
b. fulfil a need for personal association					
c. the provision for leisure time.					
d. to get relief from bore boredom					
e. the routine of home and work.					
f. from the frustration of day to day living					

Factor II	1	2	3	4	5
<u>Factor II</u>					
<u>Professional Advancement</u>					
a. To secure professional advancement					
b. To increase my competence in my job.					
c. To meet some professional requirements					
d. To acquire knowledge that will help me with education course.					
e. To enable me secure another job.					
f. To help me obtain my entry professional certificate					
g. To attain same status with friend/spouse/peer group					
<u>Factor III</u>					
<u>Welfare</u>					
a. To prepare for more responsibilities					
b. To be more opportuned to know what is going on with Society					
c. To be more acquainted with the social responsibility					

- d. To improve my social relationships
- e. To improve my ability to serve humanity

Factor IV

External Expectations

- a. To satisfy the expectation of friends.
- b. To satisfy the expectation of my employers
- c. To meet up with the educational policy
- d. To improve my social position

Factor V

Cognitive Interest

- a. To satisfy an enquiring mind
- b. To seek knowledge for its own sake.
- c. To take acquisition of knowledge as an aesthetic need

	1	2	3	4	5
d. To improve my social relationships					
e. To improve my ability to serve humanity					
<u>Factor IV</u>					
<u>External Expectations</u>					
a. To satisfy the expectation of friends.					
b. To satisfy the expectation of my employers					
c. To meet up with the educational policy					
d. To improve my social position					
<u>Factor V</u>					
<u>Cognitive Interest</u>					
a. To satisfy an enquiring mind					
b. To seek knowledge for its own sake.					
c. To take acquisition of knowledge as an aesthetic need					

Thank you very much for sparing your time to answer these questions.

Structured interview with the Co-ordinator/Facilitators.

1. What is your opinion about this programme?
2. What can you highlight as the major problem confronting learners?
3. What can you say are the factors that are contributing to the performances of learners?
4. What can you say about the arrangement at learning centres?
5. In your own opinion would you agree that the course work is difficult for the learners?
6. How far as the NTI provide for your training needs.
7. Do you have suggestions for the researcher?

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