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A STUDY OF FACULTY ATTITUDES TOWARDS THE ADOPTION OF UNIVERSITY-BASED DISTANCE EDUCATION IN GHANA

By
Samuel Badu-Nyarko
Faculty of Education
Lakehead University
Thunder Bay, Ontario, Canada

A thesis submitted
in partial fulfilment
of the requirements for
the degree of Master of Education

Dedication

This thesis is dedicated to my sweetheart and wife Mrs Charity Sisi Badu-Nyarko (nee Otchie) who surmounted hardships and sacrificed her family life for the success of this study.

Declaration

It is hereby declared that this thesis is an original work undertaken by me. It has not been presented either in part or whole to any university or institution. Where references and quotations were made the authorities concerned are duly acknowledged.

Acknowledgement

I wish to express my profound gratitude to Professor Miranda Greenstreet, former Director of Institute of Adult Education (University of Ghana) for nominating me, and the Canadian International Development Administration for sponsoring this Thesis.

I am grateful to Dr. Robert Sweet, my supervisor who despite his tight schedules offered useful suggestions and comments on the thesis. His advice and tutorials not only contributed to my understanding of research but also distance education in general. I am also thankful to my advisor and committee member Dr James Haines who recommended Dr. Sweet as my supervisor and offered meaningful contributions on the thesis. Of special mention is Dr. Maureen Ford who was on my committee.

I am also grateful to the faculty and staff of the faculty of education - Dr. Mary Clare Courtland (Chair of Graduate Studies), Mrs Diana Mason (Secretary to the Chair of Graduate Studies) and the staff of the Education Library for their support.

Among colleagues who showed support and interest in the study were James S. Turner, Nicole Sanderson, Donna Cranton, Yari Sarkka, Heidi Jaske. I cannot also forget the contributions of the Ghanaian students on CIDA scholarship. To these people I say thanks.

I also wish to acknowledge the help and support received from the heads of department and faculty of the following for their support and participation: Institute of Educational Development and Extension, Educational Psychology and Home Economics (Winneba); Departments of Religions, Home Science, Botany, Chemistry, Drama and Theatre Studies, Geology, Geography, Communication Studies, Institute of Adult Education and the following faculties - School of Administration, Arts, Law, Science and Social

Sciences all of Legon.

Finally, I thank the two universities, University of Ghana (Legon) and University College of Education at Winneba for accepting my request to conduct the study in their universities.

I cannot forget the moral support and encouragement given me by my wife Charity during the course of my stay in Canada.

All omissions and shortfalls found in this study are entirely mine.

Samuel Kofi Badu-Nyarko.

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Abstract

The purpose of the study was to examine the basis for faculty attitudes toward participation in university distance education as an innovation in Ghana.

The study adopted the survey research method in soliciting information. Two hundred and six responses were analysed using descriptive statistics.

The study found higher faculty support and participation among Winneba faculty than Legon. Faculties in Winneba were more familiar with distance education from discussions and hearing than Legon. Resistance to participation was in research and science-related disciplines where practicals, demonstrations, and regular interactions were needed. Participation did not differ significantly across gender, academic rank, age and lecturing experience. Faculty believed that for effective participation, incentives, tenure and promotion, and personal benefits must be considered. In addition, initial training in distance education practice should form part of their participation. Departmental policy was the most influential among the institutional factors for participation.

Faculty believed that for effective participation, the quality of university distance education must be addressed in relation to access. Dialogue and interactions were regarded as essential for university education. The limited communication network prevents this essential communication. It was the opinion of faculty that distance students possess the same qualifications as on-campus students and enroll in fewer credits per semester.

The study concluded that faculty who were more familiar with distance education were more willing to participate than those unfamiliar. As well, better planning, logistics, continuous financing, adequate incentives and manageable workload were prerequisites for

participation. Furthermore, departmental support must be the basis for participation despite government and university policies.

CHAPTER 1

INTRODUCTION

The Problem

Distance higher education in Ghanaian universities is a new phenomenon. Its introduction has been received with mixed feelings by both the public and academics. In the academic community, there has been some concern regarding the equivalency of traditional delivery modes versus a distance education mode, specifically with programmes or instructions relatively new to most faculty. The main factors accounting for the introduction of university distance education were population growth and the expansion of the educational sector (Aggor, Kinyanjui, Pecku, & Terbury, 1992) which compel graduates from the senior secondary schools and post-secondary schools throughout the country to compete for entry into the universities and polytechnics with the objective of obtaining a degree or diploma as a guarantee for employment and job security (Ansere, 1978, 1979; Waniewicz, 1976).

The highly selective admission in Ghana based on a residential status, distance from the university, and lack of financial support for non-residents or off-campus students serve, however, as deterrents for pursuing full-time study, forcing students into courses which are not their first choice. Consequently, many students fail to achieve their desired ambitions. Statistics show that out of secondary school completers and other qualifiers only 40% or less gain admission into higher education (Aggor and others' 1992; Aggor, 1991). The rest, who do not have access to higher education, enter the work force without any professional qualifications and skills. As a result, continuous efforts are required to motivate them to undertake further education. Aggor et al. (1992) found that high costs

associated with the country's traditional residency-based higher educational system have put higher education out of the reach of many forcing them to enter into jobs; the workers, for fear of losing their positions and jobs, find it difficult to engage in further studies. Aggor et al. (1992) recommended that distance education has the potential to meet manpower requirements of the country and must be pursued.

These dimensions prompted the Government of Ghana to introduce as a policy the university distance education programme based on Aggor and others' (1992) recommendations and a national conference in 1995. Despite the Government's efforts to assist financially in this educational innovation, faculty response has been very slow. Out of the four universities and the University College of Education at Winneba, only the University College of Education at Winneba has responded positively. Faculty members are divided over the issue of distance education. The success of the system will depend, however, on the acceptance and support of faculty members.

No study in Ghana has focused as yet on the attitudes of faculty towards university level distance education. The intent of this study, therefore, is to examine the attitudes of faculty towards participation in distance higher education in Ghana. Studies conducted recently outside Ghana indicate that success in distance education involves not only student support systems (Dillon & Walsh, 1993; Sewart, 1993) but also how faculty perceives and supports distance education (Clark, 1992; Clark, Soliman & Sungaila, 1984; Mani, 1988; Siaciwena, 1989; Black, 1995; Haughey & Fenwick, 1996).

Implementation of innovative programmes becomes a difficult task especially when it is being introduced from outside or by outside agents (Fullan, 1993; McIntyre, 1978). In

the United Kingdom, for instance, Titmus (1981) noted that the establishment of the Open University faced similar opposition and criticism from conventional university members. He writes:

> The Open University began in the face of strong opposition from both the political and educational establishments. It was argued that it would not work, that the country could not afford it and, if it could, the money could be better spent on other forms of education. (p. 118)

In Ghana these sentiments may be similar in the minds of many faculty members and could be a crucial factor for the success of the educational innovation. Such negative attitudes serve as institutional barriers to participation in adult programmes (Cross, 1981). Faculty have been identified as crucial to the successful implementation of distance education at the university level (Siaciwena, 1979; Johnson, 1978; Black, 1992); however, few studies in an African context have been reported on faculty and distance education innovation (Rishante, 1985). According to Siaciwena (1989), faculty attitudes' toward the acceptance of distance education are crucial to the success of distance education in any given situation and, therefore, merit attention.

Purpose of the Study

The primary objective of the study is to examine the basis for faculty attitudes toward an innovative distance education programme. The study extends the work of Johnson (1984) and Black (1992) who developed models of faculty receptivity to innovation and employed these models in studying university faculty attitudes towards the introduction of a distance education programme into an established, 'dual-mode' university. The Johnson-Black formulation defined faculty receptivity in terms of their strength of commitment to the notion of distance education. Receptivity could be expressed in their supportive comments about distance education, their willingness to vote in favour of the adoption of a distance education programme, and their willingness to teach in such a programme.

Generally speaking, more positive attitudes towards educational innovations are associated with greater knowledge of the innovation (Clark, 1993; Johnson, 1984; Nolan, Anderson & Mowrer, 1977; Scott, 1985). Consistent with these findings, Black (1992) found that higher levels of receptivity were associated with greater familiarity with the distance education concept. Evidence of faculty familiarity with distance education was to be found in what they had 'heard about' distance education, what they had read about the concept, and whether they would be willing to teach in such a program. Familiarity with distance education also formed the basis for faculty beliefs about the costs and benefits of adopting distance education as part of the university system of provision. These beliefs were termed compatibility and feasibility. Compatibility, in Black's model, refers to faculty views towards issues of accessibility and quality in distance education. As in most

such access-efficiency analyses, a tradeoff was assumed that affected faculty in terms of the instructional demands made on them in a distance education programme.

Feasibility factors centred on the availability of resources, institutional support for implementation and perceived personal impact of distance education on faculty. The latter refers to incentives for individual faculty who may participate in the program as instructors.

Individual differences -- age, gender, and variables related to institutional life such as qualifications, rank, or years of teaching experience -- play a role in determining faculty beliefs about the feasibility and compatibility of the distance education. Black included a number of these professional characteristics in her examination of faculty attitude. The characteristics of faculty are not only useful in relating individual differences to attitude, they also serve as important indicators of differences between institutions.

Both Black (1992) and the earlier study by Johnson (1984) found that faculty with teaching as their primary role commitment were more receptive than those who were committed to research. Also, faculty with "minor workloads" (i.e. not involving research) were more supportive of distance education than those committed with teaching and university administration. However, Clark (1993) found that faculty who were department or division chairs had more positive attitudes toward distance education. Clark (1993) further found women faculty more open to innovation in his study in the United States.

It was found that Black's model was more descriptive than explanatory in determining faculty intentions to support distance education. For instance, Black (1992) stated, "There was no theory or conceptual framework in the literature that was suitable for adoption in this study" (p. 41). In response to this difficulty, the task of explaining faculty

intentions to participate in a distance education programme was conceived to be a problem of attitude-behaviour congruence (Ajzen-Fishbein, 1980; Schuman & Johnson, 1976). The relationship between behaviour and antecedent indicators of attitude is well established in the field of social psychology (Schneider, 1976; Triandis, 1967, 1977; Wicker, 1969)

Consistent with the general attitude-behaviour formulation, a faculty member's support for the distance education initiative may be expressed in his or her willingness to teach a course in the proposed programme. According to Fishbein & Ajzen (1975), such statements of behavioural intention reflect the system of evaluative beliefs associated with this behaviour as well as normative beliefs that also bear on the execution of the behaviour. This was the attitude-behaviour model developed by Fishbein & Ajzen (1975). The Fishbein-Ajzen formulation was used in this current study to aid in theorizing the task of explaining faculty members' decisions to participate in the distance education innovation. While the study does not attempt a validation of the Fishbein-Ajzen model, it does draw on the theory to conceptualize and extend Black's model of faculty support for distance education. Specifically, the concepts of behavioural intention and social norms are developed in the study and incorporated with Black's model to examine the basis for faculty support of the Ghanaian distance education initiative.

Behavioural Intentions

Fishbein-Ajzen's (1975) "Theory of Reasoned Action" (TORA) stipulates that intentions are the products of two major variables: the attitude towards the behaviour and the subjective norm. These are based, however, on information acquired about the consequences of the behaviour and on normative beliefs and motivation to comply with

those norms. The theory further suggests that the more favourable a person's attitude is toward a behaviour, the more his or her intention to perform that behaviour and vice versa. In this study, behavioural intention refers to plans of faculty to participate in the distance education program.

Social Norm

A major interest of this study as a modification to Black's (1992) study is the influence of the social environment on intentions and behaviour of faculty members. This aspect has been described by Fishbein & Ajzen (1975) and Ajzen & Fishbein (1980) as the person's subjective norm. The subjective norm refers to the person's perception that people who are important to him/her think he/she should or should not perform the behaviour in question. The concept of social environment therefore suggests that "motivation to comply is based on the information a person has about his relevant referents, particularly the referent's power"(p.136). Other values and norms that can influence individual decision-making and choices are those created by government and institutional policies. General economic constraints and incentives also influence peoples' involvement in the life of an institution or programme (Etzioni, 1975).

The specific purpose of the present study is to examine the basis for faculty's active support of a proposed implementation of a distance education program. This will be done within the framework suggested by Black (1992) but with three changes to her conception of the relationship between faculty beliefs about the desirability and feasibility of distance education and their willingness to take action in demonstrating their support for the concept. The additions are participation (Behavioural Intentions), institutional differences

(Legon and Winneba), and social influences (Social Norm). The elements of the extended model and the important relationships among the model's variables are discussed below.

Figure 1.1. A Distance Education Adoption Model

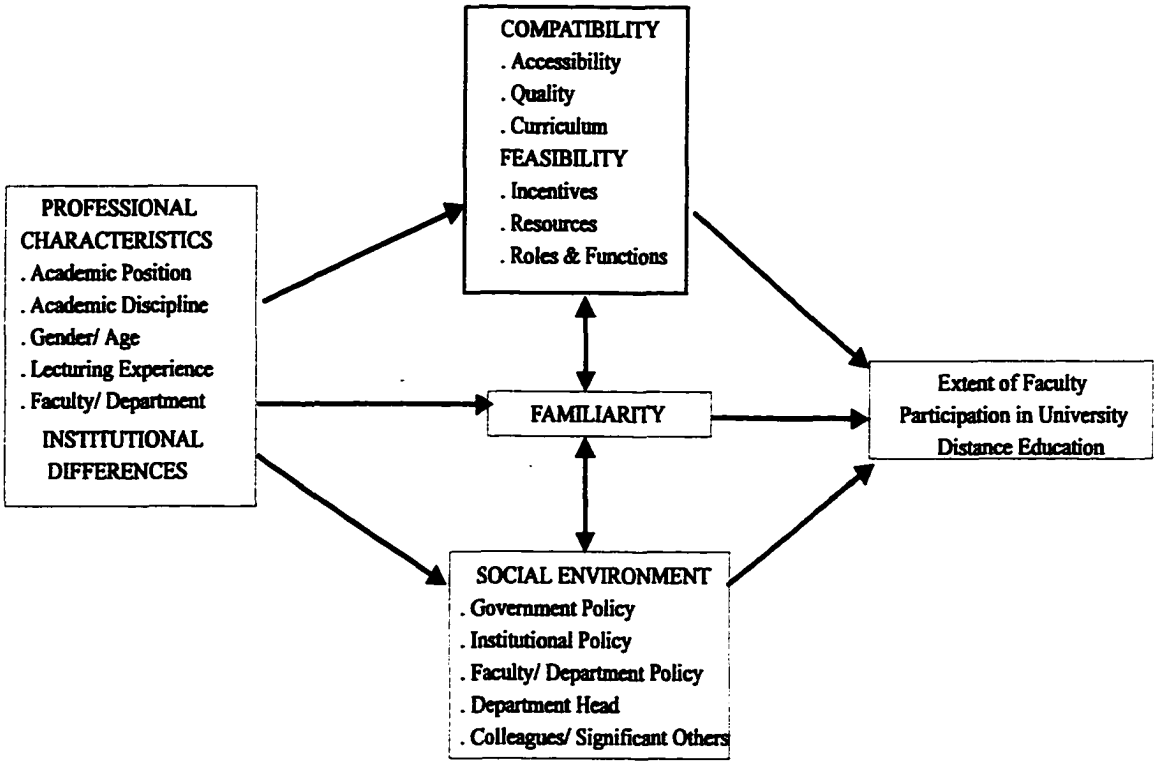

Figure 1.1 details the elaborated Black model which comprises seven factors: (1.) Faculty Receptivity (participation), (2.) Social Environment/Norm (3.) Professional Characteristics, (4.) Institutional Differences, (5.) Familiarity, (6.) Feasibility, and (7.) Compatibility.

The concept of receptivity (Johnson, 1984) has been defined as the extent to which a faculty member favours or opposes distance education at the university level with reference to how faculty will vote, speak and teach a distance education course. In the

present study, faculty support for distance education is defined in terms of the faculty member's stated intention to teach a course at a distance. This behavioural intention (participation) is assumed to reflect the antecedent variables in Black's (1992) model and the social norms of colleagues, as well as institutional and governmental policies.

Professional characteristics comprise demographic variables such as age, gender, academic rank, and academic discipline. Black found that faculty in the soft-pure and soft-applied faculties were more supportive of distance education. Also, the knowledge and experience of faculty may result in the formulation of beliefs about distance education which, in effect, affect participation. The two universities in Ghana (Legon and Winneba) differ in terms of program development and courses offered. Legon is a comprehensive university (Clark, 1993) offering both graduate and undergraduate programs up to the doctoral level while Winneba is a teacher education university offering undergraduate programs. Differences are seen in the professional characteristics of faculty at Winneba and Legon.

It is expected that in an institution like a university the individual faculty members will be influenced in their decision-making by other members of the institution -- colleagues, administrators, and even the policies and practices of the department or the culture of the larger university. Significant others include colleagues of faculty both within and outside their departments and their immediate supervisors (departmental heads) who may ask them to perform specific duties. It is expected, therefore, that such influences have a direct bearing on faculty participation. Faculty participation rests (in part) on university autonomy and self-governance (Clark, 1987). Within the Ghanaian context, however, the

full faculty autonomy is not possible due to government regulation of national education policy which requires compliance and the financial support (subvention) from government.

University distance education is currently being implemented by University College of Education at Winneba (UCEW) as part of its degree programs. Although University of Ghana (Legon) and UCEW were both involved in the distance education initiative, Winneba currently has enrolled students and has organized workshops for some staff and faculty in distance education. Therefore, the expectation is that faculty in Winneba would be more familiar with distance education than Legon. This level of familiarity may affect faculty participation. Both Black (1992) and Johnson (1984) justified the importance of familiarity (awareness, knowledge and understanding) of distance education and its relationship to a supportive attitude or receptivity. This is also supported in the literature on distance education(Clark, 1993; Scott, 1985). Familiarity is the extent to which faculty members have personal knowledge of distance education from readings, discussions, or involvement in distance education (Black, 1992; Johnson, 1984). Discussions involve the degree of conversation with other faculty about distance education activities within the university or other institutions elsewhere. Familiarity of distance education in the model served as an intervening variable towards participation.

Feasibility indicates the degree to which such factors as faculty roles and functions affect their participation in distance education (Johnson, 1984). As well, the provision of incentives to faculty and adequate resources - human and material to the universities contribute to effective participation (Clark, 1993; Siaciwena, 1989; Taylor and White, 1991; Olcott and Wright, 1995).

The concept of compatibility is the degree to which faculty compares distance education with on-campus studies based on their beliefs about university education. This included accessibility of distance education, concern for quality of distance education and alternative modes of instruction. Faculty beliefs about both the quality and accessibility of university distance education directly or indirectly affect their desire for support (Croft, 1992; Black, 1992; Johnson, 1984).

Research Questions

The following questions guided the present study of faculty attitudes on distance education.

Q#1. To what extent do levels of faculty participation differ between institutions?

Q#2. To what extent does faculty familiarity with distance education, differ between institutions and levels of participation?

Q#3. Do the indicators of Feasibility, Compatibility, and Social Norm (Environment) differ across levels of participation and between institutions?

Q#4. How do faculty explain their beliefs about Feasibility, Compatibility and Social Norm (Environment) of distance education?

Definition of Terms

Distance Education

Distance education implies many different things. There are few definitive standards regarding content, methods or evaluation; therefore, it is necessary in adult education to be clear about the needs of the learner, the sponsoring organization, and the society itself. The term distance education refers to the form of study which is not supported by face-to-face interaction of the student and the tutor. Holmberg (1981) defined distance education as "those teaching-learning methods in which, because of the physical separateness of the learners and teachers, the interactive, as well as the proactive phase of teaching, is conducted through print, mechanical, or electronic devices" (p.11). Sharma (1991) saw it as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner. The concept is also identified as the form of study not led by teachers in classrooms but supported by tutors and an organization at a distance from the student (Sewart, 1988).

For the purposes of this study, however, distance education would be defined operationally as all the forms of study involving the imparting of knowledge, skills and attitudes through the use of mediated instructional materials with the intent of completing a course. This includes the forms of media applicable to the adult learner at a distance on some selected tasks and courses often with supported feedback from the learner and tutor.

Faculty

Faculty in this study refers to members of the university community employed with the sole aim of teaching and research with other administrative responsibilities and designated as lecturer, resident tutor in Ghanaian Universities.

Attitudes

One of the most useful concepts that educational and social psychologists have dealt with in the organisation of experience and behaviour is attitude. Fishbein & Ajzen (1975) defined "attitude as a learned predisposition to respond to an object in a consistently favourable manner." (p. 336) In this study, attitude is defined as a relatively stable system of behaviour (beliefs and feelings) displayed by a person toward a particular programme of action, which in this case is university distance education, with the intent to participate.

Significance of the Study

The study of faculty members is crucial to this study because understanding how faculty view distance education is important as they make the academic decisions regarding program approval, resource allocation and regulations governing the recognition and operation of distance education courses (Black, 1995). These decisions, as pointed out by Black (1995), are made by faculty in committees at the departmental, faculty, academic committee and senate (university council) levels of university governance.

The study wishes to provide a theoretical basis of faculty support and receptivity towards the adoption of university-based distance education based on the Fishbein-Ajzen theory of reasoned action.

The study also hopes to offer policy recommendations on faculty attitudes toward the adoption and implementation of university-based distance education in Ghana. The study, being exploratory, will assist policy makers, educators and practitioners of distance education in implementation strategies for the sustenance of distance education. Conducting a study to determine attitudes of faculty members in university distance education in Ghana can enhance the understanding of issues surrounding the practice of distance education and contribute to effective programme planning and implementation.

Limitations of the Study

The main limitation of this study is that it concentrates only on two of the country's universities and, as such, the results of the findings in the completed questionnaire responses may not represent those of all Ghanaian university faculties. However, Winneba and Legon are both involved in the National Distance Education Program and their success in this endeavour is important to the future involvement of other major universities in the country.

Organisation of the study

This study is organised into five chapters. The first chapter focuses on the general introduction to the study. Here, the problem is introduced with relevant background material, the purpose of the study as well as definition of terms, and the significance of the study. This is followed by the literature review. The third chapter involves the study methodology and how data was analysed. The focus of the next chapter is on the presentation and analysis of data, and summary of findings. Finally, the conclusions, discussions and recommendations comprise the last chapter.

CHAPTER 2

LITERATURE REVIEW

In writing this literature review considerable effort is given to the concept of change (innovation) and faculty attitudes in general. It describes the field of higher education and perceptions held by faculty members in relation to distance education.

The Role of Faculty

Research has studied faculty roles in distance education and educational change (Bradley & Habeshaw, 1991; Scott, 1993; Beaudoin, 1990; Pardy & Wright, 1992). Keegan (1990), focussing on faculty performance in both the dual mode educational system and that of conventional universities, found out that faculty in dual mode were heavily tasked. Garrison (1989), in an examination of distance education, stated that "while it is currently fashionable to advocate for student-centredness, the crucial role of the teacher cannot be ignored" (p. 120).

Traditional Roles of the Faculty

According to Badley & Habeshaw (1991), the only way to appreciate the changing role of the teacher in higher education is to understand the traditional roles. Beard (1976) raised two main traditional views of the faculty, philosophical and scientific. From the philosophical view, the lecturer is to engage the mind of the student by bringing him/her into contact with scholarly and cultural comparisons. The scientific view, which emphasizes the need to inculcate a body of knowledge, tends to undervalue the social and

broad educational purposes of higher education.

According to Badley & Habeshaw "neither view of the traditional role of higher education presented us with an image of a professional teacher committed to examining the purposes of higher education and the methods and content to be used to meet these purposes"(p.15). Focusing on university teaching, Henderson (1969) identified the lecturer as performing a double role - that of pursuing research and teaching. This view was later supported by Titmus (1981). Fincher (1993) added a third dimension, that of carrying out its duties in an international context.

Traditionally, higher education teachers have been criticised as failing to encourage their students to participate in research and to express new ideas. Rarely challenged by the student, faculty members were authorities who assumed the roles of correctors of students' errors and talkers rather than listeners (Freire, 1990). This traditional role emphasized the dominant, traditional teaching method, the lecture. The claims made for its continued use are based on the notion that it is the only way to make sure the ground is covered, and is the best method to deliver facts (Gibbs, 1982). Many faculty members assumed that lectures were the best way to encourage students to think. It is argued that lecturers are inspirational and ensure that students have a proper set of notes. Furthermore, the attention of the lecturer is needed as some students are identified as being incapable of, or unwilling to, work alone.

Gibbs (1982) suggested that faculty members have clung to the traditional method because:

i. They are ignorant of the evidence about the effectiveness of lectures and of

alternatives techniques;

ii. They are overworked with the view that alternatives to lectures may appear to involve more work and changes take time to introduce;

iii. There exist shortages of resources, particularly books and other material;

iv. Lecturers' attitudes obstruct change and so use lecturing as a coping strategy; and

v. Institutional constraints do support lecturing since teaching hours are counted especially in the relationship between individual courses. (p. 54)

Other roles performed by faculty included: supervising individual and group dissertations and projects, serving as tutors for solving students' problems, assessing students' work, evaluating teaching and courses, administering courses, and sharing in departmental and institutional administration, and maintaining subject expertise through research and staff development (Beaudoin, 1990; Wilson, 1979). Additionally, faculty may be involved in extension, community and international service.

Changing Roles in Distance Teaching

The expansion of the university's responsibilities to a broader constituency through distance education has created a new dimension in the role of the faculty. With this new vision, the pressures of shared academic values, professional status, and maintenance of common academic standards have increased. In the light of these, the lecturer has to adjust to the anticipated changing roles required. The anticipated changes include the acquisition of new skills, teachers becoming facilitators, and their involvement in distance

teaching (Landstrom, 1995). In addition to the increased workload, the university lecturer has to be retrained or reoriented to adapt to the innovations.

Jordan and Layzell (1992) found that faculty at Arizona State University worked an average of 50 hours a week. Of this time just under 50% was spent in-class and in preparation of teaching, 33% was spent on research activity, 14% on administration and 6% on public services. Increasing workloads were also a problem for British academics. A recent survey by Court (1994) found the average number of hours worked per week by UK academics to be 54, an increase of 6% from 1969 figures. Fisher (1994) found out that 75% of a sample of 268 British academics felt frequently or always overworked. A similar report was made by Siaciwena (1989) in Zambia. It is necessary, therefore, when considering other innovations like distance education to consider faculty workloads. In considering future trends, Allen (1994) concluded:

> A generation ago faculty members resolved the conflict between teaching and research by expanding their work-weeks. But the eight-hour growth to a 53-hour work-week makes future increases unrealistic (p.26).

Where faculty consider themselves already heavily burdened with teaching responsibilities, they will not consider expansions of educational opportunities that involve further teaching and less time for research. Haughey (1986) noted that the professors who depend on the lecture format to carry out instructional intents do not understand what to teach at the distance and which style to adopt. Faculty often argue as to whether the workload of both off-campus and on-campus ought to be the same.

Similarly, Beaudoin (1990) maintained that "those faculty accustomed to more

conventional teaching modes will have to acquire new skills to assume expected roles not only to teach distance learners, but also to recognise instructional resources suitable in content and format for independent study" (p.27). The main thrust of this statement rests on the premise that faculty members would have to be re-oriented to their new roles if they were to accept them. Further, faculty engaged in distance education must be adept at facilitating students' learning by paying particular attention to process, unlike classroom-based teachers whose traditional role is largely confined to selecting and sharing content (Beaudoin, 1990).

To buttress this view and to promote effective strategies for distance learning practice, a few faculty with experience in distance education could provide orientation and training to enable new instructors to become acclimatised to the unique requirements of distance teaching. Beaudoin (1990) was apt in stating that:

> Attempts to provide faculty with assistance or advice designed to acquaint them with program procedures and student needs may be resisted by some faculty who will interpret such efforts as telling them how to teach. But, it is essential that expectations be made clear from the onset, least faculty assume whatever previous experience they may have had with adult learners will carry them through this new assignment when, in fact, their new instructional roles may require drastically different activities and approaches.
>
> It is therefore important that administrators seeking resources for the establishment of a distance learning programme take pains to cultivate the support and interest of faculty, since many faculty members may not be familiar

with how the new concept actually works. Thus, the major refrain is that most innovations towards distance education fail to create an academically sound, degree-granting program as many faculty members continue to remark "well, those new techniques may work in some other disciplines, but they certainly won't in mine" (p. 28).

Adding support to this assertion, Purdy & Wright (1992) stated there should be new approaches, techniques, or styles in situations where communication with the students is through written lessons or computer exchange in asynchronous time formats. Of particular interest is: these factors have suddenly changed the role of the faculty to a new form of teaching and learning. According to Dillon & Walsh (1992), little has been written about the faculty although lecturers constitute the basic source of distance education. To them, "the view to understanding distance education as an innovation provides an important means for understanding the phenomena of distance education, particularly from the perspective of those upon whom its acceptance depends: the faculty." (p. 53)

These salient issues have moved the concept of education from dissemination to development. According to Boot & Hodgson (1989), the role of the teacher invariably changes from a subject expert and guardian of knowledge to a facilitator, serving more as resource person and a co-learner. This dissemination to development model has far reaching implications for both curriculum and faculty roles. Meacham (1990) examines the issue differently from an innovative point of view. Regarding distance education, he was concerned about the faculty acquiring information and having an awareness of the innovation, and the "consequences in terms of lecturer action and intervention." (p. 250).

The shift from the traditional campus has resulted in tension with regards to the functions and roles of lecturers. Croft (1992) writes that the absence of the lecturer's freedom to develop and present subject matter has affected both instructional and research integrity, academic freedom and the authority derived from expertise in the field. Her notion is that much of distance education is in direct conflict with the autonomy of the faculty member. Distance education has been seen as an innovation that "changes the nature of the classroom in a manner which may seem to undermine the teacher's central role and autonomy in the instructional process and limit his/her freedom" (p. 54). The faculty takes a 'back seat' role in developing courses and allows the media to take his place with regards to instructional delivery. Faculty, according to Croft, see distance education as threatening the integrity of traditional instruction and learning processes:

> Nothing dispels the attitudinal aspects of discomfort with distance education - a fear of change, a fear of technically complex devices used to deliver courses; concerns that students may not get the education they deserve, about one's own reputation, about job security, that distance education will make faculty superfluous, a resistance to learning new things, a worry that students will not adapt, skepticism about the abilities of distance education to deliver what it promises, and previous negative experiences. (p. 54)

Demonstrating the importance of institutional support for increased faculty participation on the basis of tenure and promotion, Olcutt & Wright (1995) emphasized that participation goes beyond merely providing instructional leadership. They argued that

> Institutional leadership suggests that faculty are intimately involved in the

instructional design process, the design of student support services, in student advising and in the rigorous evaluation of technologically mediated instruction. Moreover, faculty participation includes engaging in discipline-based research and the serving of the academic community (p.19)

These functions may exert pressure on faculty while participating in distance education.

Faculty Attitudes Towards Distance Education

Traditionally and historically, academics have held a less than positive attitude towards distance education (Black, 1995; Johnson, 1984; Rishante, 1985; Dillon and Walsh, 1992; Clark, 1982). McAfee (1972), for instance, stated that the immediate objections to using correspondence courses in universities and colleges probably centre on one or more of the following:

a. A belief that students taking distance courses will not learn as much as those in regular universities;

b. The fear that distance education courses cannot be used to meet the entrance requirements of institutions of higher learning;

c. The belief that the use of distance education courses will adversely affect the accreditation of the degrees; and

d. The belief that distance education courses are poorly prepared by unqualified persons (p. 34).

In contrast, Meachem (1982) indicated that the goal of innovation such as distance education is perceived as being the development of effective distance teaching materials

by staff who have little or no experience.

The acknowledgement of faculty support or resistance towards distance education shows that faculty may support innovation even when unfamiliar with the system (Black, 1995). The literature on higher education, according to Johnson (1984), showed that faculty have often appeared unfavourable to innovation and resistant to change. Recent studies on faculty attitudes have empirically confirmed this (Black, 1995; Landstrom, 1995).

In writing about faculty attitudes towards distance education, Verduin and Clark (1991) maintained that attitudes play a significant role in decisions about who will use it, and how and when it will be used. Faculty may be resistant to public exposure, fearing that their course materials/content or their teaching styles may come under attack. According to Levis & Wall, (as cited in Verduin & Clark, 1991),

> Some instructors are resistant to dealing with students who cannot get to campus, having little or no sympathy for the student whose life situation does not permit attending college in the traditional manner. Among these are teachers who believe they cannot teach if they "cannot see the students' faces," or who are [even] reluctant to try interactive transmission systems in classrooms located distance across the campus. Some believe that 'you can't teach this way' no matter what (p. 12).

The implication is that many faculty members do not recognise the university operating outside the domain where it traditionally belongs.

Opinions, however, do differ among faculty members. Verduin and Clark (1991) pointed out that attitudes are related to status. Scott (1985), reported that although

admission and graduation requirements may be similar for both off-campus and on-campus programs, most external degree instruction was performed by adjunct professors who were paid less and often felt slighted in terms of professional advancement. As well, faculty who participated in distance education perceived their teaching as of higher quality than that of colleagues in conventional programs (Landstrom, 1995).

Many studies conducted recently on faculty receptivity towards external degree programmes found their attitudes to be either apathetic or hostile towards distance education (Beaudoin, 1990). Like Scott's (1985) study, participating faculty tended to be positive, while scepticism increased among 'tenured faculty' who lacked experience with non-traditional programs. Even among those who were inclined to support off-campus study, the majority of them still had reservations about correspondence courses and other independent approaches.

Similarly, Dillon & Walsh (1992) established that faculty teaching at a distance are positive towards such teaching and their attitudes tend to improve with experience. Clark (1993) found that familiarity and previous experience were moderately predictive of respondents' receptivity to distance education. Generally, faculty motivation to teach distance students is derived from intrinsic rather than extrinsic incentives (Siaciwena, 1989; Black, 1992); however, lack of commitment has been identified as a basis for rejection of distance education by faculty (Siaciwena, 1989). Mani, (as cited in Siaciwena, 1989) found that it is the perception among faculty that distance teaching is neither rewarded by academic departments nor perceived as a scholarly activity by a significant number of colleagues.

Smith (1979), writing on the Australian distance education system, explained the reaction of the University of Sydney's Professorial Board as saying:

> External studies are necessarily greatly inferior to internal studies and even with the most carefully organised and well-staffed external department so little could be achieved and so imperfectly that the establishment of external studies cannot be recommended . . . Indeed, there is a pressing danger that external studies will give the illusion of a university education without the reality. Students will go through the motions of study and believe that they have had a true University education when they have not (p. 26).

This marked reaction later proved untrue as the development of distance education continued to progress in Australia. Chick (1992) saw Australian faculty as being ambivalent and with the exception of a few, those at Queensland had been hostile towards distance education.

With regards to decision making processes, faculty members have been identified as having ambivalent attitudes about participation (Wilson, 1979). Haughey (1989) and Croft (1992) found that faculty were concerned about their own disciplines rather than the importance of institutional growth.

Attitudes Towards Quality and Accessibility

Recent studies on faculty attitudes towards distance education had centred on the need to maintain the quality of students graduating from the universities. Clark (1993) highlighted the issue of faculty in part-time studies by pointing out that for faculty "the

most demanding part of their environment is other academics in the same field" (p. 207). In arguments between discipline-driven faculty and consumer-oriented sectors, the latter would be effectively blocked by an inward-looking faculty.

For many academics, the question rests on quality. If more students are admitted, will not standards fall? This seems to reflect the economic principle that what is scarce is valuable. The basis for this viewpoint is the traditional admission and examination system, where entrance requirements and grading procedures are presently monitored. An additional concern is that the high student-lecturer ratios will involve more work, equipment and other facilities (Guiton, 1992; Blix, Cruise, Mitchell & Blix, 1994).

Central to these questions is the issue of 'parity of esteem.' Criticisms on distance education have generally centred on the quality of instruction and the degrees obtained. Garrison (1989) wrote that distance education has long sought 'parity of esteem' with conventional education. However, recent issues have focussed on equal and quality learning packages and content of courses targeting specific segments of the market instead of mass production of materials. Ellis and Chapman (1982) suggest that institutions of higher education must make "changes in their regulations and ways of dealing with remote adult students before [they] can be accepted as having received an academically equivalent course"(p.276).

This revelation, similar to what Black (1992) and Tight (1993) identified, calls for serious considerations. Tight noted the positive and negative aspects of access in relation to flexibility and relevancy to restructure further education. Those in support of elite education "are anxious about the fluctuation and decline in the use of conventional further

and higher education" (p. 62). These anxieties have provided an impetus for limiting the number of students because of the fear of 'falling standards' or 'more means worse'.

Black's (1995) study of faculty support for distance education illustrated the different roles, conflicts and compromises associated with a mass versus an elite conception of university education based on accessibility and quality. A mass system places value on more open access to larger numbers of the population. This conflicts with the values of an elite system which is more selective and focuses on preparing a smaller number of individuals with the highest of academic credentials.

Griffin (1983) argued that:

> For although attitudes in further and higher education may be opportunistic in certain conditions, there are no logical barriers to open learning systems but rather material ones. However, in terms of access, the open university committee report acknowledges 'the fact that any proposal made for increased scope in continuing education are substantially reduced in value if significant numbers of students do not have access to what is produced' (p. 58).

Griffin was of the opinion that accessibility to adult education means people will be able to take courses of their choice at recurring intervals. This implies that these courses will be available when and where the student can use them; however, some academics believe that allowing students to take courses in a system of recurrent education lowers the credibility of the courses. Recent studies in support of the accessibility of distance education have emphasized the need to make education more equitable, so that other people would have access to university education (Black, 1995, p.17). Yet, those who

oppose mass distance higher education have maintained that it is important to get good quality people into the system, not necessarily denying educational opportunities to people.

Black (1995) acknowledges the views held by many faculty who oppose distance education. The opposers view campus experience as essential. They argue that university campus experience is the most "ideal community of scholars where students from a variety of disciplines bump into each other and debate issues from various points of view" (p. 20). As well, it forms an arena for socialization, the shaping of character and developing scholarly outlook (Black, 1995).

Verduin & Clark (1991) hold the view that increasing faculty knowledge about distance education is the key to gaining acceptability. Faculty may also influence committee decisions about proposals to offer distance education even though they have limited knowledge about, or involvement in distance education (Black, 1992; Johnson, 1984). This view adds support for Black's (1992) premise that distance education is often dismissed on the grounds of prejudice.

University Culture

The concept of university culture like any organisation provides insights into the beliefs, structure and processes within its organisation. Such knowledge helps to consider the ways innovative teaching methods and distance education may or may not fit into the culture of the traditional university (Croft, 1992). Harris (1987) contended that most faculty members refuse to cooperate on the grounds of the 'culture industry'. The culture industry constitutes the status quo that university learning must occur on campus where the

lecturer controls the instruction. Their main concern was that the credibility of the Open University of United Kingdom is based on the argument that face-to-face contact between teachers and the taught is not essential. This is criticised, however, by current research by Haughey and Fenwick (1996). Their study established that "when the tutor made personal, frequent, face-to-face contact with the students, the perception was that students learned more and generally had a more positive experience with distance education" (p. 6).

According to Trow, 1987

> Elite higher education is marked by high selectivity, a close student-teacher relationship and intense, structured study of arts and science subjects associated with a liberal education. It is concerned with shaping the mind and character of students in order to prepare them for elite roles in government and the learned professions (p. 269).

For faculty members, maintaining the status quo that their courses cannot be taught at a distance had been the basis for resistance. Paul (1989) for instance, criticised faculty's role at Athabasca University towards distance education based on university culture by saying that

> several unfortunate experiences with external academics led to a deliberate decision not to develop courses in a disciplinary area unless there was at least one resident academic in the field in question to plan and oversee the overall development of courses in that discipline (p. 148).

In most instances, the Athabasca faculty regard distance education as a second rate, low level job. Athabasca University faculty resisted administration's efforts to hire full-time

academic staff for distance teaching by employing retired professors and paying them less or allowing junior lecturers to handle the courses.

Many faculty members, according to Grossman (1989), see distance education as playing a 'second fiddle' to on-campus study. This second-class status of distance education is attributed to the fact that distance educators fail to understand the traditional academic culture that prevails in institutions of higher education. Distance education, to Dillon and Walsh (1992),

> has failed to become integrated into the academic culture, not as a result of the commonly cited factors of cost and faculty resistance, but rather due to the insistence of distance educators on perpetuating a culture that is out of touch with the driving force of higher education (p. 17).

Similarly, Croft (1992) supported the issue of ownership and compatibility that traditional academic values prevent lecturers to "sacrifice the intellectual proprietorship held in esteem by the academy"(p. 17). The issues of ownership and compatibility were also of interest to Dillon and Walsh (1992) as a means to successful diffusion of distance education. They emphasized that distance educators must respond to the needs of the faculty as they, in turn, respond to the needs of the students. Their conclusion emphasized that the ingredient most neglected in diffusion of distance education is leadership, the very foundation of change. They stressed that current distance education literature "fails to view faculty development within the framework of a system which supports professional development (faculty growth)" (p. 18).

Academic Independence and Credibility

Faculty members in higher education greatly value the tenets of academic freedom and its corollary of independence (Croft, 1992). Croft (1986) maintains that the major problem facing distance education is a "reluctance to accept someone else's course because the "slant" or emphasis does not correspond exactly to one's own" (p. 35). Most often faculty members hold tenaciously to the notion that 'if we didn't make it, it cannot be good enough" (Smith, Daniel & Snowden, 1984, p. 84).

According to Smith and others (1984), the method of establishing academic credit often creates problems in distance education. The issue of time-based formulae that incorporates some form of contact hours in lecture, laboratory and field placement to correspond with course credits does not apply in distance education. Based on this many faculty members dismiss distance education with ease.

Biggs et al. (as cited in Konrad and Small, 1989) indicated that

> ... some academics still claim that distance education lacks legitimacy, arguing that it can give the shadow but not the substance of a university education, that it provides predigested instruction rather than the open-ended dialogue that is the essence of good education, and that its students miss the intangible but priceless benefits of residence on campus (p. 38).

The fear of the loss of credibility of the universities becomes real when many of the traditional trappings of university education are not present. This adds to the reluctance of some academics to support distance education ventures (Konrad & Small, 1989). The fact that it is normally conducted as overload work and the perception that it is not integral to

the institution's primary purpose strengthen misconceptions.

Studies on Faculty Involvement in Distance Education

The relative importance of faculty resistance had been investigated extensively by Johnson, 1994; Siaciwena, 1989; Taylor & White, 1992; and Black, 1995. Black (1992) studied faculty voting behaviour towards distance education at committee meetings in University of British Columbia, a large research intensive university.

Support for distance education has been thoroughly reported by Black (1992). In her study faculty support for distance education was explicit, even when they were unfamiliar with the system. The study was one of beliefs and values. Faculty who were concerned about maintaining the elite status of universities were resistant to change. In the study of 487 respondents and 50 interviews, 78% indicated they would vote in favour of distance education courses for undergraduate credit although the general consensus was that "they could not be in favour of more extensive endeavours" (p.168). The implication, here, is that faculty with high familiarity of distance education spoke more favourably about distance education than those with low or some familiarity.

Most of the faculty support for distance education in Black (1992) centred on accessibility. They believed that university education should be more accessible to a large section of the people. Black's (1992) study concluded that faculty support for distance education was largely determined by factors related to compatibility of distance education with faculty beliefs and values about the purposes of higher education . Faculty beliefs about accessibility of face-to-face interaction and campus experience were the most

important factors. However, the large section of the study on qualitative analysis failed to address vividly the interrelationships among the variables used. Evidence should have been made to draw categories of support in terms of age and influence of other significant factors.

Clearly related to Black's (1995) study but using quantitative analysis is Clark's (1993) survey of 317 faculty members in the United States. He reported that faculty members using distance education in their programs were more favourable toward the use of distance education in college credit courses and held very positive attitudes towards their personal participation in the programme. Approximately, 40% of college instructors had very positive attitudes towards using distance education.

One of the main issues established by Clark relates to interaction. Criticisms were based on the notion that distance education precludes interaction. One professor in his study disliked distance education on the grounds that " face- to-face interaction is part of what he considers education - distinct from transferring information or skills."(p. 29)

In Clark's study, concern for access and quality of education were positively identified by 48% of the respondents. Major criticisms centred on socialization and affective development (14%), class study (15%) and learner access to resources needed for college study (9.9%). Acceptance for distance education was based on the type of content and the type of students for which distance is appropriate. Other issues for disinterestedness in distance education by faculty were "the inability of rewarding faculty adequately for their work, research and publication and distrust of administrators" (p. 31). Clark established that support for greater access was mixed with concern about: (i) quality,

especially quality of interaction; (ii) about ensuring effectiveness through the use of distance education in appropriate circumstances with adequate administrative support; and (iii) technical support and professional rewards. Both supporters and sceptics agreed on the need for high standards, adequate resources, and personnel, whatever the mode of transmission.

Concluding, Clark (1993) indicated that department and division chairs were relatively positive in their attitude towards distance education when compared to their professors. In his opinion, respondents who held positive opinion towards distance education despite their little or no experience with teaching at distance were likely to "support the growth of distance teaching in higher education"(p. 32).

Taylor and White (1991) also studied faculty attitudes towards teaching in distance education in Australia with emphasis on job satisfaction. Using the valence model developed by Vroom (1964) and a questionnaire on eighteen factors, they found out that five factors were rated consistently as being important to faculty in achieving personal job satisfaction. These were :

- quality of interaction with students;
- working with motivated students;
- satisfaction from the act of teaching;
- feeling of personal achievement; and
- high level of student outcomes (p. 8).

Their conception rested on the notion that

faculty could be attracted to the increased flexibility in their work schedule

associated with the distance education mode, since they are not tied so much to regular schedule classes. This possibly could enhance research and consultancy opportunities during normal working hours (p. 11).

The finding clearly demonstrates that faculty placed more of a premium on intrinsic rewards associated with teaching than with research-based activities. Benefits perceived to be associated with off-campus teaching include autonomy, flexibility in work schedule and contribution to the needs of the broader community. To them, working with distance students "provides extensive opportunities for interpersonal interaction" (p. 11).

Taylor and White noted that the attractiveness for distance teaching centres on the flexibility of the instructor. Of much concern to instructors in distance education is the quality of the interaction with the students, described as the most rewarding feature of teaching.

In another study at a Canadaian university, Landstrom (1995) used questionnaires to interview twenty instructors involved in distance education on their preferences and needs. This study, although not extensive as the others, established that in most dual mode institutions, there are some detractors among faculty who fear or suspect that the courses are not as rigorous as regular courses, and that student contact will be less rigorous than classroom-based programs. Even among those who have written course guides, there exist some ambivalence about being involved in the program. There have also been some questions about the academic standards in distance education raised at faculty meetings.

From the instructors point of view, the lack of contact and the anonymity of distance students were the major drawbacks to distant courses. To some, lack of student

contact prevents the instructor from testing his/her command of the subject, and limits his/her ability to teach effectively and to engage in discussions. Thirteen out of twenty respondents did not change their minds or attitude towards distance education during the length of time they taught at distance.

Haughey and Fenwick (1996) provided yet another insight into the attitude of tutors towards distance education. Their study of 181 school superintendents and staff established that "face-to-face learning is essential to the learner" (p. 5). Some of the superintendents they studied felt in-school facilitators provided more of the necessary encouragement, assistance and guidance than learners separated from their tutor-markers. In the survey, 45% viewed distance education as a desirable replacement for traditional classroom instruction but many were sceptical as they indicated that on-campus studies may be an old-fashioned concept, "but we feel that the best opportunities for students are in the classroom with a teacher, because this situation offers immediate feedback and immediate assistance" (p. 11).

The majority of respondents felt that 'face-to-face' contact between students and teachers was the best way to mediate learning effectively. Others felt classroom instruction 'spoon-feeds' students and that distance education helps even passive students to develop self- reliance and become more self-directed, independent, and resourceful as learners. Haughey and Fenwick's study suggested that supplementing distance learning with face-to-face instruction could be a useful innovation.

Studies on Faculty Attitudes Toward Innovation

A major study on innovation with respect to faculty attitudes was done by Johnson, (1978). Johnson (1984) investigated faculty receptivity towards a proposed external degree at the University of Michigan, based on questionnaires of 418 respondents. Johnson identified these variables for his study: professional characteristics based on familiarity, research type, role preference, reward orientation, non-academic background, academic area; 'desirability factors'; and 'feasibility factors'. Under desirability factors he studied faculty attitudes in terms of experimentation, access goal agreement, alternative modes of instruction, quality concerns and anticipated benefits. Feasibility factors related to student market, external student performance, and anticipated instructional difficulty. The findings show that 79.8% of the 418 respondents were interested in the proposed program. Higher faculty receptivity was found to be associated with greater interest in the programme implementation and greater concern for access to non-traditional students. A substantial percentage were positive about: expanding the program to non-traditional students (89%), increasing accessibility (86.3%) and guaranteeing quality (76.4%). Faculty believed the non-traditional programme must be of the same quality as traditional courses. Among the areas of concern were instructional difficulty and adequacy of laboratory facilities for faculty in the sciences. Faculty-student interaction and library resources were rated as of critical importance by 85.8% of the total sample. Johnson's study traced lower receptivity scores to medicine and dentistry where the requirements of clinical education present formidable obstacles to the natural sciences as well as history and modern languages. The study explained that feasibility of external programs was closely limited to practical

considerations of implementation and market. Faculty response was described as generally ambivalent, and the external degree characterised as offering few incentives, generating value conflict, and representing a difficult problem in the setting of a research-oriented university.

Johnson found out that in terms of professional characteristics only familiarity and non-academic background were good predictors of the extent to which faculty favoured or opposed the external degree program. Faculty with direct knowledge of external programs registered much higher percentages of receptivity than those with indirect knowledge or no knowledge. Overall, variables in the categories of desirability and feasibility were the strongest predictors of faculty receptivity.

Studies from Africa.

Siaciwena's (1989) and Rishante (1985) provide major examples of faculty attitudes towards distance education from Africa. Siaciwena (1989) studied faculty attitudes toward distance education at the University of Zambia. The study identified lecturers as not having enough time to carry out their distance teaching. Distance teaching was regarded as an extra burden which was not sufficiently rewarded.

Despite the low sample size of twenty-six, it was significant in terms of staff attitudes. Using a quantitative method, 61% of his respondents "felt that distance teaching was not given due weight when considering academic staff for promotion and that more often than not correspondence study is considered the last priority by lecturers and other university members" (p. 58).

Faculty criticised distance education in relation to the load on student counselling and support services. Most of the lecturers (two-thirds) agreed that the counselling services did not seem to solve students' problems due to a lack of interaction between course advisors and individual lecturers. Siaciwena (1989) concluded that

> the main source of dissatisfaction seem to be the heavy teaching load which is largely a consequence of the shortage of staff in teaching departments and the tendency in some departments to give distance teaching lecturers the same internal teaching load as those who do no teaching externally (p. 59)

He supported the views of Clark, Soliman & Sungaila (1984) that one way to overcome the dissatisfaction of lecturers thus ensuring interest and promotion, is to "include changes in the teaching environment and organisational structure, in the promotion criteria and the provision of staff development programs related to teaching" (Clark et al, p. 60) and to work out a reward system to adequately and demonstrably recognize the lecturers' contribution to distance education. The attitudes of staff towards distance education varied in terms of support and participation.

Rishante's (1985) Nigerian study involved attitudes of academics towards distance education innovation. The study elicited the ways in which the characteristics of academics differed in terms of their attitudes towards the adoption of distance education as an innovation. Apart from familiarity with distance education concepts, there were no significance differences in attitude toward the National Open University of Nigeria (NOUN) across the contextual variables used; "conventional system adequacy" and lack of distance education related skills were identified as the only major reasons for

unwillingness to participate in the proposed innovation.

Studies not directly related to faculty attitudes include those of Aggor, Kinyanjui, Pecku, & Yerbury (1992), Aggor (1991), and Dodds (1988). Aggor, in both documents, elaborated on the need for distance education in Ghana. He emphasised the potential of distance education and drew parallels with programs being organised elsewhere. His major concerns included the inability of the universities to accommodate and admit a large number of qualified students, and the general problems facing part-time learners. The Aggor, et al. (1992) report contained far reaching recommendations for the establishment of distance education in Ghana. Among them were: the introduction of university distance education, the establishment of study centres, and funding.

Another study on distance education was completed by Kinyanjui (1992) on the training of teachers at a distance in Kenya. He found out that although distance students were highly motivated by monitory benefits, their motivation needed to be sustained through professional support and commitment. He maintained that close consultation and cooperation among the various departments, organisation, and institutions involved and clear definition of each entity's responsibilities are important. Kinyanjui concluded that distance education requires orientation and training to equip educators with the knowledge, skills, attitudes and approaches that are appropriate to distance education as well as the provision of the necessary physical, fiscal and human resources to operate efficiently.

Dodds (1992) revealed that the problems and challenges facing distance education in Africa were not motivational; rather, they arose in areas of material development and delivery, tutorial and student support services, administrative structures, political

commitment and understanding the concept of distance education. Distance education, to him, should be seen as a supplementary rather than an alternative form of education and should be of equality (parity of esteem) as other types of education.

Innovation and Adoption.

The view of distance education as an innovation provides an important means for understanding the phenomenon of distance education, especially from the perspective of faculty (Dillon & Walsh, 1992). The overall argument developing in the educational change and innovation literature is that effective change and/or innovation require pre-planning, on-going thought, resources and the ability to cope with day-by-day problems and issues in an effective way (Braithwaite, 1993; Larsen, 1991).

One major element for consideration in any proposed change process is the concept of time. Motivated faculty and the institutions have always found time to change and adapt their curriculum or program and teaching methods spontaneously and gradually. According to Fullan (1991), change that is imposed from outside with a deadline exerts much more pressure on individuals particularly if they have not participated in the thinking on which the changes are based. Although they may be sympathetic to the aims and intentions underlying those proposals, they may not, at first sight, be able to internalize the link between the philosophical framework and its manifestations in terms of course outlines, teaching approaches, and assessment criteria (Linke, 1993).

Strategies for bringing about educational change differ but they are most often committed to social planning in the new technological society (Griffin, 1983; Koontz,

1981). These strategies include the gaining of an awareness and understanding of innovations often associated with the view that change will come given the political will. However, in most organizations the power-coercive strategy is used. When this happens, change occurs by the deliberate restructuring of the situation by a superordinate having the necessary authority. Such a strategy is underpinned by political, legal and economic sanctions. This approach rarely invokes compliance, especially when it represents a challenge to professional ideology (Etzioni, 1975). Furthermore, the environment into which an innovation is introduced will determine how it will be altered or adopted. With this approach to distance education, one in which the curriculum is located in a socially constructed context of culture, power, and ideology, resistance to innovation can take a variety of forms.

Cameron (1984) defined organizational adaptation as "modifications and alterations in the organization or its components in order to adjust to changes in the external environment"(p. 123) and suggested that, in view of the increasing complexity and turbulence of organisational environments, organisational adaptation must become a standard feature to ensure long-term survival. Similar sentiments, that organisations must adapt to changes and environmental uncertainties in order to survive have been expressed by Emery & Trist (1965), Kotler (1982), and Rogers (1983). In most universities, like those in Ghana, many faculty members may be unaware of the extent of their own universities/faculty involvement in distance education and its implications for the institution and society as a whole. Faculty, by maintaining the status quo, do not see the university moving beyond its walls and, as a result, may reject proposals for distance

education.

As a result of environmental uncertainties, universities are often considered as conservative institutions. Distance education, therefore, would be a covert operation in breaking this problem (Harris, 1991). According to Haughey (1989), academic activities in general are embedded in a climate of ambiguity and uncertainty due to lack of agreement about solutions to changing the universities system or mission. She pointed out that the danger is that although an innovation or change can easily become part of the work of the organisation "the retention of academic traditions may also endure" (p. 161). She believes that the acceptance of distance education as part of the mandate of universities appears to be problematic.

Haughey explained this in the following quote:

> Certainly, such images suggest that while some loosely coupled units may already be involved, there is always a possibility that distance education will not be generally accepted or sustained. The compartmentalization of academic staff into faculties and departments, each most concerned with the values, procedures, and issues associated with its own discipline, mitigates against the adoption of a single initiative. (pp. 162-163)

Haughey (1989) castigated the attitude of faculty towards university distance education and emphasized the democratization of education, the reduction of educational inequalities, and the provision of opportunities for self-actualisation in adult learners. The university, to her, must consider the impact of life-long learning on traditional university programs and must consider the adoption of continuing professional education as a serious commitment.

Perhaps, Roger's (1983) theory on innovation clarifies the situation. He suggested that the presence or absence of certain characteristics could predict not only whether an innovation would be accepted but also the rate of diffusion throughout the system. According to Rogers, an innovation is more likely to be adopted if, in addition to receiving prior commitment, it is perceived to be: better than its predecessor (relative advantage); compatible with the needs, past experience and value system of the adopters; and relatively simple and easy to understand (complexity). He further suggested that early adopters in a social system " tended to be younger in age, have higher social status, a more favourable financial position, and more specialized operations" (p. 192).

Writing from a faculty point of view, Lindquist, (as cited in Dillon &Walsh, 1992), believed the role of ownership and values were so strong that for an innovation to be successful, it must fit the local scene and be perceived as belonging to those whom it affects. This presupposes that innovation must start from within (McIntyre, 1978; Fullan, 1993) and must have the support of all.

Regarding educational change, Fullan (1991) made the point that effective reform requires the presence of six themes: vision building, evolutionary planning, initiative taking and empowerment, staff development and resource assistance, monitoring/problem-coping, and restructuring. According to Fullan, the presence of a combination of these themes provides effective innovation.

In most innovations and curriculum change, the most neglected aspect has been implementation. Patterson and Czajkowski (1979) suggest that much of the failure of educational innovations may be attributed to inadequate attention paid to the

implementation phase. They indicated that more effort should be put into *planning* for implementation, applying change strategies and conducting staff development.

Summary

Although most investigations recognize the importance of faculty, studies so far conducted vary in scope and specificity. The literature reviewed has shown that faculty in general were either ambivalent or receptive towards distance education. The various characteristics exerted by the university on faculty either requires them to accept or reject innovation. Generally, faculty attitudes vary according to the circumstances in which they find themselves and their academic discipline (Johnson, 1984; Black, 1995). In this situation faculty attitudes may be related primarily to their roles in the university and how the innovation affects them personally. For instance, tutors who cannot take on extra load or work with distance students may reject the system outright, even though they may be unfamiliar with the concept.

The literature demonstrated that unless faculty are willing and able to introduce innovations planned by others into their courses, these innovations will not be implemented. Faculty cannot be by-passed. The assumption that faculty may accept innovation uncritically is not supported in the literature.

CHAPTER 3

METHODOLOGY

Introduction

The purpose of this chapter is to present an overview of the study's methodology. This involves the selection of the target population, the research design and instrument used for the study, ethical considerations adopted, and the procedures adopted for the collection and analysis of the data.

Respondents

The study involves the participation of faculty from two universities in Ghana, University of Ghana (Legon) and the University College of Education at Winneba (UCEW). Incidentally, they represent the oldest and the youngest universities in Ghana respectively. University of Ghana is a general course (comprehensive) university while the University College of Education at Winneba is Teacher Education (specialized/professional) institution offering only undergraduate programs. Both universities are urban-based. University of Ghana has over four thousand students with UCEW nearly a thousad students. Currently, UCEW is writing modules in four courses for 246 (136 females) first year distance education students in English, Life Skills, Mathematics and Science to be delivered in five study centres in Tamale, Kumasi, Hohoe, Cape Coast, and Winneba.

The respondents included all faculty members currently working in the selected faculties as of March 1996, in University of Ghana (Vice-Chancellor's Report, UG., 1996)

and University College of Education in Winneba (UCEW, 1996). The only exceptions were: (a) those not on full-time employment; (b) those on sabbatical leave or out of the country; and (c) those on study leave.

This represented over a third of all university lecturers in Ghana. Twelve faculties comprising forty-two departments (31 in Legon and 11 in Winneba) as illustrated in Tables 3.1 and 3.2 formed the sample.

Table 3.1
Sampled Faculties/ Faculty Members in University Of Ghana.

Faculty	*Faculty Members*	
	#	%
Social Sciences	78	35.3
Faculty of Law	11	5
School of Administration	26	11.8
Faculty of Science	52	23.5
Faculty of Arts	50	22.6
Faculty of Agriculture (Home Science)	4	1.8
Total	221	100

Table 3.2
Sampled Faculties/Faculty Members in University College of Education at Winneba

Faculty	*Faculty members*	
	#	%
Inst. of Educ. Dev't & Extension (IEDE)	8	6.8
Special Prof. Studies in Education	20	16.9
Gen. Culture & Social. Studies in Educ.	26	22.0
Science Education	20	16.9
Applied Arts & Tech. Educ..	16	13.6
Languages Education.	28	23.8
Total	118	100

Table 3.1 shows that more than a third (35.2%) of Legon faculty were in the Social Sciences. Other areas of concentration were the Arts (22.6%) and Science (23.5%)faculties. The four lecturers in the Home Science form a sub-set of the Agriculture faculty.

In Winneba as indicated in Table 2, the lecturers were more evenly distributed than at Legon. The Languages faculty has slightly more (23.7%) than other faculties. The 8 members in IEDE represented the smallest faculty at the time of the study. As expected, the IEDE faculty being a new faculty, had just began recruiting faculty members. Also, Winneba, being a new university, has fewer faculty members compared to Legon. This explains the differences in the number of faculty in the two universities.

The various characteristics of the participants are provided in Table 3.3.

Table 3.3
Participants profile by age, academic discipline, administration, gender, academic experience and academic rank for both universities.

Variable	*Frequency*	*Percentage*
Age Range		
30-34 years	13	6.3
35-39 years	39	18.9
40-44 years	44	21.4
45-49 years	45	21.8
50-54 years	28	13.6
55-59 years	18	8.7
60 years & above	5	2.4
No Response	14	6.8
Academic Discipline		
Humanities	23	11.2
Social Science	41	19.9
Science	32	15.5
Applied Science	6	2.9
Research	26	12.6
Professional	78	37.9
Gender		
Female	75	36.4
Male	131	63.6

Table 3.3 continued.

Administration	#	%
Yes	74	35.9
No	120	58.3
No Response	12	5.8
Academic Experience		
Below 4 years	47	28.8
5-9 years	52	25.2
10-14 years	37	18.0
15-19 years	35	17.3
20-24 years	15	7.3
25-29 years	10	4.9
30 years & above	7	3.4
No Response	3	1.5
Academic Rank		
Lecturer/ Resident Tutor	117	56.8
Snr. Lecturer/Snr. Resident Tutor	59	28.6
Associate Professor	20	9.7
Professor	10	4.9

Note: N=206.

Age of the lecturers:

Most of faculty, 89 (43.2%), were in the age groups 40-45 and 45-49. The median age was 45.5 years. Less than a quarter (39) were below 40 years while 23 (12%) were above 50 years. Differences were found between Legon and Winneba where the average ages were 46 and 42.7 years respectively. Fourteen (6.8%) participants did not specify their ages.

Academic Discipline

Academic discipline was classified into six categories in partial conformity with

Johnson (1984), rather than Black (1995) Hard-Soft, Pure-Applied dimension. This was consistent with the Ghanaian situation.

The professionals constituted over a third (37.9%) of the participants. This disproportionate representation was due to the fact that most of the lecturers at Winneba were training professional teachers. Professional departments in Legon included Nursing, Communication Studies, School of Administration, Library and Archival Studies and Theatre Arts. Applied Sciences were under represented because only a few of the respondents specified belonging to this sector.

Administrative work

One hundred and twenty (58.3%) participants were non-administrators, with 74 (35.9%) actively performing both lecturing and administration. In both institutions, only a few of faculty were involved in direct university administration.

Gender

In terms of gender, female participants were nearly half the number of the males. This large difference may be attributed to the level of education attained by Ghanaian women in higher education. Females were over-represented in disciplines like Home Economics/Home Science, and Nursing.

Academic Experience

The lecturers at both universities were fairly new. Less than 10% of the respondents had taught for more than 25 years. This fact is representative of those in the Professorial rank. More than half (56.8%) were Lecturers/Resident tutors.

Research Design

A survey design was chosen for the study. This was regarded as most appropriate for collecting valuable data from faculty members concerning their perceptions, interests, opinions and related issues with regards to distance education at the university level (Borg, Gall & Gall, 1993). The design is similar to the Johnson (1984) and Black (1992) studies on receptivity and support for distance education; it placed emphasis on faculty participation (willingness to teach a distance education course). Johnson (1984) employed survey research methods, while Black (1992) combined both the survey and interview method. Borg, Gall & Gall (1993) suggest that survey methodologies are appropriate where people are able to analyse their own behaviour and articulate their belief systems.

Objectives

Consistent with the research questions raised in Chapter 1, the specific relationships regarding distance education, examined in the study are outlined in the following tasks:

(i) to determine levels of faculty participation between institutions

(ii) to determine levels of familiarity across institutions and participation.

(iii) to assess faculty beliefs about social norms.

(iv) to assess faculty beliefs about feasibility.

(v) to assess faculty beliefs about compatibility (access and quality)

The terms in the model were assessed (operationalized) using a number of indicators. Table 3.4 presents the variable sets employed in the analysis arranged as organising and

model variables.

Table 3.4
Variable Sets and Indicators Used in the Analysis

Organizing Variables	***Participation*** Willingness to teach	***Institution*** Winneba Legon	***Professional Characteristics*** Gender, Age, Acad. Discipline
Model variables	***Familiarity*** Heard Read Discuss (informal/formal communication)	***Social influence*** Institutional policies Individual (significant others)	
	Feasibility Incentives.(participation) Resources (institution) Personal Effects(Roles and functions)	***Compatibility*** Access Quality - University education - instruction - instructional materials	

Organizing Variables:

Participation/Institution/ Professional Characteristics

The organizing variables employed in the study were Participation (willingness to teach) and Institution (Legon and Winneba). The analysis was initiated with an assessment of the relationship between levels of faculty participation and their institutional affiliation. Selected professional characteristics (gender, age, and academic discipline) were also examined.

Model Variables:

Familiarity

Familiarity with the principles and practices of distance education was determined with respect to hearing about the concept, reading from magazines and journals, and colleague discussions. An important distinction was made between formal and informal communications among faculty in the two institutions. The two familiarity variables reading and hearing were classified as personal knowledge acquisition while colleague discussions were operationalized as social interactions.

Social Influence

Two sets of variables were used to distinguish social influences: institutional and individual (significant others). University policy, government policy and departmental policy constituted institutional factors. Departmental colleagues, departmental head and colleagues in other departments were designated as individual or significant others. These normative influences were determined according to institutional differences. The role of significant others was analysed along levels of participation.

Feasibility

The concept of feasibility was measured by such indicators as incentives for faculty, library facilities for distance students, resources for teaching in distance education courses, satisfaction and benefits of teaching in distance education. Feasibility as personal incentive was examined in terms of institutions, participation, and selected professional characteristics (gender, and age). The expectation was that younger faculty or women would be more interested in promotion and tenure than older, established faculty. Younger

faculty and women might be interested in developing their careers.

Compatibility

Compatibility factors were measured in relation to levels of participation and quality of instruction, quality of instructional materials, and the performance of distance. Quality of university education was measured in relation to participation.

Survey Research Instruments

Data was collected through a mailed questionnaire technique to 339 lecturers (221 in Legon and 118 in Winneba). This was consistent with procedures adopted by other researchers who had conducted similar studies (Black, 1995; Taylor & White, 1991; Clark, 1992; Siaciwena, 1989; Dillon & Walsh, 1992). It was found that because most lecturers were busy and engaged in teaching and research activities, the survey technique was less intensive, thus enabling them answer the questions at their own convenience and pace. It was anticipated that people would find it difficult to provide personal information if a face-to-face interview method had been adopted (Best & Khan, 1993). To obtain individual elaborations of the questionnaire items, open-ended questions were included in the instrument. The questions were predominantly closed to make coding easier. For those items requiring personal views on compatibility, feasibility and social environment factors open-ended questions were used to avoid pre-judgement and value-laden information (Best & Khan, 1993).

The questionnaire had a total of 39 questions of which 13 were open-ended (see Appendix A). The questionnaire was divided into four sections. The initial items on the

questionnaire centred on the demographic information of the participants. This covered professional characteristics such as university academic position, academic department (Johnson, 1984) or faculty, lecturing experience, age, sex and responsibilities.

The second section focused on the level of familiarity with university distance education through hearing, engaging in discussions with colleagues, and reading newspapers and scholarly journals. Respondents ranked each on a scale from "3 - A great deal", "2 - To some extent" to "1 - Not at all".

The third section elicited views about university distance education courses with regard to how they would vote, and speak, at departmental meetings. In addition, respondents indicated their willingness to teach distance courses, and their need for training before participating. Other questions focussed on anticipated personal effect on present work, and on comparison of the two systems (on-campus and distance education) in terms of quality of instruction and quality of instructional materials. Perceptions and opinions on distance education at the university level were based on a five-point Likert attitudinal scale ranging from "Strongly Agree (5)" to "Strongly Disagree (1)".

The final section addressed two issues. The first part related to their compatibility and perceptions about the quality of university education and access to university education. The second issue, involving Social Norm, attempted to determine the extent that factors such as university and Government policies had an effect on faculty toward participation. Also included were the influence of colleagues views and department heads on respondents' decision to teach distance education courses. Based on a 4-point scale of "4 - A great deal", "3 - To some extent", "2 - Not at all" and "1 - Not applicable" faculty

were asked to determine their level of influence. Finally, two open-ended items on the questionnaire elicited their opinions/comments on the advantages and disadvantages of undertaking university distance education.

Data Collection

Pilot Study Procedures

The questionnaire was thoroughly scrutinized by the supervisor and the committee members, colleagues in the Education Faculty as well as the Ethics Advisory Committee of the Senate Research Committees to conform to research standards and approved (Appendix B).

The questionnaire was pretested on a selected group of lecturers at the Institute of Adult Education in Legon during the first week of May, 1996. These lecturers had either participated in running distance education programmes or had acknowledged an awareness of the concept. The pretesting did not affect the content and structure of the questionnaire but helped to locate potential problems in the interpretation of the questions and coding procedures before it was finalised for the main survey (Borg, Gall & Gall, 1993).

Field work

The field survey was organized from the second week of May, 1996 to the first week of September, 1996. All the questionnaires were mailed to the respondents with self-addressed stamped envelopes for return when completed (Appendix C). Respondents were requested to answer all questions. In order to ensure a high response rate, a follow-up was undertaken soon after the deadline, and at two-week intervals (Gay, 1987) when responses

were not forth coming. Five people returned their questionnaires either half complete or unanswered. These were not used for the study.

Table 3.5
Response Rate From University Of Ghana.

Faculty	*# distributed*	*# received*	*% received*
Social Sciences	78	65	83.3
Faculty of Law	11	5	45.4
School of Administration	26	12	46.1
Faculty of Science	52	28	53.8
Faculty of Arts	50	26	52
Faculty of Agriculture (Home Science)	4	2	50
Total	221	138	62.4

Table 3.6.
University College of Education at Winneba

Faculty	*# distributed*	*# received*	*% received*
Institute of Educ.. Dev't & Extension	8	6	75
Special Prof. Studies in Education.	20	14	70
Gen. Cult.& Soc. Studies in Educ..	26	12	46.2
Science Education.	20	9	45.0
Applied Arts & Tech. Educ..	16	14	87.5
Languages Education	28	13	46.4
Total	118	68	57.6

Using the current lecturers list from the selected faculties, 339 questionnaires were mailed after permission was sought and granted from the two institutions (Appendixes D & E). One hundred and forty-two (142) responses were received from Legon (University of Ghana) of which four (4) were rejected for incomplete/no response. Sixty-nine (69) valid

responses were returned from Winneba. One (1) incomplete was discarded. This yielded an overall response rate of 60.8%, 62.4% and 57.6% from Legon and Winneba respectively.

The main problem the researcher faced was the late return of the responses. This was due to the fact that the university lecturers had just resumed lectures after an eight-month strike action for improved services. They were, therefore, eager to complete their academic schedules, set examination questions for the second semester, mark the first semester examinations, and conduct academic research. All these tended to affect the response rate.

Statistical Analysis

Descriptive statistics, Analysis of Variance and cross-tabulations were employed to compare and establish significant differences on the responses between the Winneba and Legon faculties regarding their willingness to teach distance education courses (participation) and other variables listed in Chapter 4. The Statistical Package for the Social Sciences (SPSS) was used to analyse all the 48 variables generated from the coded responses.

In exploring the basis of faculty perceptions on feasibility, compatibility and social influence, a content analysis of the open-ended questions was performed to explain and elaborate faculty intentions to participate.

Content analysis procedures were employed through the "Constant Comparative Method" advocated by Glaser & Strauss (1967) and Lincoln & Guba (1985) to analyse the open-ended responses.

Ethical considerations

The research proposal was reviewed and approved by the Lakehead University Ethics Advisory Committee to the Senate Research Committee (Appendix B). In order to gain access to the two universities, permission was sought from the authorities by explaining the purpose of the research, obtaining their permission to conduct the research, and securing a list of lecturers in the selected faculties.

Letters with self-addressed stamped envelopes were sent to participants. The respondents were informed of the purpose of the study, and assured the treatment of their responses would be confidential and used only for this research project. They were also assured of the absence of physical danger or psychological harm in participating in the study (Appendix F). Also none of the questionnaires requested individual names. Instead, identification or serial numbers were used. The primary data will be stored with the Lakehead University for seven years by the supervisor of this thesis.

CHAPTER 4

RESULTS

Introduction

This chapter analyses the survey results gathered from two universities in Ghana (Legon and Winneba). As described in Chapter 3, the analysis is structured to determine the basis for faculty support - defined in terms of their willingness to participate in a distance education programme.

Determining the Levels of Participation

Willingness to Teach a Distance Education Course

Willingness to teach was used as the indicator of support for university distance education. A person might either behave, speak or vote favourably, negatively or neutrally towards the adoption of university distance education. These were coded as "3 = willing", "2 = undecided", and "1 = unwilling". The two terms "willingness to teach" and "participation" are used interchangeably in this analysis. Table 4.1 illustrates faculty responses on their willingness to teach a distance education course in the two institutions.

Table 4.1.
Institutional Comparison of Participation (Willingness to Teach)

Levels of Participation	*Institution*			
	Legon		*Winneba*	
	f	%	*f*	%
Willing	74	53.6	48	70.6
Undecided	40	29	8	11.8
Unwilling	24	17.4	12	17.6
Total	138	100	68	100

There were significant differences in the responses of Legon and Winneba faculty toward participation ($X^2_2 = 8.01$, $p < 0.05$). As may be seen in Table 4.1, faculty's willingness to teach was significantly higher in Winneba than Legon. More lecturers showed indecision in Legon than Winneba. Perhaps, the level of programme development in Winneba might account for the high level of support.

Participation and Gender

There were no significant gender differences in respondents' willingness to teach ($X^2_2 = 5.60$, $p > 0.05$); however, as shown in Figure 4.1, women showed slightly higher levels of support than men. In addition, both had relatively low levels of indecision.

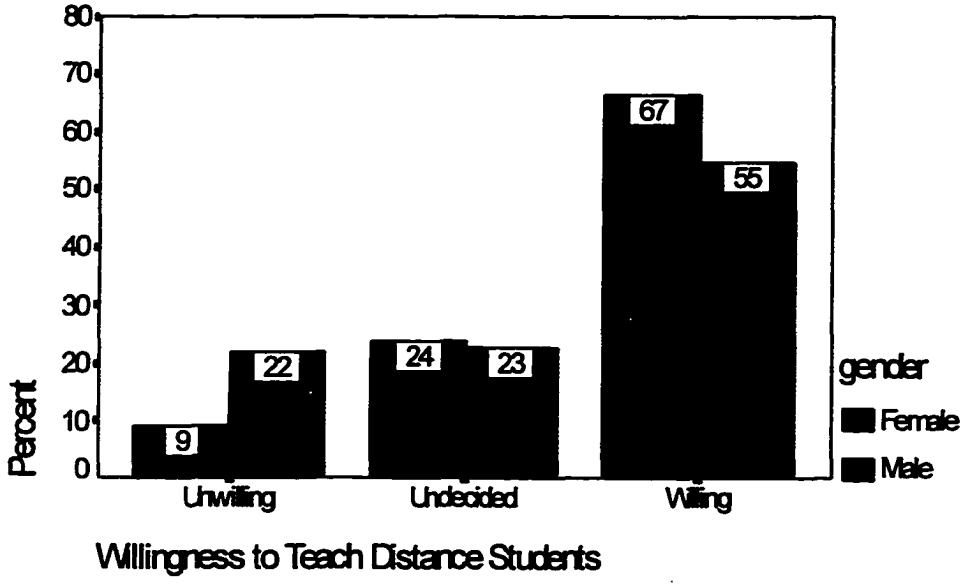

Figure. 4.1: Comparison of Gender Differences by Participation

Participation and Academic Discipline

The literature on faculty attitudes toward distance education indicates that faculty resistance was prevalent within the sciences and disciplines that require laboratories and practicals (Johnson, 1984; Black, 1992; Clark, 1991). The study found significant differences between academic disciplines in terms of willingness to teach ($X^2_{10} = 27.42$, $p < 0.05$) as shown in Table 4.2.

Table 4.2
Levels of Participation by Academic Discipline

Academic Discipline	*Participation*	
	$\bar{x}$	*s.d*
Humanities	2.59	.59
Social Studies	2.49	.72
Science	2.03	.91
Applied Science	2.17	.75
Research	1.94	.80
Professional	2.58	.71

Table 4.2 showed that faculty in the Humanities, Professional and Social Studies were significantly more willing to teach than those in research and science-related disciplines. Faculty in research were most reluctant to participate with a mean of 1.94 showing that they lie between unwilling and undecided. The mean score of faculty in the sciences show their comparatively low level of indecision. This was to be expected as distance education is being promoted in the more flexible disciplines like the social sciences and the professions. Also those in research engage in minimal university teaching. This was consistent with Johnson (1984) and Black (1995) who found faculty in the hard/pure and research-related disciplines less receptive toward distance education.

Familiarity

Extent of Faculty Familiarity with University Distance Education.

This section explored the extent of faculty awareness, knowledge and understanding of university distance education either by hearing the concept, reading from magazines and scholarly journals or discussing distance education with colleagues on their campuses. Both Black (1995) and Johnson (1984) emphasized the importance of faculty's familiarity with university distance education as an intervening variable for support and resistance. In this study the two variables, read and heard, were classified as personal knowledge with colleague discussions as social interactions as shown in Table 4.3.

Table 4.3
Extent of Faculty Familiarity with Distance Education by Institution

	Institution			
Familiarity indicators	***Legon***		***Winneba***	
	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
Heard about university distance education	2.24	0.56	2.44	0.53
Read about university distance education in magazines and scholarly journals.	1.93	0.68	1.81	0.70
Discussed university distance education with colleagues (Social Interactions)	1.75	0.71	2.47	0.63

The multivariate analysis in Table 4.3 showed significant institutional differences with regard to familiarity ($F_{3,198}=17.49$; $p < 0.05$). Faculty in Winneba were generally more familiar with the concept of distance education than Legon.

Personal Awareness of Distance Education Information:

The univariate analysis did not show significant difference between the universities with respect to individual awareness and knowledge, from readings about university distance education ($F_{1,200}$= 3.21; p > 0.05). With reference to Table 4.3, lecturers in Legon had read slightly more about university distance education from magazines and scholarly journals than Winneba.

No significant institutional difference existed in faculty's levels of hearing about university distance education through other forms of communication ($F_{1,200}$ = 1.15, p > 0.05). However, lecturers in Winneba had to a large extent heard more about the concept than Legon. Among personal knowledge variables, hearing and reading, faculty exhibited lower degree of reading.

Communication/Social Interactions:

Social interactions through colleague discussions about distance education showed significant differences between institutions ($F_{1,200}$ = 26.41; p < 0.05). Informal communication through collegial discussions were more effectively promoted in Winneba than in Legon as indicated in Table 4.3.

The study further demonstrated the extent to which Winneba faculty had been exposed to distance education. Perhaps, the extent of programme development in Winneba and the university policy on distance education might have promoted the high level of social interactions.

Faculty Awareness and Participation.

The multivariate analysis established significant differences in the level of familiarity between those willing, unwilling and undecided. Those familiar with university distance education were more willing to participate than those unfamiliar ($F_{6,396} = 5.06$, $p < 0.05$) as shown in Table 4.4.

Table 4.4
Faculty Familiarity about Distance Education by Levels of Participation

	Participation					
Familiarity indicators	***Willing***		***Undecided***		***Unwilling***	
	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
Heard about university distance education	2.43	0.58	2.13	0.49	2.11	0.47
Read about university distance education in magazines and scholarly journals	2.04	0.68	1.79	0.65	1.50	0.70
Social Interactions	2.21	0.74	1.67	0.67	1.67	0.72

The results of the univariate analysis of variance (Table 4.4) revealed significant differences in the degree of familiarity across participation levels. There were significant differences between the willing, undecided and unwilling with respect to colleague discussions ($F_{2,200} = 10.23$, $p < 0.05$). Social interactions were significantly higher among willing faculty whose mean level of contacts with colleagues was 2.21 as compared to that of the unwilling and undecided groups both of whom had means of 1.67 as in Table 4.4.

With regard to personal knowledge through reading, the study showed significant differences among the three levels of participation ($F_{2,200}=11.46$, $p < 0.05$). A higher level of journal reading as a means of acquiring personal information on distance education and

other related sources characterized the willing faculty. Their mean of 2.04 was significantly higher than the unwilling and the undecided faculty with means of 1.79 and 1.50, respectively.

The univariate analysis showed significant information gathering differences through hearing of the concept between participation ($F_{2,200} = 7.12$, $p < 0.05$). As shown in Table 4.4, the willing faculty had heard more about university distance education than the unwilling and undecided. However, faculty irrespective of the levels of participation had read very little about distance education compared to hearing and social interactions.

The study found faculty very familiar with distance education more willing to teach than the unwilling and undecided. This was consistent with the literature on faculty attitudes toward distance education which stated that those more familiar with distance education were supportive of distance education than those with lower levels of familiarity (Scott, 1985; Johnson, 1984; Black, 1995).

Faculty Participation and Speaking At Departmental Meetings

Faculty expressions of formal acceptance or resistance to a programme are discussed and determined at departmental meetings. It is at such meetings that faculty debate the pros and cons of adopting such a proposal. The general consensus, irrespective of individual differences, opinions and beliefs, forms departmental policy. The study found significant differences in the responses of faculty's willingness to teach and speak at departmental meeting in favour of adopting distance education courses ($X^2_4 = 172.66$, $p < 0.05$). The willing faculty were more likely to speak positively for adopting distance

education in their respective faculties and departments than the unwilling. For example, 86% of willing faculty members would speak positively for the adoption of distance education in their departments. The undecided were neutral as in Figure 4.2.

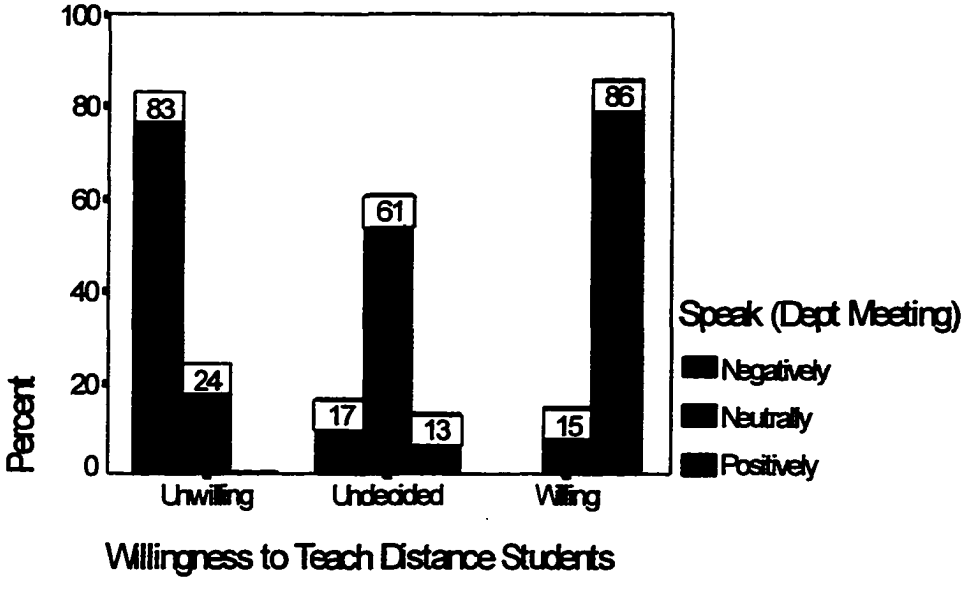

Figure 4.2. Faculty Participation by Speaking at Department Meetings.

Social Norms

Underlying the *concept of social norm* is the influence of the individual's motivation to comply with the wishes of significant others (Fishbein and Ajzen, 1980; Etzioni, 1975) and the opinion of group members (Fitzpatrick, 1989). The social norm factor was included in the adoption of the Black (1995) model to determine the extent to which norms and values existing within the society and the university influenced faculty participation in distance education.

Extent of Social Influence on Faculty Participation.

This section tries to determine the extent to which social influences may compel faculty to teach a distance education course. The multivariate analysis of variance showed no significant institutional differences in terms of social norms ($F_{6,196} = 1.87$, $p > 0.05$).

Table 4.5.
Extent of Sources of Social Influence by Institution

Social influence indicators	***Institutions***			
	Legon		***Winneba***	
Institutional	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
University policy on distance education	3.20	.82	3.47	.66
Government policy on distance educ..	2.86	.89	2.97	.83
Department Policy on distance. educ..	3.32	.72	3.37	.67
Colleagues/Significant Others				
Colleagues in your department	2.65	.68	2.84	.80
Colleagues in other department.	2.36	.62	2.37	.73
Your head of department	2.67	.87	2.85	.90

Institutional Influence

No significant effect was found for institutional influences on institutional differences ($F_{3,198}=2.59$, $p >0.05$). For example, the univariate effect on university policy were: ($F_{1,200}= 2.63$, $p > 0.05$); government policy ($F_{1,200}=1.19$, $p > 0.05$); and departmental policy ($F_{1,200} = 0.28$, $p > 0.05$). However, from Table 4.5, faculty may be influenced to participate by department and university policies more than by government policy. For example, university policy had greater impact on Winneba faculty with Legon faculty

likely to be influenced by departmental policy.

The multivariate analysis of variance showed that levels of participation differed according to institutional policies ($F_{6,396}$=9.26, $p < 0.05$). The influence of institutional policies had greater effect on those willing to teach distance education courses than the unwilling and undecided faculties as shown in Table 4.6.

Table 4.6

Institutional Influences by Willingness to Teach (Participation)

Institutional Policies	***Participation***					
	Willing		***Undecided***		***Unwilling***	
	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
University Policy	3.55	0.64	3.06	0.86	2.72	0.70
Government Policy	3.17	0.85	2.56	0.80	2.44	0.70
Department Policy	3.52	0.63	3.23	0.75	2.86	0.64

The univariate analysis of variance indicated a significant difference of university policy on levels of participation ($F_{2,200}$ = 19.26, $p < 0.05$). As well, the influence of government policy significantly differed across levels of participation ($F_{2,200}$ = 17.59, $p < 0.05$). There were also significant differences with regard to the influence of department policy on levels of participation ($F_{2,200}$ = 11.56, $p < 0.05$).

Colleagues/Significant Others and Participation

A multivariate analysis of variance showed significant differences between participation and significant others ($F_{6,396}$ = 3.65, $p < 0.05$). Those willing to teach distance

education courses showed significantly higher degrees of influence by significant others than the unwilling and undecided as shown in Table 4.7.

Table 4.7
Influence of Significant Others by Participation

Colleagues/Significant others	*Participation*					
	Willing		*Undecided*		*Unwilling*	
	$\bar{x}$	*s.d*	$\bar{x}$	*s.d*	$\bar{x}$	*s.d*
Department Colleagues	2.85	0.74	2.60	0.68	2.38	0.65
Other department colleagues	2.48	0.74	2.31	0.55	2.05	0.23
Department head	2.93	0.91	2.63	0.79	2.22	0.68

The univariate analysis found significant differences between participation and the levels of influence from departmental colleagues ($F_{2,200} = 5.08$, $p < 0.05$). Departmental colleagues were more likely to influence the willing faculty into participation than the unwilling and undecided.

Similarly, there were significant differences between participation and the influence of the departmental head ($F_{2,200}=9.02$, $p < 0.05$). Table 4.7 showed that the willing faculty with a mean of 2.93 higher than the undecided and unwilling whose means were 2.63 and 2.22 respectively may be influenced by the departmental head.

As well, colleagues in other departments and participation showed significant differences ($F_{2,200} = 6.46$, $p < 0.05$). Colleagues in other departments may influence the willing faculty whose mean of 2.85 was more than unwilling and undecided with a mean of 2.60 and 2.38 respectively.

Direction of Social Influence on Participation.

The views of faculty on how the most important social norm will motivate them to teach distance education courses were similar in both universities. As identified in Table 4.5, the lecturers were likely to be more influenced by political and institutional policies than group pressures and those individuals who had a significant influence in their lives.

Influence of University Policy:

Faculty members on contract with the university, are bound to comply with university policies which may weigh heavily against their personal beliefs and intentions. Examples of such influences are represented in the following statements:

-I have been employed by the university to teach and I have to do the work assigned. (Male, Snr Lecturer, Chemistry, Legon)

-If distance education is university policy, it will be well organised and as part of the university, I see it as my responsibility to help towards it. (Female, Snr. Lecturer, Legon, Administrator)

-If it is university policy, then I would assume that the university will consider my workload, the staffing position, prospects of promotion etc. so that I do not, as it were, work in vain. (Female, Snr. lecturer, Legon, Unwilling to teach)

- A university policy to engage in distance education will influence my decision to teach distance education courses because, as a faculty member, the university policies must be upheld and worked on, to improve its status and the organisation's objective. (Female, Home Economics, Winneba)

- I am employed by the university and part of contractual agreement is to teach

distance education, then, I have to comply. I have no alternative other than to quit. (Male, Lecturer, Professional)

University and Government Policy:

In most cases, government policy is implemented by the university, bearing in mind its strengths, weaknesses, opportunities and threats. This is because the university is not completely autonomous. It relies entirely on the government and society in the performance of its roles and functions. Therefore, government policies have far reaching implications for performance, although faculty may resist such temptations through industrial actions and petitions. Some of the issues addressed were:

-The government determines the direction of some of the university programmes through finance. So, if it is ready to finance, I have to support it. (Male, Snr lecturer)

- The most important reason to me is the government policy on distance education. Such a policy will determine how much resources will be put into the scheme and how people engaged in it are going to be motivated. This, to me will greatly determine my preparedness to participate in the distance education programme. (Winneba, Female, Professional)

- If government policy is being implemented by the university to teach distance education courses, this is the policy my department will adopt for my head of department to carry out. It will be a matter of duty; I will have no choice but to teach distance education courses. (Male, Snr Lecturer, Legon)

- My experience is that our university has always dragged its feet anytime

innovative programmes are being discussed. The way the proposed distance education programme is being handled is a good example. Only a strong government policy backed by the necessary resources can see the program take off. (Male, Social Studies, 20 years lecturing experience, Legon)

Head of Department:

Direct personal influence may be directed on faculty by the immediate superior who may be supportive of implementing the programme. This can either help to promote programme success or acceptance by other faculty members.

- *I must obey my head of department especially impact on workload* (Snr. Lecturer, Male, Research)

- *Courses to be taught might be given to me by my head of department which I cannot categorically refuse. I am expected to take instructions from my head of department who is my immediate employer.* (Female, Modern Languages)

Departmental and Faculty Policy:

Faculty and departmental decisions are paramount in teaching distance education courses. This is because the department must decide its official participation bearing in mind its potentials.

-*If my department is to teach distance education courses and they are in my area of specialization, I will teach them. In fact I would have been part of the decision making process.* (Male, Home Science, Snr. Lecturer, Legon)

- *We are bound to teach when the department accepts it as a policy and embark on distance education as part of the functions of the department. It becomes a duty.*

I cannot help out. (Male, Associate Professor, Humanities, Legon)

Peer Pressure:

Peer pressure may compel people to work against their will. When this happens they conform to the interest of the group or satisfy the group (Fitzpatrick, 1987). Thus to others, peer pressure would influence them even when they want to abstain. A lecturer stated: *If the head of department is pressurizing me and colleagues are also mounting undue pressure, I will have to do it.* (Male, Professional, Legon)

Other Factors:

Some faculty members believed factors other than those stated earlier could influence their participation. Financial considerations, personal interest and the overall strategic planning of the university were the major reasons.

-If the necessary materials and proper remuneration are made available.(Male, Lecturer, Science, Legon)

-The only reason that will influence me is if the remuneration is right (Male, Social Studies, Legon)

-I am an employee of the university and thus once it adopts a policy to engage in distance education, I should comply, provided adequate remuneration is assured. (Female, Lecturer, Humanities)

- Improved staffing position would influence my decision to teach distance education.(Male, Social Studies, Snr. Lecturer)

- Whether I will teach this course or not depends on what I believe in personally and not any other person's beliefs. (Female, Social Studies)

Feasibility

Faculty Perceptions About Feasibility of University Distance Education

Six main variables were used to determine the feasibility of university distance education in terms of personal benefits and institutional support (resources). These were (1.)Time spent on distance students; (2.) Promotion and tenure; (3.) Research and academic work; (4.) Salaries for services rendered at distance; (5.) Training need and (6.) Resources. A 5-point scale of "5 = Strongly Agree", "4 = Agree", "3 = Neutral", "2 = Disagree" and "1= Strongly Disagree" was used to determine their perceptions on the first four variables.

Incentives/Personal Benefits

The multivariate analysis showed significant institutional differences related to incentives/personal benefits ($F_{8,394} = 3.38$, $p < 0.05$). Faculty in Legon were much more concerned about personal benefits than their peers in Winneba, as illustrated in Table 4.8.

Table 4.8
Incentives/ Personal Benefits of Faculty by Institution

Incentives indicators	***Legon***		***Winneba***	
	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
Time working with dist. student	3.48	1.05	3.35	1.13
Tenure and promotions	3.74	1.20	3.87	1.33
Reduce research and academic work	3.01	1.31	2.78	1.33
Additional remuneration for distance education services	4.30	0.88	4.10	1.12

Remuneration for Services Rendered At Distance

Faculty involvement in distance education teaching is normally associated with reward (Taylor and White, 1991; Clark, 1993). When asked to express their attitudes on whether additional salaries or allowances ought to be paid for services rendered for distance teaching, most faculty agreed. Faculty views toward being paid additional allowances significantly differed across institutions ($F_{2,200} = 9.98$, $p < 0.05$). Faculty in Legon expressed significantly greater interest in remuneration than Winneba (see Table 4.8). Faculty considered remuneration as the most important incentive factor in both institutions and agreed it should form a basic component of distance education.

Tenure and Promotion

Significant differences were shown between institutions regarding tenure and promotion as part of faculty participation in distance education ($F_{2,200}=6.56$, $p < 0.05$). From Table 4.8, it was observed that faculty members in Winneba were significantly more inclined to believe that tenure and promotion should form part of their job in order to encourage more faculty to participate than in Legon. This attitude of Ghanaian faculty was consistent with the views of Olcott & Wright, (1995); Siaciwena, (1989); and Mani, (1987).

Time Spent Working with Distance Students

There were no significant institutional differences between the time spent working with distance students ($F_{2,200} = 2.03$, $p > 0.05$). Faculty in both institutions agreed the time spent working with distance education students could be somewhat excessive as shown by the means of 3.48 and 3.35 in Legon and Winneba respectively.

Research and Academic Work.

The univariate analysis of variance revealed no significant institutional differences on research and academic work ($F_{2,200} = 2.05$, $p > 0.05$). The lower mean of 2.78 in Winneba and 3.01 in Legon show that faculty believe research and academic work will not be adversely affected while engaged in distance teaching.

Incentives/ Personal Benefits and Willingness to Teach (Participation)

The multivariate analysis showed significant difference between participation and incentives ($F_{8,394} = 19.62$, $p < 0.05$) while the univariate analysis showed that three of the indicators were significant.

Table 4.9
Incentives/Personal Benefits by Levels of Participation

	Participation					
Incentive indicators	***Willing***		***Undecided***		***Unwilling***	
	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
Time working with distance student is excessive	2.67	1.04	2.50	1.05	2.28	1.13
Tenure and promotions	4.35	0.74	3.48	1.35	2.25	1.00
Reduce research and academic work	3.38	1.22	2.45	1.25	2.81	1.37
Additional remuneration for distance education services	4.53	0.71	4.17	0.88	3.33	1.24

The univariate analysis showed significant difference of willingness to teach on

research and academic work ($F_{2,200} = 3.96$, $p < 0.05$). The willing faculty (Table 4.9) believed research and academic will be somewhat adversely affected. This is exhibited by the mean of 3.38 of the willing faculty which was greater than the responses of the undecided (2.45) and the unwilling (2.81).

Significant differences were also shown between participation and remuneration ($F_{2,200}=38.18$, $p < 0.05$). Significantly, unwilling faculty members were less interested in intrinsic or monetary rewards as basis for participation while the undecided and willing faculty supported incentives for participation.

Furthermore, there were significant differences between participation groups on tenure and promotion scale ($F_{2,200} = 79.20$, $p < 0.05$). Willing faculty would encourage colleagues to participate if teaching distance students count toward tenure and promotion.

Incentives by Selected Professional Characteristics

The study further explored whether incentives differed across gender and age.

Table 4.10
Incentives/Personal Benefits by Gender

Feasibility indicators	***Gender***			
	Male		***Female***	
	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
Time working with distance student is excessive	2.57	1.11	2.60	1.00
Tenure and promotions	3.74	1.33	3.85	1.07
Reduce research and academic work	3.13	1.37	2.95	1.20
Additional remuneration for distance education services	4.25	1.01	4.20	0.90

The multivariate analysis of gender effects did not show any significant difference of incentive variables on gender ($F_{4,199} = 0.92$, $p > 0.05$). Similarly, the effects of the univariate analysis of incentives on gender did not produce any significant differences. The result indicates that faculty shared similar views regarding incentives and career development.

Table 4.11
Means and Standard Deviation of Incentives by Age.

	Incentives Indicators							
Age groups	***More time with dist. students***		***Reduce research & academic work***		***Additional remuneration***		***Tenure & promotion.***	
	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
30 - 34 years	3.54	1.13	2.69	1.18	4.31	0.75	3.92	1.32
35 - 39 years	3.89	0.99	2.38	1.02	4.10	1.14	3.69	1.34
40 - 44 years	3.25	1.04	3.16	1.33	4.14	0.93	3.80	1.27
45 - 49 years	3.51	1.06	3.02	1.32	4.28	0.92	3.76	1.25
50 - 54 years	3.46	1.20	3.11	1.52	4.43	0.84	4.00	1.12
55 - 60 years	3.83	1.10	3.22	1.40	4.44	0.98	3.78	1.22
60 & above	3.20	1.10	3.40	2.19	4.20	0.84	3.80	1.10

The multivariate analysis of variance revealed no significant age differences with regard to incentive variables ($F_{24,615} = 1.09$, $p > 0.05$). Similarly, all the univariate analysis did not show any significant age differences. From Table 4.11, the relationship of age by incentives showed that the lecturers shared similar concerns about intrinsic rewards (salaries and allowances), tenure and the effects their participation will have on research

and academic work. Younger faculty, however, showed concern about research prospects.

Training Need (Staff Development)

For any innovative programme success there should be a well organized training for the staff willing to participate (Fullan, 1993; Boot & Hodgson, 1987). Both old and new personnel must be inducted into the dynamics and workings of the programme. Change, it is said, is dynamic but requires careful planning, competent and committed personnel capable of implementing the change (March, 1981; Meacham, 1992; Beaudoin, 1990).

Table 4.12
Training need by Institution

Training Need	*Legon* (%)	*Winneba* (%)
Yes	58.0	50
No	3.6	20.6
Not Applicable	38.4	24.4
Total	100(n=138)	100(n=68)

There were significant differences in the response of Legon and Winneba faculty towards the need for training ($X^2_2 = 14.74$; $p < 0.05$). Evidence from Table 4.12 showed that more than half of faculty in the two universities (55.3%) required training in order to participate actively in the distance education programme. More lecturers in Legon needed training to participate than in Winneba. The large percentage of not applicable response were those undecided and unwilling.

Although the question was attributed to those willing to teach, it was significant that only 3.6% and 20.6% in Legon and Winneba respectively declined training in both

universities. This showed how supportive faculty were in embracing distance education. This support may have been influenced by the fact that those in Winneba had undergone training recently in course writing and assessment, while those in Legon's Institute of Adult Education had previously engaged in distance education work.

Perceived Effect of Teaching Distance Students on Present Work

Faculty not only give academic instructions to students but are intimately involved in the institutional design process, student support services like advising and counselling, writing instructional materials, evaluating students performance, research and community work (Olcott & Wright, 1995). Williams, Williams, Guray, Bertram, Brenton, & McCormack (1994) perceived these as barriers to curriculum implementation. The current study tried to find out the anticipated effect of faculty participation in distance teaching on their present work. The responses are summarized in Table 4.13.

Table 4.13
Anticipated Effect of Participation on Present Work by University

Anticipated effect on present work	*Legon* (%)	*Winneba* (%)
Improve lecturing & enhance present work/research	7.2	14.7
More work/limited time/reduce efficiency	33.3	36.8
Increase work but gain experience & information for research	9.4	11.7
Time consuming but materials help improve face to face teaching	-	5.8
Involves sacrifices (shifted attention)	8.7	4.4
Criticisms of work creates better delivery	4.3	4.4
Increase work load/limit research & administrative work	22.4	16.1
No effect	5.1	4.4
Affect professional practice	2.2	-
Affect leisure/ Research	3.6	-
Cannot comment/no interest	3.6	1.4
Total	100 (n=138)	100 (n=68)

Table 4.13 demonstrates that faculty had different perspectives about the anticipated effects distance teaching would have on their present work. The absence of enough time and increase in workload became central to faculty participation as expressed by 33.3% in Legon and 36.8% in Winneba respectively. The general perception was the additional workload bearing in mind the limited number of lecturers and students currently on campus. Faculty members fear this will affect the time for academic work, leading to inefficiency, ineffectiveness and stress. For instance, a female Senior Lecturer in Social

Sciences in Legon with 15 years lecturing experience emphatically stated:

> *It is critically impossible for me to take part because of the current high student numbers (I have 300 students) and the demanding semester system. The staffing position in the university will have to be improved and the workload shared.*

A lecturer at Legon opposed to distance education added:

> *It could increase my workload, marking of scripts and making notes and elaborate feedback available to students by post and there is no incentive to do more for the poor remuneration of lecturers.*

Other statements were:

> *It depends exactly what is involved - writing courses? marking assignments? Setting and marking examinations? Putting on weekend encounters? Radio and television support? If so, less time for campus students and for research and for extra mural activities.* (Male, Professor , Humanities, Undecided)
>
> *- I will be writing modules and this will take me away from my work for some time. I may also be a tutor and this will be needing extra time to meet students during the vacation. My regular examination script marking may suffer.* (Male, lecturer, Winneba)

Faculty in the science and research-related disciplines complained about time for research activities, and commitment in preparing handouts and study materials for students all over the country. It was the opinion of others that engaging in distance teaching would enhance their job and research prospects.

> *-More load and responsibility but also more opportunity to read, know and*

communicate with a wide range of people. (Female, Social Studies, lecturer, Legon)

- It will be a pleasure and experience to help me in my research work from contributions of my students at a distance. A means of self assessment. (Male, Snr Lecturer, for, Professional, Legon)

-My taking part in distance education might reduce the time available to me for research. On the other hand, it could provide me new areas for research work (Male, Languages, Lecturer, Legon)

- It will add a little more load and promote more research for current information. (Male, 30 years lecturing experience, Social Studies, Legon)

- I think it will further promote my career of researching - which will be rewarding because promotions are based on research and publication.(Legon, Lecturer, female)

Professionally, some of the Winneba lecturers viewed their participation as a means to job enhancement and experience.

- It will help me improve the quality of my instructional materials by making it learner friendly. (Female, Home Economics)

- It will improve my face to face teaching in terms of planning , execution and materials. (Female, Home Economics)

- It will take more of my time but it will improve my work, because materials I would produce for distance students need more research work. This in turn will enhance my knowledge and teaching in general (Female, Home Economics,

9 years lecturing experience)

-It will help in my methodology since the delivery method is more learner friendly. (Male, Lecturer, Winneba)

- It is likely to increase my work load but will give me more experience, acquire additional skills in my profession and plan my lessons well (Snr lecturer, Science, Legon)

Some lecturers believed outside criticisms and comments on course materials could help improve their present work more than the lecture method which offers little or no feedback from the students. Only 2.2% at Legon anticipated an adverse effect on professional practice. These were lecturers in Law and Administration. As a senior lecturer in Legon stated: *If you have to meet students during the holidays then it will affect leisure. It will also involve sacrifice as you may resume work tired.*

Resources

Feasibility of Adopting Distance Education in Terms of Resources

An area of concern for institutions to adopt a concept or idea is the resources available to sustain the programme over time. Distance education teaching is cost effective in the long run but initially requires the availability of both human and material resources. To this end, faculties were asked to indicate how feasible it would be for the universities in adopting distance education with regard to resources. Their views are expressed in Table 4.14.

Table 4.14
Feasibility of Adopting Distance Education by Institution

Response	*Legon (%)*	*Winneba (%)*
Political will & external funding	0.7	5.8
Institution established (course writing & recruitment)	1.4	17.6
University facilities will be overstretched	4.3	4.4
Human resources available but logistics & training	1.4	4.4
Needs more staff, logistics & funding	52.2	25.0
Incentives/motivation of lecturers & students (for programme sustenance)	15.9	19.1
Not feasible - communication problems	8.6	4.4
Needs proper planning & programme management (limited courses)	10.8	7.3
Needs more & well-equipped study centres	0.7	4.4
Cannot tell	2.1	1.5
Can only use print materials	0.7	4.4
No Response	0.7	1.5
Total	100 (n=138)	100 (n=68)

Table 4.14 shows that the universities are currently not well equipped for the commencement of distance education. In other words, without resources and other facilities, adoption will not be feasible. More than half (52.2%) in Legon expressed this concern with almost a quarter in Winneba. The central issue was the need for more staff and funding for the successful implementation of the programme.

- Everything depends on capital. If sufficient capital is provided and personnel motivated well, the hard-liners may be convinced to adopt it by next academic year (Legon, male, Snr lecturer, Science)

- Not feasible, resources are inadequate. There is no use starting for a few years with external funding to be stopped later. The university must make sure most departments agree and set right the incentive system. (lecturer, male, Social studies)

Communication Problems:

The absence of high technological inputs of communication may render the programme ineffective as illustrated in Table 4.14. As a lecturer puts it, the university presently cannot afford the provision of technological equipment.

-At the moment, it will not be very feasible giving the facts that we have a general problem with communication. Letters take weeks before they reach their destination. Certain areas do not have a post office. Getting materials to participants would be a problem. Textbooks are not available for even on-campus courses let alone for distance education courses. (Female, Winneba, lecturer)

- Not feasible at the moment with poor communication and transportation problems (Female, Winneba)

In Legon, the need was highlighted for better telecommunication systems, such as telephones, photocopiers, and fax machines, to facilitate such a venture.

Planning :

In Table 4.14 planning toward effective participation was seen as essential by 10.8% and 7.3% of Legon and Winneba faculties respectively. A coordinator of the

programme had this to say:

> *A little bit of planning in the use of facilities will do. For example, distance education students can use the university during holidays and also use the Workers Colleges as study centres where they can meet their tutors.* (Snr Lecturer, Legon.)
>
> *- It will call for adequate preparation in terms of proper planning for the subject areas that should be tackled, as well as the students to be targeted at the onset. This is because budgetary allocation to tertiary institutions in Ghana is diminishing in real terms and telecommunication system not effective. Also the current student-lecturer ratio and academic work as well as research calls for strategic planning.*(Legon, Associate Professor, Science)
>
> *-The prospective students as well as the general populace would have to be made aware of such a programme before it could be adopted in order to produce a positive result* (Legon, Nursing, non-administrator)

Motivation:

Motivation, both intrinsic and extrinsic, serves as a catalyst in promoting interest and participation for both students and lecturers. Faculty members, 15.9% and 19.1%, were of the view that the feasibility of university distance education might be necessitated by motivation of lecturers and students. According to respondents in Legon,

> *For the moment, the odds are in terms of staff strength, motivation, printing materials, communication and transportation of materials which weigh heavily against distance education. This is no reason why we cannot start in a small way depending on availability of resources.* (Modern Languages, Professor)

- Feasibility to the university depends on how the university maps out strategies in selected courses which it can easily facilitate. As already stated, there is advantage in sticking to Humanities and Social studies because of far less sophisticated resources required for such programmes (Associate Professor, Science).

In fact a lecturer in Modern Languages in Legon commented this way:

Unless distance education is attractive in terms of remuneration to lecturers, the latter might be reluctant to get involved. In some cases, the lack of sufficient number of lecturers could result in the unwillingness of the available few to overburden themselves.

More Staff and Funding:

The need to recruit more lecturers, and to acquire teaching-learning resources such as personal computers and continuous funding become paramount. In both institutions the lack of lecturers in many departments and the fact that the departments face the difficulty of obtaining materials for current academic work were emphasized. These were the result of Ghana Government's current financial squeeze on the universities.

Fact is that the adoption of distance education will call for substantial resources in the production of print, audio and visual materials and without assistance from the government, it will be difficult for a university like Legon to pursue it alone. (Associate Professor, Social Studies)

In Winneba, however, faculty expressed the hope of feasibility for the very reason that the political will has been expressed by the government to assist the programme with the establishment of Institute of Educational Development and Extension. Presently, some

lecturers are writing distance education materials in four courses, supported through external funding from the Overseas Development Administration of Great Britain. It was further stated that lecturers had been trained in course writing and supervision and regional coordinators in the process of being appointed. Yet, nearly a quarter suggested the need to recruit more staff, continuous funding and more study centres, well-equipped and closer to the students.

In Legon for instance, lack of interest has been a major factor as an Associate Professor in Social Sciences stated:

> *I cannot tell because I do not have the facts. We should learn our lessons from the University of Ghana (Legon) Workers College External degree programme where lecturers were not paid regularly, materials not written, absence of well stocked reference library and junior lecturers/ teaching assistants made to teach*

Not All Courses Are Feasible:

Fifteen lecturers (7.3%) expressed indifference or were neutral on the notion that adopting distance education in all disciplines was unnecessary as some courses would not adapt easily to distance education.

> *-Lack of resources and other factors may not allow 'distance education in the Natural Sciences, Applied Sciences etc. However, it should be possible in the Humanities, and in the Social Science on a small scale initially. This will ensure that the faculty members involved in the programme are not overburdened. Perhaps, a number of subjects can be taught in a pilot project to ascertain how it could be improved.*

It should also be possible for distance education students to be invited to the campuses during the inter-semester breaks to use the facilities and to confer with instructors.

As far as instructors are concerned, there may be a need to hire new lecturers and/ or provide adequate remuneration to those who participate in it. Equipment such as photocopy machines, cassette tapes to record lectures etc as well as administrative staff are other resources that should be provided. (Female, lecturer, 12 years lecturing experience, Humanities, Legon)

A lecturer in Law in Legon stated:

Given Legon's critical situation in terms of manpower and other resources, I daresay that an improvement in resources is a sine qua non for the adoption by the university of a distance education programme. In any event, where the adoption of the policy is a must, it must be preceded by training programme for all those to be involved in the programme implementation.

Compatibility

Compatibility was defined as a factor relating to the quality and accessibility of university distance education in relation to on-campus study. This was consistent with both Black (1995) and Johnson (1984). The present study, therefore determines faculty perceptions and beliefs about distance education in comparison to on-campus education with regards to: (a) Access to university education; (b) Quality of instructional materials; (c) Quality

of Instruction; and (d) Quality of university education.

Access to University Education

Faculty members stated that access to university education should be unrestricted. Most faculty, 44 (21.4%) maintained that university education must be accessible to everyone qualified and prepared to pursue university courses either for self development, information or degree certificate. Furthermore, 24 (17.4%) of Legon and 18 (26.4%) of Winneba lecturers stressed the importance of university distance education in improving access to university education by helping to alleviate the numerous problems besetting the universities currently.

> *-With the growing population, it is appropriate to expand opportunities for university education* (Humanities, Languages)
>
> *- A great number of qualified students are left out owing to constraints far too much for the university to bear. This constraint especially of space could be alleviated by the introduction and effective monitoring of distance education.* (Lecturer, Humanities)
>
> *-Currently, there are many people who are qualified but do not get admission to on-campus university programs. Also, others for special reason cannot do a course full-time. Distance education will benefit such people.* (Male, Research)
>
> *-It should be accessible to workers and not School Cert or 'A' level holders from secondary schools who are inexperienced and many.* (Female, Social Studies)
>
> *- Like the former correspondence courses(of which I was a beneficiary) it will make*

university education easily accessible to people who otherwise will not or may not like residential programme. The vacancies are far fewer than those qualified. Otherwise why should someone with 'DEE' at the G. C. E. "Advanced" level be denied admission or his interested course though qualified by the university criteria. (Lecturer, Winneba)

Thirty-eight lecturers (18.4%), that is, 30 (21.7%) in Legon and 8 (11.7%) in Winneba, supported access restriction through entry requirements to preserve quality. Seven (3.4%) faculty believed that university campuses were the best place to study. These faculty members viewed campus experience as the most important reason.

-The need to have better studies is done in the universities. It is here that people can make critical comments, argue on major issues and at the same time undergo rigorous supervision especially in Physical Education and Music. (Male, Lecturer, Professional, Winneba)

-Opening the university to everybody will cheapen the university course. It must be based on academic excellence and few since this will create a lot of graduate unemployment. (Science, Associate Professor)

- Access could be difficult in view of the relatively poor postal system and problems with radio and television reception in the remote areas. Also how many people can stay at home and have enough time and facilities to concentrate on university work? (Humanities, Snr Lecturer, Winneba)

- The same conditions affecting on-campus students should hold for the distance students i.e it should be open to all those who meet the minimum entry

requirements. (18 years lecturing experience, Social Studies)

It was further argued that, by opening up access through distance education, students could be offered courses of their choice rather than the current imposition of courses through high entry requirements on campuses (Titmus, 1981). Other reasons stated by faculty members included: over-production of graduates may create unemployment in a country like Ghana (1.9%); improvement in human resource development (6.8%) and access to the working population (4.9%).

Distance Student Performance in University Education

Distance student performance in university education forms one of the bases for either rejection or acceptance of the innovation. Faculty perception of distance students performance emphasized quality more than access.

Table 4.15
Selected Compatibility Indicators by Participation

	Participation					
Compatibility factors	***Willing***		***Undecided***		***Unwilling***	
	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***	$\bar{x}$	***s.d***
Same qualifications for admission	4.07	0.98	3.44	1.09	3.06	0.72
Same credits per semester	2.75	1.30	2.94	1.12	2.89	1.00

The multivariate analysis of variance showed that faculty response on distance student performance differed significantly between the levels of participation ($F_{4,398} = 9.43$, $p < 0.05$). A significant effect was found by the univariate analysis of variance in favour

of distance students possessing the same entry qualifications as on-campus students on participation ($F_{2,203} = 17.44$, $p < 0.05$) but not for distance students offering the same credits per semester ($F_{2,203} = 0.52$, $p > 0.05$).

Those willing to teach distance education courses with a mean of 4.07 agreed distance students should possess the same entry requirements as on campus students. From Table 4.15, faculty disagreed with distance students offering the same credits per semester as on-campus students, as indicated by the lower mean levels below 3.

Quality of Instruction

A comparison of the quality of instruction in the two systems in Table 4.16 showed that those willing to teach regarded distance education as of utmost importance. The responses varied in relation to their understanding of the concept, familiarity and participation.

Table 4.16
Comparison of Quality of Instruction by Levels of Participation

Quality of instruction	*Participation*		
	Willing %	*Undecided* %	*Unwilling* %
On-campus is better (face-to face, interaction & Research)	32	37.5	61.1
In effective communication in distance education	3.3	2.1	-
No coordination/interpersonal relationships in dist. education	8.2	8.3	16.7
Distance education better with (feedback /experienced lecturers/writers)	8.2	2.1	-
Depends on the instructors	6.5	10.4	5.5
Combines tutorials with course materials	3.3	4.2	-
No difference	29.5	22.9	5.5
No response	4.9	-	-
No basis for comparison	4.1	12.5	12.5
Total	100 (n=122)	100 (n=48)	100 (n=36)

Evidence from Table 4.16 showed that a little over a third of faculty (38.3%) believed quality of instruction on campus was better, the assumption being that more effective face-to-face communication exists when lecturers can instantly clarify complicated questions for other class members to understand. To these respondents, there is nothing better in education than face-to- face interaction, especially in areas of research

and laboratory work. Moreover, in areas requiring constant demonstrations and practicals, like physical education, languages, music, art, drama and theatre arts (dance) and pure sciences, it was necessary that students are on comes campus. Dialogue was viewed as essential. Undoubtedly, as shown in Table 4.16, the majority (14 or 67%) of those reluctant to teach distance courses came from these disciplines. They believed that, however good distance education could be, it could not be substituted for on-campus education. On-campus study, to them, involves extra-curricula activities such as debates, sports and leadership roles in student administration and politics.

For instance, a female lecturer in Humanities who was willing to teach in Legon remarked:

> *On-campus education involves face to face interactions with other learners (who may help one another in the learning process), and with the instructor, who can answer questions from students and vice versa promptly. Content can be adjusted to meet the level and needs of students anytime during the semester. Quality of instruction is always better in on-campus education than in distance education.*
>
> *On-campus learners generally have access to equipment, libraries, laboratories etc., which may not be available to a learner miles away from the institution. Tutorials, seminars, workshops, conferences that take place on-campuses (apart from classroom work) are other sources of knowledge for on-campus learners. The distanced student generally has no access to them.*

Statements from others included:

> *On campus students have the opportunity to meet the lecturer personally and*

discuss problems with him/her at tutorials and at lectures. In distance education, the student has to postpone his questions about certain issues until such a time that he can meet his lecturer and this might be 2-3 months. They also have access to library facilities on-campus: students of distance education would not have this opportunity (Female, Winneba)

-Instructional materials for distance education may be clear and easy to understand but there is nothing better than face-to-face with the lecturer who can answer all your questions almost immediately. There is something to be gained from the interaction - Student-student as well as lecturer-student. (9 years lecturing experience, Social Studies)

Thirty-seven (26.8%) respondents in Legon believed there would be no difference if the same lecturers taught both modes through team work, as indicated in the following responses:

-If the subject materials are planned and programmed by well equipped academic and supporting staff with good referencing, there should be no difference. The problem I perceive is lack of reading. That is, specific reading materials for candidates in Ghana and developing countries. For practical tuition, the face-to-face is of crucial importance. Again, lack of the basic equipments might be a problem regarding distance learning in developing countries. (Female, Winneba)

-If properly organised and supervised there should be very little difference (Male, Associate Professor)

However, 10 (8.2%) and 1(2.1%) in Legon and Winneba respectively disagreed

with the notion that on-campus instruction was better. To these faculty members, distance education could utilize both tutorials (occasional face-to-face interactions) and learning materials which on-campus students may not have.

The assumption, here, is that distance education is able to utilize a variety of learning methods and styles such as print materials, audio and visual aids, and occasional campus appearances. The learner is able to select a learning method or style most appealing for effective learning (Knox, 1987).

Others were of the opinion that, even though campus might be a bit better in facilities, many on-campus courses are poorly taught. To them, campus courses do not easily lend themselves to making students critical enough where they listen to lectures as prisoners or only take notes with little or no peer evaluation. They stated as follows:

> *-In general, I believe interpersonal contact is valuable. But many face-to-face courses are poorly taught and some distance education courses may be well taught* (Female, Associate Professor, Professional)
>
> *-It will depend on the subject area. Some subjects may easily lend themselves to distance education while others may not. The medium will also have a role to play - correspondence course materials, radio and television.* (Female, Social Studies)

Fifteen lecturers could not establish the difference due to lack of knowledge about distance education or would have to participate before making meaningful comparisons.

Quality of Instructional Materials

On the issue of quality of instructional materials many of those who criticized the quality of distance education instruction as low accepted the fact that instructional materials are richer and better at distance than on-campus education.

Table 4.17
Quality of Instructional Materials by Participation.

Quality of instructional materials	***Participation***		
	Willing (%)	***Undecided (%)***	***Unwilling (%)***
Distance education can be better	41.8	14.5	11.1
The same (No Difference)	23.8	29.2	5.6
Cannot tell (inadequate information)	6.5	12.5	13.9
Distance education material may be poor	3.3	4.2	13.9
Difficult to amend	2.5	-	2.8
Campus is better (library facilities)	7.4	20.8	30.5
Depends on the courses offered	6.5	6.3	8.3
Very difficult to understand issues (charts, diagrams)	5.7	4.2	13.9
No Response	2.5	8.3	-
Total	100 (n=122)	100 (n=48)	100 (n=36)

Table 4.17 demonstrates that instructional materials may be perceived to be qualitatively better at distance than on-campus study. The majority of willing faculty members (41.8%), favoured distance education materials. They argued that the care, patience, and painstaking nature through which distance materials are organised and

reviewed makes it far more superior. The materials are highly comprehensive, detailed and learner-friendly. The language is simple for everyone to understand and appreciate its content.

> *-Instructional materials in distance education are likely to be concise, self-explanatory and learner-friendly. Since distance education is supposed to be 'self-taught' the materials presentation is more painstakingly done and therefore could be better prepared.* (Female, Winneba)
>
> *-I feel instructional materials will be of a very high quality in distance education since it should be such that it can promote self-learning. Even though home study is difficult in the present socio-economic situation, instructional materials for distance education are more complete and therefore more effective than lecture notes.* (Female, Lecturer, Professional)
>
> *- It is likely to be better since peer examination and editing may take place before publication. It is written by a team of expects/experience lecturers and so very rich and detailed.* (Legon, Male, Professor, Humanities)

Forty-five lecturers (23.8% willing, 29.2% unwilling and 5.6% unwilling) respectively believed there were no differences in quality between the instructional materials. It was argued, if the materials are well planned and prepared there would not be much to choose between distance and campus courses. The crux of the matter, however, may lie in the competency of lecturers developing the instructional materials in terms of charts, graphs and photographs.

Those unwilling to teach, particularly in Winneba, stated that distance education

materials may be poorly written in a rush to satisfy the government or donor agency to start the programme. Others held the view that materials would be very difficult to understand, voluminous and costly.

Nearly a third of unwilling (30.5%) and 20.8% of the undecided lecturers viewed on-campus instructional materials as better. They believed that the distance student cannot have the required materials to learn if not near campus. Also, the economic constraints in the country render it difficult for students to purchase books and relevant reading materials. Two lecturers opposed to distance education explained:

> *-Distance education materials may not be able to capture many examples and that the outreach would be difficult and expensive.*(Social Studies, Legon)
>
> *-In our present state of affairs, distance education will not compare favourably with on campus education. This is because communication equipment (phone, fax, computers) are non-existent in many homes and the university departments.* (Legon, Lecturer, Science)

A professor sums it all thus:

> *As regards instructional materials it will be worse since on-campus facilities are even not up to standard. Off-campus students will face problems in terms of well-equipped libraries, access to reference materials for assignments and posted materials.*(Science, Legon)

Others expressed the view that making regular amendments to distance materials is difficult once printed and mailed to students; however, with on-campus study, the lecturer could add or alter materials whenever possible to upgrade content.

Quality of University Education

The literature on faculty attitudes indicate that faculty opposition to university distance education is also based on quality and parity of esteem. Many faculty members dismiss university distance education with contempt on the grounds of quality (Smith, 1979). Table 4.18 summarizes the views of Ghanaian faculty on this issue.

Table 4.18
Quality of University Education by Participation

Quality of university education	***Participation***		
	Willing %	***Undecided %***	***Unwilling (%)***
Maintain quality through campus study	4.9	8.3	50
Better infrastructure/supervision will enhance distance education	7.4	4.2	2.7
Need for better planning (resources, staff/student motivation)	15.6	22.9	8.3
Depends on type of courses, content, scope and examinations	6.5	27.0	11.1
Distance education discourages wide reading & research	2.5	2.1	13.9
Distance education needs qualified & experienced lecturers	2.5	-	2.8
Quality cannot be good under present circumstances	6.5	6.3	2.8
Admit right calibre of candidates	0.8	4.2	-
No difference	47.5	22.9	5.6
Have limited information	1.6	2.1	2.8
No response	3.3	-	-
Total	100 (n=122)	100 (n=48)	100 (n=36)

There were significant differences in the responses of faculty participation and beliefs about the quality of university education ($X^2_2 = 92.19$, $p < 0.05$). From Table 4.18, the majority of faculty willing to teach (47.5%) believed distance education will not adversely affect the quality of university education. They argued that with the required facilities and resources provided distance education would be comparable. For instance, they believed that if students take the same courses, examinations and same certificates awarded, quality could be maintained. In both Legon and Winneba, 31(28.2%) and 32 (47%) respectively expressed this opinion.

Half of those faculty (50%) opposed to participation in distance education believed quality of university education could only be maintained through on-campus study. In fact, faculty in Legon asserted that campus study covering a variety of activities contributed to the educated person through debates, workshops, conferences, extra-curricula activities and interactions.

The undecided argued in favour of better planning and provision of infrastructure to maintain quality. Some lecturers, particularly the undecided (27%), who prefer graduate courses believed graduate students were mature and had the desire to attain personal goals, thus enhancing quality. As student-workers who had already experienced campus instruction and socialization they could contribute to high performance. Such a group, it was argued, would not be as large as the undergraduate (Post-Advanced Level) students for effective supervision and management. A few respondents (5.8%) stated that, currently, the standard of university education is falling due to decreased financial, and logistical support, and ineffective supervision from increased intake; and that distance

education will worsen the situation.

Faculty's Reasons for Overall Attitude About Distance Education.

Faculty were requested to explain their reasons for their overall attitude towards distance education. The reasons faculty gave were similar to how they would vote for distance education. According to Kotler, (1980) people accept or reject a product, service or innovation depending on the level of satisfaction. Where one feels a particular product or service will not provide the needed satisfaction, the service is rejected or otherwise advised negatively. Also, Fishbein-Ajzen (1975), in discussing evaluative consistency, indicated that consistency is related to multiple behaviours at different points in time and that " on different occasions a person may perform different behaviours with respect to an object. The overall favourableness expressed by these behaviours, however, may remain relatively constant" (p.7). Faculty members in Ghana placed more emphasis on increased access to university education as than any other reason as in Table 4.19.

Table 4.19
Faculty's Reasons for Overall Attitude Towards Distance Education.

Reasons	*Overall Attitude Toward Dist. Ed.*		
	For (%)	*Indifferent (%)*	*Against %*
Economical/Minimize campus problems	18.2	-	-
Non-institutionalization of university education (Accessibility)	49.0	-	-
Working and studying to upgrade professional competence (self development)	24.5	-	-
Needs proper planning & inputs	2.1	27.2	26.3
Dist. educ. cannot equip people well for critical thinking	-	4.5	52.6
Not all courses/levels are feasible	2.8	31.8	10.5
Increase lecturers work/lack of motivation/limits research & leisure	-	13.7	10.5
Take courses of one's choice	2.1	-	-
Unfamiliarity with the concept	-	20.5	-
No response	1.3	2.3	-
Total	100 (n=143)	100 (n=44)	100 (n=19)

According to Table 4.19, the main reason for supporting university distance education was the non-institutionalization of university education. Faculty believed university programmes must be accessible to anyone who is willing to learn and qualifies. There was no need denying prospective candidates access to knowledge and skills on the question of residential facilities. For instance, two senior lecturers stated:

-Education should not be confined to the university alone. It should be broad and

everyone prepared to take it must be encouraged but must be careful on which areas to tackle whether graduate courses or otherwise. (Legon)

-The present logistics available to the university are sorely inadequate; lecture rooms, laboratories/chemicals, halls of residence etc are woefully inadequate for increasing numbers of qualified young people. Distance education could be a possible answer.(Female, Humanities)

Almost a quarter supported access with respect to workers. For example, a Senior Lecturer in the Social Sciences stated that many Ghanaians are employed in the helping professions as nurses, teachers and policemen (peace officers) who needed subjects like Psychology, Sociology and Education for knowledge and successful operation of their duties. These workers could pursue studies for its sake rather than necessarily acquiring a degree or coming to campus. Other statements were:

-There are so many students out there who need to be upgraded but facilities currently present here cannot cope with this number. Besides, we cannot take all of them away from their jobs for residential courses. This distance education is necessary because people can work and study at the same time without losing their jobs.(Female, 14 years lecturing experience, Applied Science)

Another put it this way:

It is in the interest of the working population. Many people are not in a position to get sponsorship (study leave) for full-time residential education. (Male, Snr. Lecturer, 23 years lecturing experience, Professional)

Those opposed to distance education cited campus experience and the inadequate resources

of the universities in undertaking such a venture. For instance, it was stated thus:

- University education requires the full participation of both students and lecturers. Students are also to make use of university facilities as laboratory and library. It will be difficult for students outside campus to meet the above. (Lecturer, Social Studies, male)

-The university is not adequately equipped to run the programme. It would be too much work for poorly motivated lecturers. (Male, Lecturer, Social Studies)

-Ghana is technologically underdeveloped hence the introduction of distance education in the universities at this stage/ level would not yield good or favourable results.(Science, male, lecturer)

The lack of preparation, planning and non-feasibility of some courses at distance were the main concerns of those indifferent. They argued, that although the concept was good, it required cooperative attitudes of faculty members and proper planning for effective implementation.

-The staffing situation in the university is very poor. Distance education will be an additional burden on the academic (teaching) staff who are already over burdened. The time is not yet ripe for distance education. Until the staffing position is improved, I shall remain indifferent. What is worth doing is worth doing well. (Lecturer, male, Social Studies)

-It will put considerable stress on the already inadequate resources - financial, human and material (Female, Snr Lecturer, Professional)

-Conditional, in that courses in the Humanities and Social Sciences can be easily

catered for under the programme, however very little or nothing could be achieved for Pure and Applied Sciences due to the handicap of laboratories etc (Sciences) *- I know a bit about distance education. It looks like the current government policy believes it can almost substitute it for on-campus education and I am wary of that notion.* (Male, Lecturer, Social Studies.)

Even among those favouring distance education, similar statements were expressed. A female Associate Professor at Legon remarked:

I need to see the proposal first. Distance education can be very helpful in solving access problems. But it needs to be very well planned and staffed and there needs to be some interpersonal contact.

The majority of faculty (52.6%) opposed to distance education believe distance education was not the best method for university education. They believe that studying through the distance education cannot equip students well for critical thinking and detailed research for academic work.

Apparently, some faculty believed imposing courses on students based on inadequate campus facilities was improper. Distance education was identified as the only means to enable students pursue courses of their choice and related to their jobs. In the same way, it will assist in minimizing the current problems besetting the universities such as accommodation, lecture rooms and high student-lecturer ratios.

Summary

Faculty in the study showed a high level of participation in distance education, just

over 53% were willing in Legon and 70% in Winneba. There were no significant differences in the level of participation across most of the professional characteristics. More than 69% of faculty showed an overall positive attitude towards distance education.

Familiarity was higher in Winneba than Legon although Legon faculty had considerable personal knowledge and information from reading journals and articles on distance education. The concept had gained much ground in Winneba as faculty had heard of the concept and the university had policy on distance education. Faculty in both universities had read very little about university distance education compared to the information gained through hearing and social interactions.

Social interactions through collegial discussions were higher in Winneba. Also, within academic disciplines, social interactions were greater in the social sciences and professions than the science and research-related disciplines. Faculty, who were more familiar with distance education, showed greater interest in participation. It was also found that those willing to teach are more likely to speak favourably for the adoption of distance education in their respective faculties and departments than the undecided and unwilling. Generally, faculty showed a higher degree of familiarity than was found by Black (1992) who reported that "most of respondents were not familiar with distance education beyond hearing and reading" (p.116). However, this statement is reflective of Legon faculty.

Social influences were also an important source relating to participation, particularly departmental policy as an institutional factor, rather than university and government policy. University policy was influential in Winneba while departmental policy was higher in Legon. The role of significant others, principally some departmental colleagues was less

strong compared to institutional factors; however, in terms of participation, those willing to teach were more influenced by significant others than the unwilling and undecided.

The acceptance and views expressed by faculty varied. They ranged from hypothetical beliefs about distance education to actual life experiences. Those who had experienced distance education were more supportive toward its adoption. Faculty views with respect to quality and accessibility of distance education differed depending on their willingness to participate. Faculty acknowledged the fact that despite the importance of on-campus instruction and facilities, the quality of distance education materials would be better. Supportive faculty, would like distance students to possess the same entry requirements as campus students but disagreed on distance students taking the same credits per semester. A reduced workload was seen as necessary. Dialogue and personal interactions were seen as essential in university education and faculty wondered how these could be achieved within inadequate communication network in Ghana.

As well, incentives were more important factors among those who were willing to teach at a distance. No differences were found with respect to gender and age on these variables. Faculty were of the view that for effective participation, their workload must be fully considered. Other resources including administrative and clerical support services were recommended. Training in distance education practice was considered essential for participation by faculty. Faculty believed that for effective participation and commitment, additional salaries and allowances should be provided for distance teaching. As well, tenure and promotion opportunities should be available to those faculty who were willing to participate.

CHAPTER 5

DISCUSSION OF FINDINGS, CONCLUSIONS AND IMPLICATIONS.

This chapter discusses the findings of the study. The implications of the study are presented in relation to the development of educational theory, considerations for curriculum planning and implementation, and policy recommendations.

Discussion of Research Findings.

Faculty Receptivity and Participation.

Institutional Differences:

Winneba University was more willing than University of Ghana (Legon) to offer its services at a distance based on the commitment of the university and need to help teachers to upgrade themselves while maintaining their jobs. Faculty in Legon were somewhat undecided on their participation. The current level of programme development, the expression of political will by the government, and the establishment of the Institute of Educational Development and Extension likely influenced the high level of participation in Winneba. Winneba, being a new university, might also have attracted government attention and influence for distance education and new programmes. There is great demand for the Winneba programme.

Professional Characteristics:

Resistance to the adoption of distance education was present in the research and science-related disciplines, and within the Humanities among the language departments, where demonstrations, regular practicals and supervision were needed. Faculty involved

in university and department administration, although willing to participate, were somewhat concerned with their inability to offer services effectively due to administrative duties. University administrators' interest in the programme, however, may influence others to participate. It is also not surprising that unwilling faculty would resist attempts to introduce distance education in their faculties and departments by speaking unfavourably at departmental meetings.

Familiarity

Faculty exhibited a high level of familiarity with distance education. Faculty in Winneba were generally more familiar with distance education than Legon faculty.

Personal knowledge about university distance education was greater by hearing than reading magazines and scholarly journals. This likely resulted from faculty's limited access to information.

Social Interactions

The high level of social interaction (group discussions) with colleagues in Winneba attest to the fact that, within the current programme development policy, faculty had made strong efforts to encourage and explore with colleagues the efficacy of the policy and its relevance to their work. Support at Legon was less strong. The highest level of discussion was in the Social Sciences and the Professions. This was expected as distance education was being promoted within these disciplines and was generally seen to be a more feasible enterprise in the humanities than in the sciences.

Lecturers in both universities showed a familiarity with university distance

education. Furthermore, willing faculty were both familiar with the concept of distance education and the university policy on distance education. Faculty who disliked teaching distance students made fewer efforts to discuss, read or listen to issues related to distance education. This supports Black's (1992; 1995) contention that those familiar with distance education show greater support and commitment toward participation and adoption than less familiar faculty. It further supports the assertion that for effective support and participation, information must be made available to faculty to peruse proposals and formulate new ideas (Ajzen & Fishbein, 1980; Havelock, 1973). Similar to the social-interaction model developed by Havelock (1969), on knowledge diffusion and utilization, knowledge travels through informal networks of colleagues and friends. It is unsystematic and unplanned.

Social Norm (Social Influence)

According to Clark, (1993) faculty may participate in distance education if those respected and significant in their lives ask them to do so or are themselves participating. This was consistent with the literature on institutional change where respected leaders influence the views of others (Rogers, 1983). The role of people significant in one's life, the values and norms of the social structure, and the academic culture may influence people to perform tasks against their will. Social influences were very important factors for participation among the willing faculty. It was found that university policy was the most important among the various institutional factors associated with participation in

Winneba with Legon likely to be influenced by departmental policy. The study further established that given the current social environment in the universities, the policies of the department or faculty becomes crucial for participation.

The norms of the university may influence faculty participation since academic decisions are the corporate and binding decisions taken by faculty representatives at university council or Senate meetings. This influence did not extend to colleagues in other departments nor in their field.

Feasibility

Faculty beliefs and perceptions about the feasibility of distance education and participation did not differ much across institutions and selected professional characteristics. Faculty in both universities shared similar opinions. Their responses to the various aspects of the feasibility concept follow.

Incentives

Faculty believed that the time spent on distance students could be excessive if distance teaching responsibilities were added to their current jobs. Unlike on-campus students, distance students need reliable support services to make up for the deficiencies in learning facilities. These entail counselling, course directives and selection, detailed comments and regular feedback.

Both Siaciwena (1989) and Clark (1993) found faculty support towards distance education when this activity is credited toward tenure and promotion. Faculty in this study

believed participation should be associated with tenure and promotion. Younger faculty were especially concerned about tenure and promotion prospects, and research.

Faculty involvement and career advancement is typically based on research and academic work. As a result, faculty interest in distance education is related to its ability to enhance their research and academic work. This was demonstrated at Winneba where the distance education programme is currently underway and involved faculty were actively exploring the research possibilities. Younger faculty especially believed participation would enhance their research activities. Faculty in the Sciences and Research areas, however, did not share this view.

Additional salaries and allowances were central to faculty participation in distance education. This supports similar studies by Taylor & White, (1991) and Clark, (1993). The fact that there were no significant differences between gender, academic discipline and participation, emphasized the importance of remuneration as a reward for participation. Nonetheless, sustained faculty involvement in the distance education program will require personal interest as well as adequate remuneration

Training and Staff Development:

An essential element for both programme adoption and implementation is staff development (Fullan, 1993; Boot & Hodgson, 1987; Patterson & Czajkowski, 1979) to make faculty experience and appreciate their roles and functions in the new system (Meacham, 1990). Both institutions agreed to undertake development of a distance education system provided they receive initial training in distance education procedures. Such training exposes faculty to the principles and practice of distance education.

Institutional Support and Resources:

Adequate human and material resources are necessary to initiate and sustain programmes (Fullan, 1993). Some faculty members at both universities believed the institutions were not equipped or ready to undertake this innovative programme. The student-staff ratio on campus posed a problem for many of the already over-loaded lecturers and supporting staff. Revamping faculty and support staff positions for distance education work could promote efficiency and effective implementation.

Logistical factors likely to affect the introduction of a distance education course at either Legon or Winneba included computers, photocopiers, fax machines and effective telephone network. Continuous funding is needed as well as an improved postal system in order to meet students' and lecturers' needs. At the present time in Ghana, it seems the only means to deliver distance education programmes is with print media. Tele-conferencing and audio-visual aids are not widely available.

Another issue for faculty was the motivation of distance education students. For example, without offering distance education students the same level of financial support given the on-campus students, it is likely that many qualified students would not be able to participate and complete the programme.

Anticipated Effects on Present Work:

The work of faculty includes teaching, research, and community service, as well as serving on university committees and boards. Other functions relate to direct involvement in university administration as department and faculty heads. These roles and functions increase the responsibility of faculty.

Among faculty, it was generally believed that engaging in distance teaching would result in additional responsibility and increased workload. Distance education was expected to involve more work resulting in inefficiency and less time for academic work and research. A decision has to be made either to concentrate on distance or on-campus students. This is because distance education students needed the support of counselling, course selection, detailed comments on assignments, and regular feedback.

At Legon and Winneba, some faculty statements indicated that participating in distance education could improve their lecturing styles, provide useful experiences, and enhance their research.

Compatibility

Compatibility was defined as beliefs and perceptions faculty hold about distance education with respect to access and quality of distance education on university education.

Access Versus Quality:

Access to university education was the main issue underlying faculty beliefs towards university distance education. Winneba faculty believed that for university education to develop the labour power of the country, it must be open rather than restricted. There are students who, for family reasons and other social pressures, cannot undertake campus study. Such persons need distance education to upgrade their professional competence and for self development. Whatever their motivation to enroll,

whether to gain a credential or for personal interest, faculty believed that access must be offered to anyone qualified and ready to pursue a university degree. Improved access to university education could alleviate some of the current enrolment pressures on Ghanaian campuses.

Proponents of quality argued that opening up the university through distance education means would lower standards. Quality could be maintained only through restricted intake. As well, interaction and campus socialization were major concerns of these faculty members. Supporters of distance education maintained that quality could be maintained with off-campus programmes by having all students, on or off campus, take the same examinations, course instructors and curriculum.

Quality of Instruction:

The basis for resistance to distance education in some departments were related to laboratory work, demonstrations, and other forms of "hands-on" work. Although distance education may be well organised and delivered by experienced professors, it was dismissed as lacking opportunities to develop interpersonal relationships through activities such as group work and discussions. Dialogue, interaction and socialization were regarded as essential in university education to promote critical thinking and the search for truth.

Quality of Instructional Materials:

Some faculty believed instructional materials at distance would be better than those developed for on-campus use. This statement relates to the fact that such materials are carefully written by experts or a team of experienced professors who often bring to distance teaching and course writing their classroom expertise. It was argued by some, however,

that campus study was better because of the availability of facilities such as libraries, and laboratories. Also, distance education materials cannot be amended as easily as lecture notes.

Conclusions

This study provided evidence that faculty willingness to participate in distance education were the products of interrelated beliefs, attitudes, norms, and familiarity with distance education. The majority of faculty (135 or 65.5%) favoured adoption of distance education by their respective departments. The level of familiarity showed how informed faculty were in assessing the new programme despite the fact that they had little experience in distance education. The study found that participation and experience in the programme were linked to positive attitudes about the programme. Faculty believed they would be slighted in terms of professional advancement if distance education did not form part of their responsibilities for tenure and promotion.

The conceptual framework suggests that an individual's prior beliefs and knowledge about distance education have far reaching implications for participation. One issue worth noting was that distance education adoption and implementation rests on institutional support, both administrative and technical. Successful adoption demands efficient, reliable and continuous funding. Faculty workload must be considered as well as their training. Also needed are personnel and above all rewards -- intrinsic as well as extrinsic. Social structure and institutional environment are important, especially the policies of the faculty and department. Individuals are influenced by those whose opinions they respect or share.

Most influential are colleagues in the same department.

Most faculty viewed the quality of distance education instructional materials as equal or better than classroom counterparts. Those willing to teach supported distance education's potential for improved access and the quality of the instruction offered. Interaction concerns, campus socialization, available resources and quality of instructional materials were the major concerns of those faculty who did not support the distance education initiative.

Dialogue was identified as essential in university education. In order to promote this, faculty recommended that distance education students be given occasional periods of face-to-face instruction. Faculty also felt it was important that regular communication be undertaken to bridge the transactional distance between the instructor and the learner. This is consistent with the research of Moore (1986), Garrison (1989), and Knox (1987).

The most motivated faculty will be deterred without adequate support and meaningful training. Faculty had high motivation to teach distance courses on the condition that initial training be offered. Among the main supports for participation were: quality of university education, monetary compensation, tenure and promotions, adequate facilities, improved staffing position, coordination in communication with distance students and early distribution of course materials.

Consistent with Rogers (1983) the study concluded that new organizations like Winneba tended to be more receptive to innovations than the more well-established institutions. This may be seen in the generally positive responses of faculty at Winneba which has specialized programmes, and resources.

Implications of the Study

The various views expressed by Ghanaian faculty in the study have implications for the development and implementation of university distance education.

Theoretical Implications:

The need to expose faculty to the principles and practices of distance education may lead to the formation of a new descriptive and inferential belief about distance education and change. Faculty need information and enough awareness about the new programme through brochures, workshops, conferences and inter-faculty lectures to broaden their knowledge and overcome skepticism about distance education. By the time the programme is initiated, faculty should have gained considerable information about the new curriculum. Since this information will determine attitude and behaviour, attitude formation cannot be understood when its informational base is ignored (Fishbein-Ajzen, 1975).

Practical and Policy Implications:

Adequate preparation is necessary for any innovation. A time limit of two to three years must be assigned for the planning and try-out stages to identify flaws and other problems likely to affect the programme. This calls for effective programme planning, the preparation and testing of quality instructional materials, and modifications made before embarking on the programme.

It is further recommended that an attempt be made to identify the potential student market and feasible courses. The priority here should not be access to university education alone but should include affordability, and programme sustainability concerns.

Furthermore, faculty - on whose shoulders the success of the programme rests -

must be adequately motivated through incentives and allowances for services rendered at a distance. Of particular concern is the question of faculty tenure and promotion and faculty must appreciate the effect of a demanding work schedule on their personal lives. The recruitment of an adequate number of support staff is recommended.

In order to ensure effective job performance and academic standards by distance students, they must be discouraged from taking too many courses per semester. The maximum course load should not exceed that of on-campus students. Also, to ensure course completion, time limits must be assigned to distance courses, while at the same time more study centres which are well equipped and located closer to the students' homes must be established.

To maintain quality and parity of esteem, both on-campus and off-campus students must possess the same entry requirements, pursue the same course of instruction, and take the same examinations. Furthermore, there should be an improved financial support for distance students.

Government policy must respond to the needs of faculty whilst faculty respond to the needs of the distance students they serve. As the needs of students change so do the roles and functions of faculty. Training and upgrading is necessary; however, training will be successful only if it exists in an environment supportive of change and commitment. Attempts to provide training must be compatible with the academic culture that serves as the driving force for participation. There is a tendency in most educational innovations to ignore the needs of faculty. Even if faculty accept that an increasing amount of what they need to know is prescribed and standardized, we should not make the mistake of ignoring

the personal impact of such curriculum on their professional lives. In effect, the most needed element for faculty involvement is consultation and collaboration among all interested parties.

It is further suggested that for effective participation the universities use distance education to train faculty for distance education. Providing credential programs such as a " Certificate in Distance Education" or other ways to help younger faculty be credited towards tenure and promotion should be explored.

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Appendix A:

Participants Questionnaire

QUESTIONNAIRE

University: **1. University of Ghana (Legon)**

2. University College of Education (Winneba)

Please fill out the following questionnaire as accurately and honestly as possible. Your responses will be held in strictest confidence and your anonymity protected. The goal of this research is to gather information on faculty attitudes towards university distance education in Ghana.

Academic department/Institute _____

Faculty/School _____

Section A

1. How long have you been lecturing? .....year(s)
2. Academic rank: ..... Lecturer/Resident Tutor .....Snr Lecturer
   .....Asso. Prof .....Professor. .....Other
3. Sex: .....Female .....Male
4. Age: .....years
5. Is administration part of your current duties? ..... Yes ..... No
6. Academic Discipline: ..... Humanities .....Social Studies .....Science
   .....Applied Science .....Research .....Professional.

Section B

This section is to find out your familiarity with university distance education by selecting from the alternatives that best reflects your answer for each.

1. A Great Deal	2. To some extent	3. Not at all

7. To what extent have you:

a) heard about distance education for university degrees?	1	2	3
b) read about distance education generally in newspapers magazines and scholarly journals?	1	2	3
c) Discussed distance education with your colleagues	1	2	3

Section C

This section requests your views about distance education courses for university degrees.

8. Supposing you have the chance to participate in deciding your university's involvement in distance education, how would you vote on such a decision?

(a) For (b) Against (C)Indifferent

9. Please, indicate your reasons?

.....

.....

.....

.....

10. How would you likely speak in department meetings about distance education courses for university degrees?

.....Positively .....Neutrally .....Negatively

11. How willing are you to teach a distance education course?

.....Willingly .....Undecided .....Unwillingly

12. If yes to Question 12, would you need training if you are to teach/participate in distance education course? ..... Yes .....No

13. What in your opinion is the main purpose of university education?

.....

.....

.....

14. What is your overall attitude toward distance education for university degrees?

.....Positive ..... Negative .....Indifferent

15. Please, state clearly your reasons?

.....

.....

.....

16. In what ways do you think distance education could affect your present work (supposing you are taking part)?

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17. In your opinion how would you compare distance education courses with on-campus courses in terms of ***the quality of instruction*** and ***the quality of the instructional materials***?

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18. How feasible will it be for the university to adopt distance education in terms of resources and other factors?

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Section C

Please Tick (/) one column based on the categories:

SA = Strongly Agree; A = Agree N = Neutral D = Disagree; SD = Strongly Disagree

	SA	A	N	D	SD
19. I am familiar with the university policy regarding distance education.	5	4	3	2	1
20. I am familiar with the prerequisites distance education students must possess in order to participate.					
21. The distance education programme is really a waste of money at university level....money which could be better spent elsewhere.					
22.Studying for degrees through distance education lacks academic value.					
23.University education provided for ***undergraduate*** students through distance are generally inappropriate.					
24. University education provided for ***graduate*** students through distance are generally inappropriate.					
25. The amount of faculty time required to work with distance education students is excessive.					
26. Faculty should be paid in addition to their salaries for the services they render through distance education.					
27. If the supervision of distance education students counted toward tenure and promotion, I would encourage more of my colleagues to participate.					
28. A faculty decision to teach in distance education will influence me to teach at a distance.					
29. Distance education students should possess the same qualifications as on-campus students.					
30. Distance education will reduce research and academic work of lecturers.					
31. Distance education students should take the same credits per academic semester as on-campus students.					

Section D

Several faculty members have expressed concern about distance education for the university on the grounds of quality and accessibility. Please comment on how you perceive the factors listed below.

32. Quality of university education.....

.....

.....

.....

33. Access to university education .....

.....

.....

.....

On a scale of 1 to 4, please indicate the level to which the following responses apply to you.

1) A great extent	2) To some extent	3) Not at all	4. Not applicable

34. To what extent could the following influence your decision to teach distance education courses?

a) University policy to engage in distance education	1	2	3	N/A
b) Government Policy on university distance education	1	2	3	N/A
c) Colleagues in your department	1	2	3	N/A
d) Colleagues in other departments	1	2	3	N/A
e) Your head of department	1	2	3	N/A
f) Departmental policy on distance education	1	2	3	N/A

35. How would the most important of these reasons influence your decision to teach distance education courses?

.....

.....

.....

Comments and suggestions

36 .What opinions and comments do you have regarding the ***advantages*** of taking a degree at a distance rather than on the university campus.

.....

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.....

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37. What opinions and comments do you have regarding the ***disadvantages*** of taking a degree at a distance rather than studying at the university campus.

.....

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.....

Thank you

Appendix B:

Lakehead University Ethics Advisory Committee to the Senate Research Committee

Acceptance Letter

Appendix C:

Cover Letter to Participants

Appendix D:

Permission Letters to University of Ghana (Legon) and

University College of Education at Winneba

Appendix E:

Acceptance Letters from University of Ghana and

University College of Education at Winneba

Appendix F:

CONSENT FORM

My signature on this form indicates that I have agreed to participate in a study by Samuel Badu-Nyarko on ***Faculty attitudes towards the adoption of University-based distance education in Ghana.***

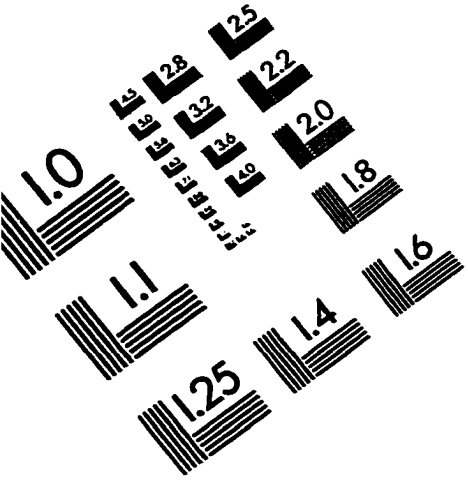
I have read and understood the covering letter of the research study and its purpose. I also understand that

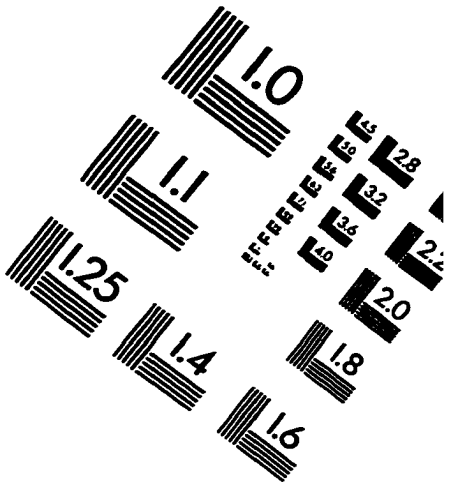
1. I am a volunteer and can withdraw from the study at any time.
2. There is no danger of physical or psychological harm.
3. The data I provide will remain confidential.
4. I will receive a copy of the results upon request following the completion of the project.
5. The primary data will be stored with Lakehead University for seven years.

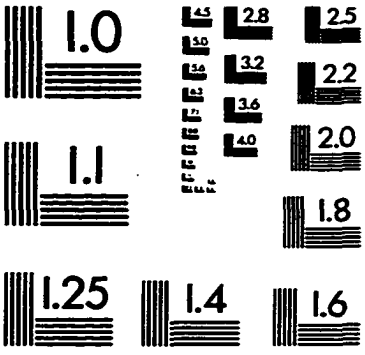
....

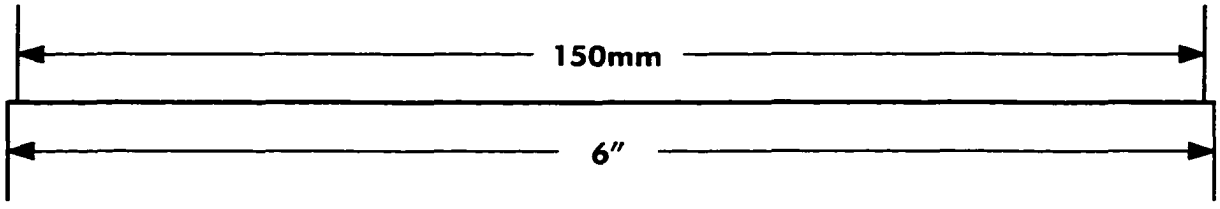
Signature of Participant Date

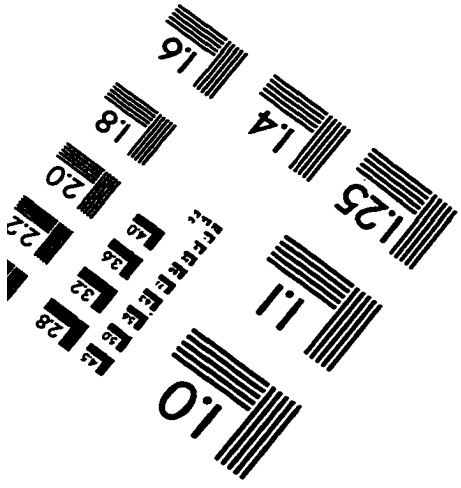
IMAGE EVALUATION
TEST TARGET (QA-3)

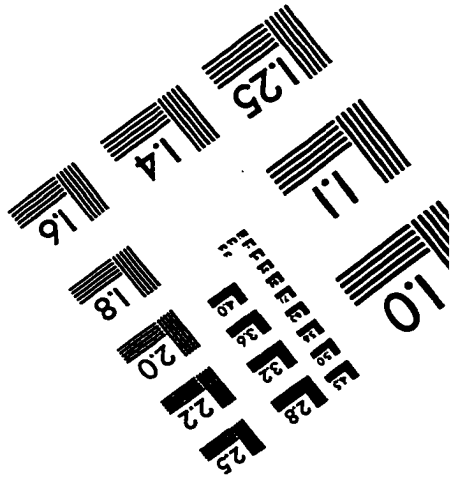












APPLIED IMAGE, Inc
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989