ATTITUDES OF UNIVERSITY OF THE WEST INDIES STUDENTS TO ALTERNATIVE MODES IN EDUCATION DELIVERY- IMPLICATIONS FOR TRADITIONAL UNIVERSITIES IN JAMAICA

A RESEARCH PAPER

Submitted in partial fulfillment of the requirement for the degree of Doctor of Science in Communication Studies of

The Atlantic International University

Mark Andrew Wellington

2005

Faculty of Social and Human Studies

Ref. Number: 287 4HCA 7131

THE DOCTOR OF SCIENCE DEGREE IN COMMUNICATION STUDIES

November 7, 2005
ABSTRACT

Communication – a field of study evolving out of many disciplines- has become a central force, in its applied form, in catalyzing changes within a global political economy. The theoretical underpinnings of the field of communication have led to the facilitation of practical constructs around the development of distance learning.

This study was undertaken to serve two purposes. At a theoretical level, it reviewed the concept of communication as it relates to the two-way flow of information, utilizing contemporary communication technologies. From a practical perspective, the paper sets out to measure students’ attitudes to an alternative mode of educational delivery focusing on a comparative quality assessment of distance education relative to traditional modes of educational delivery. The concept of interaction and feedback in distance learning was seen as an appropriate context for undertaking this examination. Given the strong links between communication and the global political economy, focus was placed on concepts of culture and political economy.

As a central focus, the study was aimed at examining alternative modes of educational delivery at the University of the West Indies since it had embarked on offering education in the distance mode. This research focused on students at Mona in attempt to keep culture a uniform variable.

The findings derived from this study underscored the view that quality had much to do with a value judgment (attitude) over anything quantitatively comparable.
Acknowledgement

May I use this opportunity to thank the members of staff of The Atlantic International University for the opportunity to design and implement an educational path for myself that suits my intellectual and professional goals and is mutually exclusive to the pursuits of others. In fact, my job focus gears me towards independent thinking and effective work design and this university has so facilitated me in this regard.

I want to express a special thanks to Dr. Franklin Valcin for his professional guidance through the phases of this process and to acknowledge him has one of the true pioneers of Distance Learning globally.

I am indeed grateful to the other administrative staff of the Atlantic International University who have facilitated me with financing my education. Not only did they offer to me a flexible payment plan but also a partial scholarship to offset some of the economic cost of my tuition.

I want to say thanks to all students at The University of the West Indies who provided data for this project as without such cooperation, a research paper could not be realized.

I want to wholeheartedly thank my General Manager and the rest of staff of Health 2000 Inc. for their kind support through this time of intense university work and to add
that they feel confident that my further academic pursuits will benefit the company in the field of Public Relations and Marketing.

I thank all family members and friends for social support extended to me through this time of intense work and study focus.
# TABLE OF CONTENTS

**CHAPTER 1**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>6-7</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>7-9</td>
</tr>
<tr>
<td>Background</td>
<td>9-11</td>
</tr>
<tr>
<td>Distance Education (UWI)</td>
<td>11-17</td>
</tr>
</tbody>
</table>

**CHAPTER 2**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature Review</td>
<td>20-46</td>
</tr>
</tbody>
</table>

**CHAPTER 3**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methodology</td>
<td>47-53</td>
</tr>
</tbody>
</table>

**CHAPTER 4**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Presentation</td>
<td>54-70</td>
</tr>
<tr>
<td>Analysis</td>
<td>71-76</td>
</tr>
<tr>
<td>Conclusion</td>
<td>77-78</td>
</tr>
<tr>
<td>End Notes</td>
<td>79</td>
</tr>
<tr>
<td>Reference</td>
<td>80-83</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

In response to the demand for higher education in the Caribbean, the University of the West Indies (UWI) has expanded its teaching programme to incorporate distance education and in that process transformed itself into a dual mode institution combining distance and face-to-face teaching.

For the purposes of this study, I have chosen to look at quality in relation to the actual teaching-learning processes, more specifically to look at students’ attitudes to
alternative delivery mode in education, as they perceive quality relative to the traditional “face-to-face” instructions.

The research has put some level(s) of emphasis on cultural dynamism as it relates to institutional culture, since the evolution of communication technologies have brought about new attitudes, values and beliefs about education never experienced a decade ago. The research shall seek to interrogate the dynamic role of the global political economy in facilitating access to communication technologies, which evidently impact traditional cultures of tertiary education to some degree.

It may also be important to highlight that socio-economic and political variables may have impacted the evolution of tertiary education through distance. However, this paper shall seek to measure attitudes of students to quality in distance education as compared to the traditional face-to-face delivery. Socio-political and economic variables shall not be considered. Since communication and education are intricately linked then attitudes to quality in mix modes of education may shed some light on variation(s) in quality of communication. Communication being defined as transmission of thoughts with feedback creates a scenario in which communication may fall on a quality continuum.¹

Nettleford (1999-2000) in his appraisal of distance education at UWI states;

“The only way we can hope to reach larger numbers of our Caribbean people, who yearn for greater opportunities for tertiary education, is through distance teaching. It is the medium through which the largest numbers can be provided with quality training without the necessity to travel to a campus country, find affordable accommodation, and in many instances, leave behind young families
that are often already apart of the lives of many of our students who wish to qualify themselves.” (UWIDEC 1999)

In Nettleford’s statement inferences have been made to quality and economics. It is quite clear that he believes that distance education can deliver quality education. By extension one may deduce that communication technologies have facilitated such levels of communication whereby a virtual university may be structured putting forward a mix of “virtual” and the “traditional”. Nettleford was not clear in his statement as to whether or not the quality education he spoke of was equal to, less than or greater than the quality of traditional learning – I guess if he were to respond to the noted point, then he would include the issues surrounding perceptions or attitudes, the kinds of discussion this research effort seeks to interrogate.

Perception(s) of quality shall come from judgment(s) made by those who analyze mix modes of educational delivery. Hence diverse views may be able to help us to construct acceptable frames of reference as we proceed to modernize our universities in the ensuing years.

At the center of learning is communication, a term being defined by Aggrey Brown as the interactive transference of meaning(s) between intelligences. The field of communication has undergone numerous debates owing to the impact of various fields on its development. The field developed initially on ideologies of the Bullet theory and today many other theories have successfully modified the crude definition of the Bullet approach.

In looking at the above topic one may quickly deduce that some focus is being given to a group of positivist students in light of the fact that there has always been a
debate between social scientists and themselves on the issue of what is to be called “science”. This debate has led to positivist groupings seeking to explain reality while phenemenologists seek to understand it.

Against such a background we may agree that while positivist students have been trained through rigorous “fixed law abiding” courses, the social science students experience more interactive, discussion oriented type of learning. In the new dispensation of the 1990s when communication technologies provide many modes of interaction, it is noticeable that Caribbean social science students have taken onto themselves distance education as a new method of achieving desired qualifications. There is the University of the West Indies Distance Education Center (UWIDEC), The Caribbean University Level Project (CULP), and many other technology based programmes that seek to offer alternative mode of education to the traditional “face to face” modes of delivery.

It is noticeable that in the Caribbean, social science students have adapted to this alternative mode of education delivery, a kind of cultural change that never existed a decade ago. It is against this background that I shall seek to ascertain how communication technologies are impacting attitudes of students towards accepting this alternative delivery mode(s) as a valid source of educational development – core focus being quality.

This study may be fairly broad based, as there are a number of students falling within natural science – as well as social science disciplines. However, this research project was narrowed to include natural as well as social science students registered in faculties at the Mona Campus of the University of the West Indies.
Theoretical Framework

This study is heavily based on the tenets of the political economy and cultural studies owing to the fact that Neoliberalism\textsuperscript{vi}, which has triggered the new political economy, has facilitated the growth and infiltration of communication technologies to a large extent globally. Hence it is natural to conclude that cultural dynamism\textsuperscript{vii} has become a growing part of most discussions in the social sciences. I agree with Stuart Hall (1997) that globalization has created pockets of sub-cultures within a single society all responding to global changes in a different way. It therefore brings me to the issue of the sub-groups ~ the positivists and the phenomenologists, to look at their own cultural attitudes towards distance education as it relates to comparing quality with what was deemed traditional or indigenous.

Positivism denotes the science that is predictive. In other words, positivists students study science that follows the rules of natural laws. On the other hand phenomenology denotes the “newer science” that explains reality from the perspective of an “understanding” of why social events occur in the way they do. As a result there as always been a tension between the social and natural sciences on the issue of how “science” should be defined. We may therefore want to conclude that the social scientists seek to understand phenomena while the natural scientists use “fixed law abiding” paradigms to explain phenomena. It may then be reasonable to include groups of students from the two orientations in any evaluation on new modes of education delivery. The two groups may have varying views on the nature of distance learning due to differing modes employed in traditional learning and the opposing nature of the two sciences.
Background

As stated by the UWI, “higher education institutions have found themselves occupying both sides of a debate whose subject is the role of new information and communication technologies in the learning environment”. Universities are now required to lead in facilitating the new learning culture, with all its electronic modalities, a seemingly reasonable requirement (OBUS 2001:2). Students are aware of the capabilities of communication technologies to deliver education that seemingly replicate the “face to face” modes of educational delivery.

In the Caribbean we have seen where the University of the West Indies has made a policy commitment to advance the development of electronic teaching and learning culture (OBUS 2001:2). It is also commonplace for foreign universities to deliver web based teaching methodologies as an alternative to classroom educational delivery modes. So, in part, there is a transformation of traditional teaching modalities, facilitating distance learning through teleconferencing as well as web-based methods.

The transformation of educational delivery modes to that which is seemingly becoming more contemporary will evoke/catalyze debates within tertiary institutions, as there may be some among us who would not be persuaded that technology based teaching can facilitate learning which would equate to traditional modes of training and tutelage. There are others who would argue that communication technologies facilitate communication and so the technology can facilitate learning to same degree as the “face to face” instructions. One may then wish to point out that, students with a relevant
education, then require the fullest exposure to communication technologies. Students who are illiterate with respect to the electronic culture will be of little value to Third World economic development.

This paper then seeks to look at the issue of quality as a variable in the transition from a traditional teaching and learning environment to an electronic learning culture. The fact is that we now have students on “both sides of the fence” with a few taking the benefits of both worlds. In any case we can all rationalize that socio-political and economic factors are brought to bear on the fruition of technology based learning, however, this research shall seek to control such variables in the effort to measure with some level of “objectivity” Quality.

According to Hilary Beckles, “issues of cost and “quality” in higher education, at a time of diminishing resources, have generate a feverish temperature in academic environments within which all universities have to function effectively” (2001:3).

It then is clear that universities in general operate within a global political economy where demands are made upon them to provide alternative mode(s) of education triggered by global trends. It then follows that we need to ask ourselves whether or not technology based learning provide the same quality of education as the traditional “face to face” mode of educational delivery? This research seeks to answer this question.

**Distance Education at University of the West Indies (UWI)**

Distance education at UWI began in 1983 via the University’s Distance Teaching Experiment (UWIDITE), an experimental programme that then relied on audio tele-
conferencing with print support. The programmes at the time included both formal courses such as the Certificates in Business Administration, Public Administration and Education, as well as outreach related programmes in health, agriculture and education. These programmes were especially aimed at students in the non-campus territories in the Eastern Caribbean. An amalgamation of the various elements of the programmes took place in 1996 and a center for Distance Education created (DEC) with headquarters in Cave Hill, Barbados. This center has planning and coordinating responsibilities in regard to distance education programmes and services and is supported by campus offices and site coordinators in each territory. The DEC locations throughout the Caribbean are linked together via telecommunications network, thus creating an electronic classroom, in which the teacher can talk to students in the various distant class-rooms with feedback. The center and site offices reflected a demand for tertiary education by students in the non-campus territories and resulted in the widening of access to a range of programmes being offered by UWI.

Critical to the expansion of Distance Education is the staffing of the various offices which include a director, materials development teams, and project and coordination officers, telecommunications, programmes and delivery personnel, and student support services coordinator who represents students concerns to the relevant authorities. So we may deduce so far that the infrastructure arrangements seem to be synchronized so as to ensure the highest quality of education for the students. Despite not being able to see each other, interaction between students and teachers on a real time basis takes place with the use of telecommunication equipment which include microphones and speakers in each room as well as other telecommunications equipment.
including typewriters, which function as electronic chalk boards, thus simultaneously displaying on monitors across all sites the written material.

In an interview for this paper, Mr. Ivan Cruickshank advised that selection of lecturers is done in consultation with the department from which the courses come. Usually it is the conventional lecturer teaching the course (or associated with the course) who is given the responsibility to teach in the Distance Programme. Outside persons are sometimes used, however, this is increasingly becoming a challenge given difficulties being encountered in off loading teaching in distance to full time staff.

Training of lecturers is generally two fold. Firstly, the Curriculum Development Specialist will work individually with the lecturers in developing materials for the course including the study guide, course outlines and readers and tutors guide. This is generally followed by a two or three day workshop in which lecturers and or tutors will be trained in Distance Methodologies. These sessions generally address issues of student demands, quality assurance issues and marking for distance. The workshop generally cover pedagogical and administrative issues.

- Special staff trained in Distance Methodologies are used in the training at both levels.
- A number of staff trained in Distance Education are based throughout the system to address student needs and staff training requirements. Elaborate Local Tutor Guides are also printed to assist in teaching Distance Programmes.

Even though statistics were not readily available on enrolment patterns, Cruickshank alluded to the fact that enrolment of students was continuously increasing. This he said was due to a number of factors viz.:

1. Increased visibility of UWIDITE in the regions
2. Increased numbers of sites or expansion in side capacity.

3. Provision of alternative strategies to facilitate access, for example, recent implementation of a call facility; students can call into teleconferencing from home or any location without actively visiting the center.

4. There has been expansion in the number of programmes, five new programmes since 1997. According to him a precise enrolment target has not been set for UWIDECE. It forms a part of the UWI off campus target, which is broadly set.

As far as UWIDECE is concerned there are no web-based programmes. However, he stated that web based programmes/courses have been developed in other areas. He has also agreed that certain courses cannot be ideally taught using traditional Distance Technology, that is, print audio. Video conferencing/TV and computer technology can largely reduce this problem. Where labs are required, alternative localized lab operations and technical guidance are provided. The courses presently taught through UWIDECE are those courses heavily grounded in the social sciences or those that are dubbed interpretive. Statistics as well as a few math-based courses are also taught.

On the issue of costing, he was unable to address that issue as he said that cost was split up across campuses and local centers. He said that he would have to review the UWI’s annual plan to see what the estimated cost for the administrative side was. The actual teaching cost, he said, was located in each faculty hence it is difficult to ascertain. He pointed out that DE cost is not fully “understood.” He said that governments across the region contribute to DE through the general contribution to the UWI’s operations not as a separate activity. The large parts of the setting up of UWIDECE and expansion, of
programmes have been supported by grant funds – IDB, CDB, EU and CIDA have contributed (Quantum’s not readily available).

As Mr. Cruickshank highlighted, “face-to-face” students pay a summary cost of 20% of economic cost. Distance students pay a per course fee, plus minimal incidental costs. He pointed out that presently a social sciences (part-time) student pays approximately $34,000 plus incidentals per year notwithstanding the number of courses being taken up to the maximum of six courses allowed each year viii. A similar student in Distance would pay 6 X $7,312.00. As he highlighted, the Distance Education Students, get printed materials as part of the package. The students however, have fewer contact hours with lecturers and fewer “lectures,” commonly referred to as teleconferencing.

With respect to the question of quality delivery, he is of the belief that both “face-to-face” and “Distance Education” have the potential to offer similar quality. He however, highlighted a few differences between the two modes of administration that could facilitate higher quality education in the Distance Programme.

1. Better structured courses necessitated by the need for precision in preparing materials.ix
2. Distance Education courses usually have detailed course objectives and detailed readings.
3. The DE teacher must teach from a learner-centered approach and emphasize life long or continuing learning techniques.
4. The DE builds self managed learning competence. The above are highlighted as advantages of Distance Education over “face-to-face learning.
Mr. Cruickshank claims that teachers in Distance Education tend to be more precise and are forced to rely on interaction if they are to effectively deliver. This is attributed to the medium used, it is easy to lose persons therefore it is a requirement that the sessions are interactive. Local tutorials are usually smaller, allowing for greater levels of interaction. He pointed out that some features of distance education could be lost if DE staff are not properly trained. He pointed out that there have been problems with material preparation, distribution and technology failures, which could undermine the quality of the theoretical frame on which DE is built.

In closing Mr. Cruickshank reiterated the fact that DE support is reduced in terms of contact hours, however, this is compensated for in provision of materials. The cost of DE vis-à-vis “face-to-face” has to be compared on numbers that is, for students taking a similar number of courses in which case “face-to-face” is marginally lower but without the textual support.

According to UWIDEC, in order to increase access, respond to environmental factors and facilitate the pursuit of its mission to unlock the potentials of the peoples of the region, the University of the West Indies decided to become a dual/mixed mode institution (UWIDEC 1999). This was underpinned by a previous policy decision and which meant the following:

- Students would be able to access “face to face” or distance delivery or a combination of both.
- Student centeredness, quality and cost effectiveness would be hallmarks of all university programmes.
Administration and faculties to enable the attainment of these goals would allocate sufficient resources, including recognition of academic effort. (UWIDEC 1996).

The UWI held a symposium in 1997 aimed at involving all faculties into discussing the above-mentioned policies. At the symposium, the Mona Campus principal alluded to the role communication technology has played in the development and sustenance of distance education in the region. He has also pointed out that a policy of distance education should be seen as part of every faculty in the UWI. Hence one may deduce that the policy as it relates to distance education would be applicable to natural science as well as other science students. The question then arises; can distance education be used in teaching natural scientists? The principal further went on to ask the question; How can practical laboratory work be taught by distance? – To which he answered – real challenge… - How were staffs to be trained? (UWIDEC 1997)

UWIDEC cites Dr. Barry Centini, lecturer in Computer-based learning at Nova University, as defining distance learning as “the live, simultaneous transmission of instructions from a teacher located at an origination site to students located in one or more remote/distant site with facility for feedback” (UWIDEC 1997). He pointed out that technology based learning involves

- Computer delivery which would involve computer based training
- Conferencing which would involve one way video teleconferencing broadcast or cable station, or two (2) way video/audio conferencing
Optical Disc Technology, which would, include digital video interactive (DVI), compact disc interactive (CDI) and interactive video disc (IVD). [The Commonwealth of Learning at the University of the West Indies; Kingston, Jamaica; 14 – 16 July 1990; P. 106]

This paper shall however, focus on CBT as well as 2 way audio conferencing. This is partly due to the UWI focus at this point in time and also the fact that communication technology is fully represented by these 2 modes of education delivery in our present context.
Chapter 2

Literature Review

A principal focus of learning or understanding phenomena is how meaning is transferred. Essentially traditional teaching methodologies as well as contemporary ones have one thing in common – the interactive transference of meanings between intelligences – the core principle of communication. Communication technologies have to a large degree changed the way things are done and their impact have created sub-groupings and sub-cultures never known to us a decade ago.

According to Aggrey Brown, there are a variety of interpretations that are brought to bear on the concepts of culture and technology. (1995:40). He highlighted that “culture constitutes the symbolic, instrumental and social responses of collectivities of people to their environment”. He further went on to point out that “technology refers to the physical and intellectual tools that extend our capacity to relate to our environment as they simultaneously mediate our relationship with our environment”. He said “environment is a common factor to both culture and technology”. (Brown 1995:40)

Hence the interplay of technology on culture described by Postman as technopoly is becoming fundamental to the dynamics of cultural change experienced in all societies. The development of what Stuart Hall describes as sub-cultures create room for different interpretations of the infiltration of new paradigms in the neo-liberal era. So, as Brown highlighted, culture and technology are analytically distinct but dialectically related phenomena.

Brown is correct in asserting, “technology helps to shape and produce culture as culture creates and employs technology” (Brown 1995:40). In an era when there are
growing concepts of information technology, there are numerous developing states that employ technologies that in some respects modify cultural habits. In this discourse we are however concerned with culture in a narrower sense (that of information technology impacting institutional culture. So for example, distance education would not be possible without computers, telephones and audiovisual technologies.

In developing the issues surrounding technology and culture change, one may agree that “technologies have altered our temporal and spatial relationships to and with our environment giving rise to forms of cultural expression which, transcending both time and place, are themselves global” (Brown 1995: 41). This subtle point gives credence to the fact that transcending technologies impact cultural relationships and catalyze cultural change. In the Caribbean for example, independence came with an education that was expressly developed on the “chalk board classroom” culture. Today some of those same subjects are being taught through web based and audiovisual technology that to a large degree, (more seamlessly) replicate the traditional classroom culture.

The issue of culture and grounds for its stability within the Caribbean context has been a focus of debate since the early 1990s. According to Stuart Surlin, “ electronic media are pervasive within the Third World and in the Caribbean in particular.” (Surlin; 1990; 299) Within the 1990s, the growth of technology within the Caribbean has brought varying degrees of sophistication to educational delivery. Some academicians argue that such communication technologies are destabilizing indigenous cultures of learning for that which is not clearly understood. The question that then arises is whether or not Caribbean traditional modes of learning can “weather the storm” for that which is now called convenience learning. There is then a link between two very important variables
and this study shall seek to identify any correlation between exposure to distance learning and any change in cultural attitudes. This study may help explain how distance learning may become an alternative to the traditional “face to face” mode of education.

Surlin pointed out that, “human values are the building block of culture.” (Surlin; 1990;300) In every institution, one may experience diverse opinions and values on issues impacting individuals within that organization. It may also be noted that there are those within institutions that share the same values. Hence, the creation and sustenance of a uniformed culture among individuals would seek to suggest that to those involved, values, symbols and beliefs all mean the same thing. If that is so, pockets of culture may exist within the broad framework of what is called popular culture. The infiltration of distance education in an institution like UWI will in some way distort the cultural norms of learning. In such an event that which was uniformly accepted as traditional mode of learning is now being revisited by those who may “sway” in original value standards. We may then be creating smaller pockets of subcultures within our institution that we must seek to understand in order to adjust appropriately to changes in order to recognize and deal with the diverse needs of all players involved.

In visiting the issue of human values and hence attitudes to such values, one must be willing to realize and accept the growing impact that technological devices will continue to have on cultural diversity and hence growing debates among sub cultures. Within constricting economies such as Jamaica individuals are less sacrificial and seek convenience as a mode of coping with what is ordinarily described as “hard times.” One may then want to deduce that economical and political variables may coerce persons into
changing values and beliefs. This shift may lead to the creation of new attitudes far divorced from our consciousness.

The ideology of uniformed educational culture existed in the University of the West Indies for decades. Up to the beginning of the 90s, students were cultured to attend university campuses for their education. Those students living outside of a non-campus territory had to make great sacrifices financially and emotionally to attend university. One may deduce that it was culturally accepted that a student must have been sitting before a teacher in a classroom in order to gain an education. Hence, we could also conclude that in that time period we had what was described as a uniformed institutional culture.

Institutional culture is the collective interest and unity built through shared beliefs habits and traditions. Owing to the fact that organizations/institutions are “habit forming”, culture has to be viewed within institutions in a dynamic way and be the focus of continuous research. It was Morgan who highlighted that institutional culture has much to do with the process of reality construction that allows people to see and understand particular events, actions and utterances or situation in distinct ways. These patterns of behaviour help to make one’s own behavior sensible and meaningful. (Cole 1995:237)

Anyone who has spent time with any variety of institutions or studied/worked in more than two or three, will have been struck by the differing atmosphere, differing ways of doing things, the differing levels of energy, of individual freedom and so on. This is so because institutions are as different and varied as countries of the world. So are faculties
of the universities. Hence this research focus is on UWI, Mona- in order to ensure some levels of uniformity of the culture of students utilized in this research project.

There are two (2) reasons one would want to research the concept of Institutional Culture;

A) Scientific reason that pertain to the building of theory and

B) Action research reasons that relates to helping administrators to manage culture issues within institutions.

This paper as it relates to quality in technology based learning and cultural dynamism should be able to assist more with the latter over the former.

According to Daft, culture /people change refers to a change in people’s values, norms attitudes beliefs and behaviour. He said that such changes in culture and people pertain to how people think. These changes pertain to technological developments as well as change of institutions structure as well as products. Hence it becomes quite easy to measure attitudinal change towards technology based learning, as it is always easy to identify factors that impact attitudes; in our case we are focused on communication technology. (2000:382)

As one embarks on a research effort such as this, issues of categorizing variables arise. Hence, one may consider socio-political and economic variables as likely forces in addition to the pervasive nature of communication technology as driving forces in the change of cultural attitudes. On the other hand, exposure to communication technologies may change people’s perception of educational delivery modes purely on the issues surrounding novelties, the ease of access and convenience. My view is that all variables listed above may play some role on cultural attitudes to education. This kind of
“complexity” has always made it difficult to hypothesize concretely on issues surrounding culture and attitudes. My own impressions are that research involving the variable culture can never be conclusive. Cultural change may be impacted on by so many different variables and so to measure the impact of one variable on culture would mean that other variables would have to be held constant. In such events, the likely impact of variables held constant must be alluded to.

When one revisits the paradigm of the political economy and the evolution of the information age, the only thing that remains constant is “change”. What does this mean? It means really that by the time a research effort such as this is completed so many global changes may have occurred or technological advancements increase. It will then mean that attitudes may constantly change and issues of quality constantly modified. It may then be important to keep careful notes on dates of activities as one’s finding may become obsolete before it is even enforced. The real issue is that no one seems to know the climax of this wave (the information age) and so no research of this nature can be conclusive.

It may be important to note that technology based learning has widened access to tertiary education. This widened access is highlighted as one of the “feature-benefit” of technology based learning. My own view is that the students who live in countries without campuses may be apart of this system of tutelage only because of access and not there because of quality considerations. If that is the case, then can we offer distance education as an alternative to the traditional? In some instances, I would want to think that some students are compelled to do distance, as an alternative mode to education as in their opinion that which is considered traditional is “inaccessible” to them. With these
thoughts in mind, I seek to embark on a survey to ascertain views from students on issues of attitudes to technology based learning which in some way help to create the ground for acceptance of the proposed hypothesis.

The Issue of Access to Information Technology

The issue of access was brought to the fore by Brown, when he states that, “access to, and the development and control of these mediating technologies by a few, limits the participation of the majority in creating this nascent global culture both in its physical ~technological as well as in its expressive forms.” (1995:41). This point while duly noted, has to be tapered to fit with the concept of technological innovation in a narrower institution setting. This paper is focused on sub groups of students at UWI (Mona) of which cultural impact and access to technology is oftentimes more realized, than looking at technology and cultural applications in a global and political sense.

The ideologies surrounding communication technologies and impact on cultures of Caribbean societies were noted from as early as the late 1930s and early 1940s. It was being noted that information technologies have expanded enormously human consciousness of the environment. They have transformed the local and the parochial into global and universal.

According to Brown, the notion of “cultural imperialism” gained prominence throughout the region in the late 1970s and continuing up to the present especially in official and academic circles. (1995:51) On the issue of communication technology and cultural change among positivist students, there has been virtually no conclusive research done to measure the impact of communication technology on such institutional cultural
expressions. One of the earlier criticisms made by Brown and others was that technologies of the 60s and 70s were “information transmitting” in nature and so separated the producers of cultural expressions in its narrow sense, from the consumers of cultural expressions as product. However, today, communication technologies have closed that gap and producers as well as consumers may now interact and so there can be a two-way flow of cultural expressions, a kind of phenomenon that clearly denotes communication.

Herbert I. Schiller highlights statements made by Al Gore at an International conference in Buenos Aires in March 1994 in which Gore remarked on the great promise he saw in communication technologies. Schiller cites Gore thus “We now have at hand, the technological breakthroughs and economic means to bring all communities in the world together. We now can at least create a planetary information network that transmits messages and images with the speed of light from the largest cities to the smallest village on every continent.” This information network he stated, “will be a means by which families and friends will transcend the barriers of time and distance... and it will make possible a global information market place, where consumers can buy and sell products.” (Gore cited in Schiller 1992:18) These few statements are very instructive in that Al Gore recognizes the capabilities of information technologies to facilitate interaction (he alluded to buying and selling) and using that same concept, education is being facilitated because in and of itself, electronic teaching and learning have become a relationship between producer and consumer – a form of E-Commerce.

In keeping with the US thrust Schiller points to a 1993 White House statement describing the information superhighway as “a means to enabling US firms ‘to compete
and win in the global economy’ and to give the domestic economy a ‘competitive edge’ internationally” (Schiller 1992:19) This area of the discourse shall lead us into arguments surrounding communication technologies and the global political economy that shall be looked at in further detail later on. However, the reality is that such technologies are penetrative and have far reaching effects on cultural dynamism and whether or not its consumption facilitates metropolitan empowerment will not in anyway impact our discourse on its obvious effects on cultural change.

Schiller’s argument highlighting destruction of traditional cultures through “cultural imperialism” would in some way connote cultural dynamism as a self-destructing force for some economies. The following question then arises: Do those “nations” experiencing cultural imperialism view their own transformation as beneficial?

From a Political Economy perspective Schiller argues very broadly, that “the period since the Second World War has been characterized by the growing dominance of the United States in the international arena. As the traditional colonial empires of the 19th century declined in significance, a new emergent American empire replaced them. This new imperial regime is based on two key factors, economic strength stemming primarily from US based transnational corporations, and communications know how, which has enabled American businesses and military organizations to take the leading roles in the development and control of new systems of electronically based communication in the modern world. (Schiller 1992:165-166)

Schiller is then highlighting that important communication systems have been thoroughly permeated by commercial interests. Moreover, he asserts, “the American systems of communication technologies have served as a model for the development of
While I can clearly see the ultimate beneficiaries of cultural imperialism, I am also willing to look at the other side of the coin as in my own research work, distance education through utilization of communication technologies has to a large extent transformed institutional culture where the issue of educational convenience and quality may become more paramount in the minds of students over issues of politico-economic imperatives. The ultimate result is what Schiller calls electronic invasion aimed at destabilizing traditional cultures.

Schiller goes on to argue that “the considerable merit of highlighting the global character of electronically based communication systems, of emphasizing their structured character and of underscoring the fact that communication systems are interwoven in fundamental ways with the exercise of economic, military and political power” (1992:171). We could not leave this discussion without focusing on what he terms “the heavy economic constraints faced by Third World countries seeking to develop their own communication systems; constraints which make the importation of foreign produced programmes and technologies very attractive”.

The idea of utilizing communication technology in education cannot disregard the complex, varied and contextually specific ways in which such systems are interpreted by individuals and incorporated into their day-to-day lives. In other words, Schiller’s argument would want to lead us to believe that such form of education would totally transform or destroy the concept of the “chalk board setting”. This may not be the case as each individual has his/her own interpretations/attitudes about how meanings maybe effectively exchanged.
Robert W. McChesney alluded to the fact that “the rise and dominance of the global commercial media and other technological advancements are simply more than an economic matter” [1998:3]. He pointed out that there were “implications for media content, politics and culture”. In some ways the genesis of his argument mimics that of Schiller’s in that he highlighted the emerging media systems to be an extension of the US system, and that its culture shares many of the attributes of the US super commercial technological system.

Unlike Schiller, McChesney was quick to highlight that governments the world over have a say in the infiltration of communication technologies into their economies. He also highlighted that there are myriads of cultures and languages that make establishing a global versions of the US system very difficult. It is then reasonable to deduce that these aspects of culture that may be transformed by technologies would be actively accepted for the long-term benefit and economic development of Third World peoples. For example distance education facilitates students acquiring education and a salary simultaneously a kind of arrangement that facilitates schooling for students and professionals, who could not afford full time education. In such an event the cultural change to alternative delivery mode of education creates better economic and social developments in people’s lives.

According to Oliver Boyd-Barrett, the term political economy in communication technology “has a broadly critical signification, often associated with ownership of technology and control, interlocking directorships and other factors that bring together transnational corporations with other industries and with political, economic and social ‘elites’”. (1990:106-111) He cites Mosco (1995) as offering “both a narrow and more
"ambitious definition of political economy” and suggesting, “in its narrow sense political economy is the study of the social relations, particularly the power relations that mutually constitute the production, distribution and consumption of resources including communication resources” (1990:106). However he suggests “in its more ambitious forms it is the study of control and survival in social life” (1990:106).

Boyd-Barrett points to four (4) essential features of the political economy articulated by Mosco, Golding and Murdock:

- It under-girds the study of social change and historical transformation.
- It is interested in examining the social whole or the totality of social relations comprised in economic, political, social and cultural fields.
- It has a commitment to moral philosophy both in terms of social values and moral principles.
- A central concern with “the balance between capitalist enterprise and public intervention”.

For him, Mosco’s arguments have “reduced political economy to that process of taking goods and services that are valued for their use, and transforming them into commodities which are valued for what they can earn in the market place”. So then political economy has to it two (2) value judgments, one coming from the consumer and the other from the producer. If Jamaicans for example place high value on technology-based education then owners of such technologies will facilitate Jamaican’s needs for alternative education, hence catalyzing cultural change and in the process earn foreign exchange. Political economy then, as it directly relates to communication technologies, is about addressing constraints created by time-space gaps in social life. The analysis of media institutions
and their contexts has however provided the most powerful contributions of political economy to communication studies.

In looking at the development of communication technologies Boyd-Barrett cites Murdock and Golding (1973) as arguing that owners of communication technologies are ‘first and foremost operators of industrial and commercial organizations that produce and distribute commodities’. He then suggests that all such organization are interlinked and argues further that the ideological component of their activities and the peculiar nature of their commodities must be understood. This means that one has to focus on more than “the production and distribution of commodities”. Critically analyzing this view one can see clearly a better balance of the equation. Since teleconferencing and web-based technologies provide a level of tertiary education for Caribbean peoples, we can argue that had the technology been absent then many of our students and professionals with aptitudes for higher education could not access same. Communication technologies while providing monetary rewards for owners and producers of such technology will also provide higher education for the recipients.

![Figure 1](First World)  (Third World)

Communication Technology (Financial)  

Education

Joseph T. Klapper in “Social Effects of Mass Communication” pointed out that “any effect which mass communication might have upon large numbers of people could legitimately be called a social effect”. This he said was due to the fact that “people make up society, and whatever affects large numbers of people inevitably affects society”.

32
Looking at the above frame of reference, one can easily extend his argument to include communication technologies. In so far as such technologies become accessible to the societies then people’s social and cultural behaviours may be easily modified. In looking at the whole area of “social effects” would bring us into all kinds of discussions outside of the context of this paper, but in keeping with issues surrounding communication research and the topic at hand, I may want to expand Klapper’s argument to say that communication technology may affect the aesthetic and intellectual tastes of its audiences, a kind of cultural change, as societies seem to modify taste and behaviour to technology that is considered novel xv.

Klapper made another very useful point, which may be worthwhile to highlight. He pointed out that the audience of mass communication [and by extension communication technologies] consists of people that live among other people and amid social institutions. (1960:66) So we are able to see that technology may have direct as well as indirect influences. Individuals have attended schools and churches; interact with other persons on the web, converse with lecturers, friends and colleagues. As a result of interactive influences, they have developed opinions on a great variety of topics, a set of values (called culture/subcultures) and hence create and sustain a set of behavioral tendencies. Communication technology (with emphasis on the internet) plays a functional role in impacting people’s lives, a new kind of culture emerges or many cultures emerge to create a kind of society never before experienced by man.

In rationally looking at the “explanatory nature xvii” of the natural science and the “understanding nature xvii” of the social sciences we can clearly see where there can and will be differences in attitudes of students to certain teaching methodologies. Hence, it is
likely that cultural adaptations to education through technology-based learning may be different. As Klapper puts it, “communication technologies do not function with one hundred percent efficiency and sometimes such technologies in as much as they are agents of cultural change may also become agents of indigenous/traditional cultural stability” (1960:71). We therefore need to study to analyze technology as it has the ability to transform traditional cultures into others forms of culture considered contemporary and compete for societal accommodation.

In some kind of way I could review the above argument to liken its predictions to issues surrounding cultural dichotomy. In fact, communication technologies utilized as a “New” culture in delivering education in tertiary institutions may create a dichotomy between the technologically versed and the traditional learners. In other words subgroupings of students with different cultural values [sub-cultures] will develop in a kind of way whereby technology being infiltrated dismantles traditional communal values of learning.

The arguments so far, lead us to believe that “popular culture” is the domain of the economically viable institutions of society. The notion of culture as an art of the powerful suggests that the values and beliefs created / construed by such powers are imposed upon the ‘powerless’ thus making culture a constantly changing phenomenon.

Culture was defined by Aggrey Brown as “that dimension of interaction that defines a particular group of people and incorporates symbolic, technical and social phenomena adopted and understood by such group(s)” (xviii). We can agree that culture is created and sustained through instrumental and social arrangements of people. As highlighted in Aggrey Brown’s work, technologies are both manifestations of culture as
they are the means through which culture is created and expressed. Implied in the statement is the fact that technologies have their own cultures as well as the ability to transform other cultures creating a “direct image” of the original culture. Hence communication technologies are capable of transforming the traditional modes of teaching in the Caribbean to something resembling the metro poles mode of technological delivery. It would then follow logically that technological advancement might modify popular culture in keeping with such advancement.

Having indicated the socio-economic and political variables that are brought to bear on culture, we can now look at strategies that inform cultural studies as suggested by Lawrence Grossberg. Of particular importance is the whole area of “the problematique of cultural studies”, which looks at the division between culture and society. This model incorporates the idea of base and superstructure and contemporary theories of ideology of power. Between culture and society, he claims that there is “the domain of every day life.” He points to Williams (1958) who identified the ambiguity in the concept of “culture”, defining a “whole way of life” which was liberal democratic politics and having signifying activities which demarcated class politics. He then highlighted that the problematique of cultural studies produces a gap between culture and society in describing how particular structures of meaning determine social processes. The clear point that this perspective has brought to the discourse is that, the means by which messages are produced, inserted into, and function within every day lives of human beings is to reproduce and transform structures of power and domination xix.

Critical theory, a dimension of the Marxist thinking also assumes that there is an abstract process of the “colonization of consciousness” by economic industrialized forms
that defines the power of the media and by extension of communication technology. It also highlights the correlation between socio-economic and socio-psychological processes. It is then easy to transmit values from economically viable economies to dependent economies and such values being imposed on the dependent often lead to cultural modifications or changes, eroding in some instances fully that which was “static”.

The other classical approach is economism. This approach looks at the mode of economic forces and relations, the systems of production and distribution. It states categorically that consumption is monolithically determined by production. Hence, this idea highlights that economic and technological practices, not only determine cultural text in part, but also insert them into already existing social relations of power. This then suggests that economism will define “a culture” and such a culture inserted in pre-existing power relations will be transmitted to the “powerless” and erode their own conventional forms of culture.

The above then brings into question the issue of cultural transformation and change. Williams pointed out that the “structure of feeling” sets limits and exerts pressure on how the audience is able to interpret television texts. In summarizing his views he sought to point out that culture is defined within society by political and economic forces. Such powers set the agenda for information technology. To this degree, the cultural norms and messages to be transmitted are decided upon, taking into consideration the interests of the “powerful” in the society. Such interests will then distort the cultural norms of the ordinary consumers. The struggle between different social groups is then enacted within the domain of culture.
In summarizing this aspect of the research work, I would like to highlight that cultural studies and political economy are intricately linked. (Grossberg; 1995:72). Cultural studies literature makes much of the word power. Critical political economy will define who speaks to whom and what these symbolic encounters mean in popular culture. This opens up the broad arena in which to insert the idea of research. To my mind, the first thing that needs to be done is to identify all the variables to be measured in any research of cultural studies but there are a range of confounding variables to contend with! It then makes it difficult to operationalize a methodology. Cultural dynamism does not focus on specific topic areas but more on the kinds of perspectives that it has developed, and various modes of theorizing.

As the new culture of distance learning take roots in the Caribbean it may be important to highlight that academicians within the Caribbean thought that distance learning could increase access of tertiary education to larger numbers of Caribbean peoples. It was also thought in the mid 90s that greater desires for convenience has made it possible to institutionalize certain kinds of communication technologies in the advancement and wider spread of courses to Caribbean peoples. In so far as our discussions are concerned we have looked at the utilization of communication technology in a broad context. If we should move “closer home” and focus on its application and reception in an institution such as UWI, we may be in a better position to evaluate attitudes of students to this alternative mode in order to start preparations for policy changes within the university as far as educational delivery is concerned. We, therefore are not concerned with the quality of the communication technology based on scientific
approvals but more so on the perception of such qualities by our users of these technologies, in our case UWI students.

The issues of scale, isolation and dependence as being associated with many of the challenges that face educational development in small states were highlighted by the St. Lucian Governor General, Dr. Peraline Louisy, at a UNESCO/CARICOM consultation on “Higher Education in the Caribbean” held in 1998. (Louisy 1998:170).

One of the decisions from that consultation was that “the region should seek to increase tertiary involvement from its 1997 level of 7.5% to 15% by the year 2005”. Dr. Louisy suggested that access via multiple modalities and pathways using technology was essential to this thrust. Several issues emanated from the discussions including inter alia, the question of institutional context given that within small states the face-to-face mode was considered a superior mode of delivery. Noted in this regard was the tendency for educational transactions to be seen as closed and distance education as a threat to this status. This had the potential to generate resistance from traditional educators. The text went on further to point out that educational transactions tended to be closed ones and distance education threatened to make them more open, making educators feel more threatened and hence may want to resist the alternative mode of delivery. While text addressed a hypothetical reaction of lecturers it has not given much in terms of reaction of students, hence there is some room for deeper interrogation of technology delivery modes in education.

The culture of “face to face” tradition has been with us for decades and so another culture/contextual issue that was reported to have surfaced frequently in the conference was the comfort of target groups experienced with known ways of educational
delivery, which had led to a concern dependence on teacher lecturer delivery. This (it was said) had to be overcome if students were to achieve full benefits from technology-based learning. In other words, we are called upon to recondition our minds to alternative delivery modes in education (cultural change) facilitated by what is popularly denoted as communication technologies.

According to Ruth Reviere, “Distance Education is often defined as flexible and open”. She stated that “flexible” meant that “learning options can be adjusted for both current and future learning needs and provide for the learner at a time and place suitable to his/her needs”. She stated further that “on the other hand ‘open’ education constitutes the removal of academic restrictions and privileges – that is the elimination and reduction of barriers between areas of knowledge, careers, institutions, the increasing and enriching of useful activities and experiences to complement the academic educational purposes”. (UWIDE 2000:59-60) This approach to education then sets the mode for changes in traditional relationships between students and educators. Hence continuous evaluation of this evolving culture of learning is paramount in assessing quality. Reviere cites Rathore & Shuemor (1998) as suggesting there is no single definition of evaluation used in Distance Education or in education generally and argues, “evaluation is most frequently defined as part of most human activities involving decisions and simply means assessing quality”. She brought to focus issues of course design, course content and efficiency of technology to deliver course material with feedback and pointed out that to date there is little in the way of distance education (DE) course evaluation at UWI. Hence, if one assumes that her comments are accurate we have more reason to be skeptical of the quality of this alternative process at least
comparatively to tradition “face to face” instructions. She has also pointed out that “what has been obtained so far has been a rather sporadic assessment of some course material, with a student questionnaire given to students at various sites”. She further pointed out that this “questionnaire contains sections that assess the elements of the DE courses: the course material, course guides, teleconferencing and face-to-face tutorials”. However, she pointed out that due to a lack of a proper research infrastructure, these researches are not continuous and hence there is no proper monitoring of quality. In keeping with Riviere, evaluation then should provide the means to estimate quality by collecting information on the following:

- Reasons for enrolling or withdrawing
- **Perception of course experiences** (key focus of research)
- Tutor/student interaction [communication]
- Effectiveness of learning processes used etc.

Why use technology in Education?

- To improve access
- To reduce cost/increase efficiency
- **To improve quality**
- To provide “on demand” learning.
“New Times” “New Era” “New Culture”

Everywhere we go these days one can take as a given that most discussions surround the notion that we are living in “new times”. In fact even the way economic transactions are conducted seem quite different from what existed a decade ago. Automated machines, credit cards, debit cards, cellular phones with all kinds of features are just a few of the examples that intermingle with our every day existence such that it becomes almost readily acceptable that we are living in new times.

From a philosophical perspective, Stuart Hall asked the question; how new are these ‘new times’? He further asked whether or not these ‘new times’ are facilitating a more progressive society or are societies regressing? [Hall, S. 1997; 223]. He pointed out to us that there is some level of ambiguity as to what the term “new times” really mean. Hall offers us a kind of capitalist definition of “new times” which I would like to highlight for the purposes of this discourse. From a capitalist perspective, Hall stated that, “‘new times’ refers to social, economic, political and cultural changes of a deeper kind now taking place in Western Capitalist societies” (1997: 223). He further went on to point out that these changes, form the necessary shaping context, the material and cultural conditions of existence, of societies.

Focusing more on the concept of distance learning, one may want to agree with Hall that “New Times” are representing the ideology of Post Modernism, which seeks to suggest that we are leaving behind post “everything” (traditional learning) but the ambiguity comes into play as we are unable to clearly define where we are heading for. In a more practical sense, we have experienced the advent of distance learning in our university (UWI). Does that mean, we shall soon have a university that is virtual? Will
there be virtual coexisting with traditional? These are only two (2) examples of the questions Hall wants us to ask ourselves.

Attitudes of students to this kind of Post Modernism (i.e. the virtual university) is likely to give us some insight on the direction(s) we are heading in. As it is today, we are not fully convinced as to whether or not education delivery will have a two (2) pronged approach, i.e. virtual and traditional. If tertiary students believe that virtual learning offers similar or better quality than “face to face” delivery then (may be) in the next decade or so our university (ies) may be fully virtual. In that case we need to start to prepare (infrastructure and human resources) for the inevitable.

A shift is taking place to new “information technologies” which are greater facilitators of communication than older information transmitting technologies. Hence, information technologies afford interaction in virtual form often times eliminating the human element. The concern then becomes one of whether or not the presence of human beings in education delivery bears relevance and also whether a lack thereof affects quality of delivery significantly.

An Attempt by Hulda Williams (1999)

Hulda Williams sought to investigate the whole notion of distance education utilized in the B.Sc. Management Studies degree programme and came up with some conclusions. As her studies revealed, access to high school education via traditional classroom was common to all respondents. (Williams 1999: 30) This point forms the basis by which my own studies had comparative scope, as all students interviewed were familiar with traditional modes of education delivery or (to be more specific) have experienced it.
According to Williams, “the University of the West Indies is creating opportunities through distance education and such opportunities must be enhanced and expanded to include various areas of academia since exclusivity must not become the norm as it will be to the detriment of some and benefit of others in so far as these programmes impact on personal as well as professional development”. (1999: 30) I am sure that since her research effort work in 1999, the university has expanded programmes in distance education. However, while Williams is almost emotional about such expansion, she has not fully demonstrated what scientific demands by students have triggered such emotions. According to her findings, she has reported 69% of her respondents to be lamenting on the ‘impersonal nature of the learning process’. This percentage is significant and to that degree, what can be done to make the distance-learning environment more personal? I raise this question, as Williams highlighted the impersonal nature of the course to be a disadvantage. What are the likely impact(s) on quality of the delivery mode?

Williams pointed out in her work “that greater access to email would significantly reduce the impersonal nature of the distance-learning mode”. She said that email would facilitate greater contact between students and lecturers. Now I am not sure if having email would enhance communication between student and lecturer. It would seem to me more important to attach email to communication technology in order to enhance contact. For example, I went to the computer and created a hotmail address – marky335@hotmail.com. However, owing to the fact that I do not have access to the technology then email becomes immaterial to the improvement of interpersonal
relationships. With all levels of balance, the university offers all students access to email. Does that mean improved quality in distance education where interaction is concerned?

Williams pointed out students’ comments about late arrival of packaged material as a concern and she pointed out that packages could be loaded unto the Internet and students could download. Williams seem to be highlighting that teleconferencing and web based technologies should be merged to give the best quality education. According to Williams, 74% of her respondents believe that the greatest advantage of distance education was its far-reaching scope facilitating education almost at home (op. cit. p. 32). This point seems to bring out some socio-economic variables highlighted by Nettleford earlier. However, this access to education is not considered a measure of students’ attitudes to quality.

Williams’ work created concerns surrounding access to quality of and economics related to distance education. Whilst some recommendations may not be thorough, one could summarize that her attempt was to seek improvement in access and quality in distance education at UWI.

This research effort is then geared at ascertaining students’ attitudes to distance education and should garner additional information to build on the value construct laid down by Williams et al.

**What of Attitudes?**

In order to give this discussion some focus, we must indulge ourselves into the psychological realm by looking at the concept of attitude. J. Richard Eiser in his book; *Attitudes, Cognition and Social Behavior* claimed that there is little or no relation between people’s behavior and their verbally expressed attitudes (1996; P.52). He pointed to the “scientific nature” of his comment by saying that studies have been done
that compare verbal expressions of attitudes with behaviour and highlighted that a rather confusing picture emerges. In fact, this is not a difficult observation to exemplify. In fact we know of students who will verbally express that in their estimation traditional learning is superior to distance learning but are found pursuing distance learning. The fact is that we know that other confounding variables may come to bear on a person's action(s), however, it is a fact that verbally expressed attitudes does not always depict behaviour. In such an event, whilst we may speculate on the future effects of attitudes to distance education (verbally expressed) we are also of the view that such attitudes would have to be measured by actual behaviour to get the fullest picture of our educational delivery mode in the 21st Century.

Eiser pointed out that Wicker in 1969 concluded that; “only in a minority of cases was a close relationship found between verbally expressed attitudes and overt behaviour, the typical result being one of only a slight association or no association at all (1996;P.52). The point to be captured here is that in many instances measures of attitudes and behaviour fail to correlate. That being a scientific fact/fact of life; can verbally expressed attitudes about distance learning tell us in wholesome way what our future universities will be like? This question then becomes the “nucleus” of our concern and the kind of research area we would want to embark on for future economic planning as the technological revolution encapsulate us.

Eiser pointed out that attitudes are pre-dispositions to respond to some class of stimuli with certain classes of response (1996;P.53). Now, his definition is very pointing. We are all to some degree stimulated and excited by the tremendous abilities of technology and so even out of curiosity, we as human beings are willing to explore the full “competence” of such technologies. Hence, the novelty of the technology sometimes not only causes us to verbally express our attitudes toward it but to maneuver its capabilities. Therefore, stimuli sometimes create the avenue by which our verbal attitudes and behaviour are one and the same.
Eiser points us to three (3) major characteristics of attitudes,

1. Affective: Evaluative Feelings and Preferences
2. Cognitive: Opinions and Beliefs and
3. Behavioral or Conative: Overt actions and statements of intent [1996;P.53].

If attitude is constituted of all three components listed above and distance education is predicated on the technological revolution then students’ attitudes to such education based on the Affective, Cognitive and Behavioral cannot therefore create a uniform response to the value constructs of distance education using technology and traditional learning.

Hence, communication may not be achieved across cultures and so deviant behaviours and attitudes will continue to increase the spread of the debate over the two modes of education delivery.

Further Clarifications – Ernest R. Hilgard in his book; *Introduction to Psychology* states that; “in ordinary social exchange, the attitudes, preferences and prejudices that sway people affect the satisfactions of living together” (1962;P.563). Implied in this statement is the fact that meanings disseminated throughout societies are interpreted differently. Hence those who promote the view of distance learning being the route to convenience and quality education may be met by the opposing views of the greater value and quality of traditional education based on the “chalk board culture.” Hence, it would seem to us that the world at large might have to cater to two groups of peoples in societies i.e. those who require traditional learning versus those who are moving with the technological delivery of education.
Chapter 3

Methodology

In keeping with the above stated topic, mixed method approaches were adopted in data collection and analysis. This included the use of a survey questionnaire to collect data regarding students’ attitudes and a semi structured interview, documentary analysis and field observation were used to garner baseline information on the operations of distance education at UWI. These combinations of methods allow the research to take on both qualitative and quantitative dimensions given the nature of the core concepts being investigated i.e. attitudes and culture. The mixed methods served to triangulate the information collected across the sources.

Data Collection

One hundred and fifty students were interviewed to get their views/attitudes towards distance education vis-à-vis traditional mode of delivery (face to face). Participants were selected from across two faculties using the Convenience Sampling Strategy. The sample was divided into three (3) equal groups, choosing students conveniently from the faculties of Pure and Applied Sciences and the faculty of Social Sciences. There was not time to obtain comprehensive listings of students from each faculty hence the Convenience Random Sampling technique was applied.

One hundred and fifty students were interviewed (through questionnaire) to ascertain their attitudes to distance education- the quality of distance delivery versus the face-to-face delivery mode in education. Fifty respondents were chosen from students in UWIDEIC programmes. Fifty respondents were taken from each of the faculties of Social
and Pure & Applied Sciences. These latter two groups were not pursuing any distance education programme. UWI Mona was chosen as the focus given that it has the “mix” of students required to complete this study and the geographic focus also creates a scenario in which institution culture is uniformed across all students, i.e. culture is held constant.

The questionnaire was geared at garnering information on individual judgment about quality of the alternative delivery modes. In any study of this nature, confounding variables are brought to bear. Hence socio-economic and political reasons may in some way influence choice of educational delivery mode chosen and hence posits a bias to one mode over the other. The questionnaire was thus constructed so as to eliminate these variables and shall not incorporate open-ended questions.
Fig. A

Diagrammatical Representation of Sample Distribution (Population 150)

The study incorporates two faculties [Pure and Applied Science and Social Sciences]

Geographical Location: UWI – Mona Campus.
As can be seen from Fig. A, there are two (2) groups of students in each faculty, broken down into experienced and inexperienced. Experienced in this study shall mean those who are enrolled in or have pursued distance education via web base, teleconferencing or both. The inexperienced are considered being those who have never pursued education through technology-based learning. However, in the overall comparative analysis, the term experience becomes more general in that one does not have to be enrolled in a technology-based course to be familiar with the workings of it. In fact, a number of “face to face” students use technology to augment their knowledge. Hence it was felt that comparative analysis among these groups was rational and scientifically sound. Hence, the information gathered shall have greater comparative scope and greater potential for inferences to be drawn. This study could then set the stage for more in depth research including other variables not incorporated in this effort.

A table of random digits was ascertained (Boxill et al; 1997: 143) and a digit chosen randomly. In this case the number three (3) was chosen from the table of random numbers. So the third person met in each faculty/department was interviewed and thereafter every sixth person up to fifty students in each department. The table of random numbers was employed so as to create a base of reference for the fieldwork and to prevent opinionated or judgmental choice of respondent(s).

A qualitative slant: I spent three (3) class hours with UWIDE students in the virtual setting. This was aimed at giving me a “first hand” experience of what transpires at the Distance Education Center, assessing qualitatively quality and students’ verbal as well as non-verbal communication.
Tables, graphs and statistical analyses were done and the findings presented with conclusions and recommendations.

**Rationale to Methodology:** The sample population was broken into experienced versus inexperienced in order to make a comparative analysis of judgments coming from both groups on issues surrounding quality of distance education. Raymond Williams’ “structure of feeling” comes into play where the inexperienced group was concerned – all fueled by the Political Economy. The truth is that sometimes we make judgments/decisions based on what is being fed to us via satellite. Having reached the comfort of our homes, we tend to create our own impressions of what we see and hence setting the stage for cultural modifications through such influences. Hence the questionnaire was geared at capturing any trend in this ideology as was explained by Raymond Williams. For example, when cable came to the region, the majority of populations had not experienced this novelty. However, the idea of cable was effectively sold throughout the region and today cable is a feature of most Caribbean homes. Hence the term attitude really denotes a judgment call and really does not border very heavily on experience or inexperience.

This study shall be piloted to ensure the finest quality of information. The data shall be analyzed with the help of computers. Findings shall be reported and recommendations made. This study borderlines on two (2) fields of study; Education and Communication. As the two (2) are intricately linked, it is believed that a study of this nature may provide insights for both.
Some Operational Definitions

Attitude: An attitude is a predisposition to make certain kinds of judgments about people, issues and events, usually in specific situations. (Cole; 1995: 113) Personal attitudes will be a reflection of the broad values held by the individual. These values may be acquired through experience or through association. Personal opinions and prejudices will be taken into account since they contribute to an individual’s exercise of judgment.

Quality: The Oxford dictionary states that quality means (1) A degree of excellence (2) Relative nature or character. The term quality, as it relates to technology based learning, becomes relative to that which existed for decades as traditional i.e. “face to face”. Hence issues of quality in distance education come to the fore. One issue of grave importance has to do with the creation and “building of intimacy in the learning process”. The other issue has to do with “the role of technology in building productivity in the student teacher relationship”. Quality will mean a degree of excellence in terms of intimacy among students, lecturers and the applied technology. It will be measured in terms of curriculum design, intimacy in learning presence or absence of tutor, efficiency of technology in facilitating communication, accessibility of distance learning technologies, time spent in delivering material and ability to interact during lectures. This definition is in keeping with Beckles (2001) regarding quality in distance education. the above can be compared with that of Koul who identifies quality criteria as including:

- Process of course preparation and quality of study material.
- Usability of DE for the subject concerned – example, DE was not supposed to be suitable for teaching natural sciences.
- Provisions made for the learning/teaching transaction, which
incorporated counseling, tutorials, assignments, etc. (2001:6)

**Culture:** Culture constitutes the symbolic, instrumental and social responses of collectivities of people to their environment (Brown 1995: 40). This will be measured by analysis of the beliefs, habits and values of the respondents to “opinion” questions. Cultural change will mean changes in the values, norms, attitudes, beliefs and behaviour, which have occurred in relation to technology based learning. He said that such changes in culture and people pertain to how people think. *(Daft 2000: 382)*

**Technology:** McOmber three (3) operational meanings of technology will be utilized viz.:-

- Technology as instrumentality
- Technology as industrialization
- Technology as novelty.
Chapter 4
What are they saying?
Data Presentation and Analysis

Summary of analyses of results from survey of UWI Mona students’ attitudes to technology-based learning compared to traditional mode of educational delivery.

Research Question:
Can technology based learning provide the same quality of education as the traditional “face to face” mode of educational delivery?

Hypothesis:
Technology-based learning cannot provide the same quality education as traditional face-to-face learning.

Below is a summary of the data analyses done on the survey of the attitudes of students from the University of the West Indies, Mona, to technology-based learning compared to traditional “face to face” mode of educational delivery.

<table>
<thead>
<tr>
<th>Table A</th>
<th>Percentage of respondents by whether experienced with technology based / distance education and faculty.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Faculty</td>
</tr>
<tr>
<td></td>
<td>Natural Sciences</td>
</tr>
<tr>
<td>Level of Experience</td>
<td>Experienced</td>
</tr>
<tr>
<td>Experienced</td>
<td>8.2</td>
</tr>
<tr>
<td>Not Experienced</td>
<td>91.8</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The above table indicates that the greater percentage of experienced participants came from UWIDEC. This observation was not surprising as this group is directly enrolled into distance education programmes.

The other two (2) groups i.e. Social Sciences and Pure and Applied Science had a small percentage of students who were experienced. This was due to the fact that they were enrolled in other distance programmes (web based programmes), which gave them actual experience, however, the majority of students from these two groups are not experienced. This observation then set the framework for comparative analyses to be done on quality imperatives. We may want to deduce at this point that the levels of experience were significantly different across the three groups. Respondents were much more likely to be experienced if they were from UWIDEC than from either of the two (2) groups. Experience was least among the group from the Pure and Applied Sciences.

From my own expectations, this observation was anticipated due to the “hands on” nature of the Pure and Applied Sciences. The observation was also supported by the fact that for Decades opposing views have existed between Natural and Social scientists on the issue of the nature of “science” which impinges in some ways on what methods are suitable for educational delivery.
Percentage of respondents with experience in technology based / distance education by type of technology and Faculty

<table>
<thead>
<tr>
<th>Level of Experience</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Science</td>
</tr>
<tr>
<td>Yes (Not Stated)</td>
<td>25.0</td>
</tr>
<tr>
<td>Teleconferencing</td>
<td>0.0</td>
</tr>
<tr>
<td>Web based</td>
<td>75.0</td>
</tr>
<tr>
<td>Both</td>
<td>0.0</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Respondents were much more likely to be experienced in teleconferencing if they were from UWIDEC. Although the numbers were small, a higher proportion of Pure and Applied respondents were experienced in web-based learning. The experience related to teleconferencing was not readily shared with the other two (2) groups. In such an event attitudes may be different since these two (2) groups are not active participants in the
distance programmes. It may also be of value to note that experience with technology by especially the Pure and Applied students is web-based and so attitudes may not have the greatest comparative scope due to the employment of different modes of education delivery vis-à-vis a uniformed teleconferencing mode of delivery. We are however, able to look at comparative attitudes, since some levels of familiarity with web-based and/or teleconferencing may be sufficient to create attitudes/judgments.

We refer to the fact that J. Richard Eiser highlighted that; attitudes indicate “feelings” held about something or someone. Attitudes may also be expressions of thoughts, likes and dislikes, approval or disapproval, attraction or repulsion, trust and mistrust and so on (1986; 11). Adopting this kind of approach to attitude makes room for an appreciation of each group attitudes even based on a passing knowledge of the mode of education delivery.
Percentage of respondents by whether experienced in technology based /distance teaching and age group of respondent.

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>Not Experienced</th>
<th>Experienced</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20</td>
<td>87.3</td>
<td>12.7</td>
<td>100.0</td>
</tr>
<tr>
<td>21-25</td>
<td>62.5</td>
<td>37.5</td>
<td>100.0</td>
</tr>
<tr>
<td>26-30</td>
<td>47.6</td>
<td>52.4</td>
<td>100.0</td>
</tr>
<tr>
<td>31-35</td>
<td>22.2</td>
<td>77.8</td>
<td>100.0</td>
</tr>
<tr>
<td>36-40</td>
<td>15.4</td>
<td>84.6</td>
<td>100.0</td>
</tr>
<tr>
<td>&gt;45</td>
<td>36.4</td>
<td>63.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Overall</td>
<td>58.7</td>
<td>41.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The level of experience with technology based learning varied significantly. Seemingly strange is that the age group with the higher proportion of experienced respondents were those above 31 years old. This however, may be the result of the survey design and the distribution of age groups across departments. As shown in the table below, UWIDEC participants were shown to be generally older than those in the other two groups. Almost all UWIDEC students are experienced and hence in any overall analysis of experience, there is a strong influence by these respondents since they constitute the greatest percentage of those with practical experiences. Another factor that may be worth considering is the time of day that the survey was done in each of the three departments. This survey was carried out over five consecutive days at midday to early afternoon.

Table C-2
Percentage distribution of respondents by faculty and age group

<table>
<thead>
<tr>
<th>Age Group (years)</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDEC</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20</td>
<td>67.3</td>
<td>40.0</td>
<td>3.9</td>
<td>36.7</td>
</tr>
<tr>
<td>21-25</td>
<td>24.5</td>
<td>26.0</td>
<td>13.7</td>
<td>21.3</td>
</tr>
<tr>
<td>26-30</td>
<td>8.2</td>
<td>12.0</td>
<td>21.6</td>
<td>14.0</td>
</tr>
<tr>
<td>31-35</td>
<td>0.0</td>
<td>10.0</td>
<td>25.5</td>
<td>12.0</td>
</tr>
<tr>
<td>36-40</td>
<td>0.0</td>
<td>6.0</td>
<td>19.6</td>
<td>8.7</td>
</tr>
<tr>
<td>&gt;45</td>
<td>0.0</td>
<td>6.0</td>
<td>15.7</td>
<td>7.3</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table D

Percentage of respondents with technology based / distance education experience by faculty and whether familiar with the modes of delivery in distance education.

<table>
<thead>
<tr>
<th>Familiarity with modes?</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDECE</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>25.0</td>
<td>25.0</td>
<td>4.2</td>
<td>8.3</td>
</tr>
<tr>
<td>Yes</td>
<td>75.0</td>
<td>75.0</td>
<td>95.8</td>
<td>91.7</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Among those who were experienced in technology based / distance education, there was little difference between the groups in the proportion of the respondents that were familiar with the modes of delivery in distance education. Generally, there was a fairly high level of familiarity among all the faculties, although, as expected, it was highest among the UWIDECE respondents (95.8%). The one respondent who made up the 4.2% from UWIDECE who responded “No” to this question may be the result of either a mistake in filling out the questionnaire or a respondent that has very special circumstances, because it would be expected that all the UWIDECE respondents would be familiar with these technologies, since these are tools used extensively in UWIDECE.

Table E

Percentage of respondents with technology based / distance educational experience by faculty and opinion which mode is more easily accessible.

<table>
<thead>
<tr>
<th>More Accessible?</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDECE</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance Learning</td>
<td>33.3</td>
<td>57.1</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Traditional Learning</td>
<td>66.7</td>
<td>42.9</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Overall there was an even split among the respondents as to which educational method was more easily accessible. Thus the differences in the proportions across the groups were not significantly different from each other. Hence, on issues surrounding access, there are strong supports for both educational delivery modes. This could mean that students’ economic situation as well as geographical location may influence students’ opinion of access. Hence in terms of quality, from this particular response it would be difficult to rate one mode over the other.
Table F
Percentage of respondents with technology based / distance educational experience by faculty and opinion on whether technology based learning can offer the same scope for interaction as traditional education.

<table>
<thead>
<tr>
<th>Same Scope for Interaction?</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDEC</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than traditional</td>
<td>100.0</td>
<td>50.0</td>
<td>80.0</td>
<td>77.4</td>
</tr>
<tr>
<td>No scope for interaction</td>
<td>0.0</td>
<td>12.5</td>
<td>6.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Same as traditional</td>
<td>0.0</td>
<td>37.5</td>
<td>14.0</td>
<td>16.1</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Most respondents felt that technology based learning did not offer the same scope for interaction as traditional education. Only an overall 16.1% of respondents felt that it offered a similar scope as the traditional classroom. However, from this particular response, we are seeing students across all three departments being in the majority on the inability of technology based learning to deliver same levels of interaction as traditional.
classroom. Interaction facilitates the exchange of ideas and meanings often considered the recipe for learning. Hence if the majority of students are claiming that the technology (ies) offers less scope for interaction, one must infer that there is less scope for learning or that learning may be manifested over longer periods of time and under some levels of duress, not experienced in the traditional classroom. This may lead us or cause us to deduce that less scope for interaction with technology based learning may impinge on quality of educational delivery – hence may give an edge to the traditional over the virtual.

<table>
<thead>
<tr>
<th>Same Level of Interaction</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDEC</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>No student-teacher interaction</td>
<td>0.0</td>
<td>37.5</td>
<td>4.0</td>
<td>8.1</td>
</tr>
<tr>
<td>Same as “face to face”</td>
<td>0.0</td>
<td>0.0</td>
<td>8.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Significantly less than “face to face”</td>
<td>50.0</td>
<td>50.0</td>
<td>48.0</td>
<td>48.4</td>
</tr>
<tr>
<td>Slightly less than “face to face”</td>
<td>50.0</td>
<td>12.5</td>
<td>40.0</td>
<td>37.1</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
There was very little support for the thought that technology based learning could offer the same level of interaction between teacher and student as “face to face” delivery. This was proportionally more or less the same across all the faculties. Since reaction to this question is same for experienced as well as inexperienced students, it was generally felt that interaction was limited in the electronic culture of teaching.

**Table H**

Percentage of respondents with technology based / distance educational experience by faculty and opinion on whether the technology utilized deliver educational material with similar efficiency as "face to face" delivery.

<table>
<thead>
<tr>
<th>Similar Efficiency?</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDEC</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inefficient</td>
<td>0.0</td>
<td>12.5</td>
<td>0.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Less efficiency</td>
<td>50.0</td>
<td>25.0</td>
<td>73.5</td>
<td>65.6</td>
</tr>
<tr>
<td>Same efficiency</td>
<td>50.0</td>
<td>62.5</td>
<td>26.5</td>
<td>32.8</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The above graph indicates significant differences in the proportion of respondents’ opinions on whether the technology utilized deliver educational material with similar efficiency as "face to face" delivery. A significantly higher proportion of respondents felt that it did so with less efficiency. Surprisingly (or probably not – they have to use the systems after all) the highest proportion indicating that it was with less efficiency were 73.5 % of the UWIDEC respondents. If the experienced students are so supportive of the ideas/thoughts of the inexperienced, we may want to deduce that material delivery in technology based learning (teleconferencing in the majority of cases) is less efficient than the traditional classroom and so, especially UWIDEC students, may be enrolled in this programme over the traditional for other reasons than quality.
Table I

Percentage of respondents with technology based / distance educational experience by faculty and opinion on whether technology offer ample scope for feedback.

<table>
<thead>
<tr>
<th>Ample Scope for Feedback?</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDECS</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equivalent</td>
<td>100.0</td>
<td>25.0</td>
<td>22.4</td>
<td>26.7</td>
</tr>
<tr>
<td>Less scope</td>
<td>0.0</td>
<td>62.5</td>
<td>71.4</td>
<td>66.7</td>
</tr>
<tr>
<td>No scope</td>
<td>0.0</td>
<td>12.5</td>
<td>6.1</td>
<td>6.7</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Similarly, most respondents felt that the technology offered less scope for feedback. The differences among the faculties were however, marginally non-significant. Thus, the indication is that the distribution of the responses was the same among the three faculties.
Communication is built on the ability for information to be transmitted with feedback. While students in the main are not saying that there is no scope for feedback, the general view is that there is less scope for feedback which puts the term communication on a continuum of quality. It may be inferred that while we utilize communication technology for educational delivery and can justify the capabilities of the technology, one has to take into consideration the quality of “feedback.” If the feedback is not to students’ satisfaction then one can only deduce that there may not be enough clarity of thoughts. From the responses, it was widely felt that “face to face” modes of delivery offers superior “feedback” mechanisms to the virtual.

<table>
<thead>
<tr>
<th>Effectively Teach all Courses?</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDEC</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can</td>
<td>0.0</td>
<td>25.0</td>
<td>16.7</td>
<td>16.7</td>
</tr>
<tr>
<td>Only Social Science courses</td>
<td>0.0</td>
<td>12.5</td>
<td>43.8</td>
<td>36.7</td>
</tr>
<tr>
<td>Some Social as well as Natural Science courses</td>
<td>100.0</td>
<td>62.5</td>
<td>39.6</td>
<td>46.7</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table J
Percentage of respondents with technology based / distance educational experience by faculty and view on whether technology based learning can effectively teach all courses.
Only a small proportion of the respondents believed that technology based / distance education could effectively teach all courses. A significant proportion felt that it could only do so with social science courses. But nearly half felt that it could do so with both. This is where one can see a mix of attitudes towards the capabilities of technology. Some respondents in the group are accepting the idea of technology based learning being a means to higher education. Others who are patriots of traditional learning are still holding to the “old” culture of face-to-face delivery.
Percentage of respondents with technology based / distance educational experience by faculty and view on whether distance education facilitate socialization and sharing among students.

<table>
<thead>
<tr>
<th>Socialization and Sharing?</th>
<th>Natural Sciences</th>
<th>Social Sciences</th>
<th>UWIDECE</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>No socialization</td>
<td>0.0</td>
<td>25.0</td>
<td>0.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Same as “face to face”</td>
<td>25.0</td>
<td>0.0</td>
<td>29.2</td>
<td>25.0</td>
</tr>
<tr>
<td>Significantly less than “face to face”</td>
<td>75.0</td>
<td>50.0</td>
<td>27.1</td>
<td>33.3</td>
</tr>
<tr>
<td>Slightly less than “face to face”</td>
<td>0.0</td>
<td>25.0</td>
<td>43.8</td>
<td>38.3</td>
</tr>
<tr>
<td>Overall</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Most respondents believed that the technology based educational delivery methods offered less facility for socialization and sharing among students, with what appears to be significant differences in the proportions among the three groups. The Social Science respondents being most negative followed by slightly less negative views among the Pure
and Applied respondents. The UWIDEIC students though, with still overwhelmingly negative responses, were not as negative as the other two.
The Analysis

Communication technology (ies) utilized in distance education is more and more becoming pivotal in terms of its role in delivery of education to students. In so far as we have viewed attitudes/judgments of students, we have seen where students are still ascribing greater value to traditional modes of educational delivery over technology based learning due to lack of deeper interactive scope and efficiency of the technology based mode of delivery. Just may be – we would probably want to treat technology based learning as an expansion of the “face to face” delivery mode over viewing it in a dichotic mode. What do I mean? As the university’s cultural foundation is built on the traditional mode and students are in the main cultured that way, technology based learning may more widely be accepted as that which augments the traditional mode over something created as a separate mode of educational delivery.

It was interesting to note that while one would have reasonably expect the interaction of technology based learning to have created a mix culture of students on campus, the results revealed that some significant values and beliefs were held constant by all three groups. It then draws one to consider whether or not technology based learning would be able to divide students’ opinions on issues of quality.

The other interesting point was the fact that inexperience has not to a large degree created disparities with the experienced. This may be due to the fact that inexperienced students utilize communication technology in order to develop their knowledge base in the traditional mode. If this argument then leads one to consider traditional learning to be of superior quality to technology based learning – does this mean better quality graduates from the face to face mode? Do students in distance feel that their education is of equal
quality to “face to face”? These are two of the questions that should trigger our minds to look a little deeper on issues surrounding attitudes as we proceed to intersperse what is virtual within the traditional.

It was interesting to note that while the majority of UWIDECE students were highlighting less scope for interaction, the majority (60.8%) would continue to pursue teleconferencing in the evenings. Hence, most noted among this group was the fact that attitude to technology based learning and action taken or to be taken are inconsistent. This point brings across the point made by Eiser et al with regards to verbally expressed attitudes and actual behaviour. Hence, one may be able to foresee the upcoming challenge that administrators of distance learning may have in the future to make budgeted plans for distance education. From this observation we cannot draw conclusion but to say that variables (socio-political & economic) outside the scope of this research can be interrogated to get a clearer picture as to why the disparity.

As was spoken about in the literature reviews – that which is expected to catalyze cultural dynamism may be the very thing that strengthens cultural stability. This statement has been made owing to the fact that traditional social science and pure and applied science students still prefer traditional classroom (full time) as their ideal mode of delivery. It should also be noted that nearly half of students interviewed at UWIDECE (47.1%) preferred the traditional classroom full time. This fact would want to draw us to believe that while the merit of technology based learning is in the main accepted – all other factors being equal students would still prefer that which is considered traditional. Also, the preference shown by UWIDECE students (47.1%) for the traditional would seek to suggest that socio-economic and political variables have a large influence on choice.
While we have not ascribed much of our focus on “web based” learning, it is not hard to speculate that such modes of delivery are becoming popular and even less personal. It therefore stands to reason that ongoing research will become necessary to ascertain how attitudes and behavior to such new realities unfolds. It is a known fact that there is a lively tension between virtual educations versus the traditional mode of delivery. Will attitudes change radically towards virtual education. In fact the data collected and analyzed do not indicate so to date and as a result, we are still to ascertain how the “new university” will evolve.

How then is Communication defined? - Interactive transference of meanings between intelligences. We can widely agree that communication technology facilitates communication. However, the degree of interaction bears very heavily on the communication process. Can interactions be carried out with great clarity? I have my own attitude/judgment. I sat in on three one (one) hour classes at UWIDEC on different days just to have a “feel” of what things were like. In all three (3) cases, the lecturers were coming from Trinidad. The transmissions were not clear and students merely requesting repeats of statements interrupted the lectures almost every three (3) minutes. This in and of itself is time consuming and hence provides little time for questions of interactive nature. As an inexperienced researcher I could not then question attitudes to scope for interaction as it stared me blatantly in the face on three (3) occasions. As a communicator, I am of the view that while the technology is communication technology, it does not serve the purpose(s) for which it was created in full as a significant proportion of the time is merely spent clarifying what was being transmitted. To say “clarifying”
should not be taken to mean a discussion surrounding the topic but rather a verification of 
the transmitted thought. In other words the mechanisms of teleconferencing (in this 
instance) follows more the paradigm of the Bullet Approach over interactive approach 
even though the technology is capable of it.

For distance learning to be as effective as the manufacturers of the technology 
(ies) dictate, there has to be an attitudinal shift to appreciating such technologies as the 
way of the future. Hence, beliefs and value judgments are going to be elements of 
surprising enormity in the whole process of technology based educational development. 
While one can possibly hypothesize about socio-political and economic benefits of 
technology based learning on our research, we have not seen any milestone change in 
quality as such relates to students’ attitudes to distance education.

The other point of concern that these findings raised in my mind was whether or 
not the students accepted in the distance learning programmes have the aptitude for such 
modes of delivery. To my mind distance students would have to be quick at analysis and 
can make “sensible” notes at fairly rapid rate. Do distance students have these kinds of 
aptitudes? In fact, if they do not then it is highly likely that the kind of responses we get 
coming out of the experience will seemingly always mimic the attitudes of the 
inexperienced.

Raymond Williams “Structure of Feeling” ideology may also play fundamental 
role in students choosing distance learning over traditional as the ease and convenience is 
much more widely advertised over issues of quality. Hence, an inexperienced applicant 
having become experienced may have an attitude change to that which was initially 
considered equivalent to the traditional.
And also, communication being defined in its most contemporary form cannot be generalized when applied in context to communication technologies because whilst these technologies can facilitate communication, it does not necessarily mean that such technologies give satisfactory levels of interaction between students and teachers. Hence, we may deduce that there are different levels of interaction, which means different levels of communication.

In my own view (biased or otherwise) I felt at the initial stages of this research that there would have been clear cultural dichotomy as we relate to the groups of students. However, cultural uniformity seems to be more prominent. We may also want to look at the fact that the technology is new (< 10 years old) and probably have not impacted or impressed upon students its value construct in light of the fact that the traditional mode is still the prominent mode of education delivery at the University of the West Indies. It would then be interesting to do a “cross-country” i.e. international study among the university campuses in the Caribbean to assess attitudinal variation(s). All in all the value of the response should be most noted by those who administrate at the University of the West Indies.

What might Administrators do? While administrators are keeping in line with globalization and communication technologies, it becomes incumbent on them to meet the needs of students. Hence, students are in the main asking for deeper interactive scope with lecturers in the “self”. By that I mean more prominence of human activities in the virtual fora. It may mean that administrators may want to merge both delivery modes casting all students (to whom courses may be applicable) into the “virtual” as well as the “traditional”. In such an event, more lecturers would be uniformly available to all
students for greater scope of interaction. What I am getting from this research is the fact that once “human element” is delineated from the virtual it looses the pertinent value of quality (i.e. high quality/better quality/both). Maybe students need an attitudinal change. However, as it stands, the consumer needs must be met first. Administrators need to ensure clarity of teleconferenced lectures to facilitate greater time spent on real interactive discussions over “repeat for clarity” scenario. The idea behind teleconferencing may be too broad based – in that one (1) lecturer will speak from an island to all other islands. We may want to have greater numbers of lecturers and lectures, facilitating, the same lecture in every or almost every country to reduce misinterpretation, accent misrepresentation and in general culture clashes. Administrators may want to expand distance education facilities, based not only on economic demands, but also on issues based on quality imperatives.
The Conclusion

WHERE DO WE GO FROM HERE??

Distance education whilst in the main widely accepted, has come to be considered (at least based on findings) inferior in quality in a number of ways to the “face to face” delivery modes. Inferior quality was not based on any scientific or engineer audit done on the technology itself but on students’ attitudes to the delivery mode. In other words not every technology that facilitates communication will be considered ideal for education and training. It certainly will depend on each student’s perception of how educational transactions should be performed. Hence, it may be necessary to do more than a filling out of the usual UWI application form for acceptance but possibly enrolling prospective students in work shops as well as conducting interviews to assess students’ attitudes to and ability to handle the technology (ies) in question.

It may also mean that students outside the scope of the virtual fora should be given orientations on the modes of operation of such technology (ies). All in all, this would facilitate a more involved debate amongst students on the likely future of the virtual fora. Also, with more direct intervention in the education of the populace, future research can be more scientific and meaningful. After conducting this survey, one gets the feeling that economics and geographic location are key players in students utilizing the distance fora. While UWIDEC is offering to some students that which they might not otherwise receive, a number of the recipients seem to believe that the quality of their education cannot equate to those in the traditional! Is this statement true? If it is true, what are we to do about it? If it is false how do we counter the attitude? This can be done
mainly through education, which of course borders on effective communication. I am therefore indicating that the hypothesis has been accepted.
Endnotes

¹ How meanings are perceived through distance education may be different from perceptions in the classroom especially in social science related courses.

² That ideology denotes on (1) way flow of information.

³ Those students/professionals who seek to explain reality using fixed laws, i.e. natural science students.

⁴ Technology that facilitates information flow with feedback

⁵ A concept to be qualified in the methodology

⁶ A new world order facilitating socio-economic and political cooperation among states

⁷ Changing values and beliefs of groups of people overtime.

⁸ 2000-2001 figures used

⁹ A lack of precision will create questions of reliability in delivery methods.

¹⁰ The subversion of culture to technology

¹¹ That technology that facilitates interaction – communication

¹² Infiltration of foreign culture into economies, fostered by the paradigm of neo-liberalism

¹³ Gore, Albert 1994. Remarks delivered at a meeting of the International Telecommunications Union, Buenos Aires (March 21)

¹⁴ Communication may find itself on a continuum because as the term is denoted, exchange of meanings is paramount to the sustenance of the term’s meaning and so effectiveness of in meaning transfer shall impact the definition of the term where communication technologies are concerned.

¹⁵ See Klapper: J.T. PP 65-72.

¹⁶ Seek to use fixed laws of nature to explain development and human action.

¹⁷ Seek to understand “why” human beings behave in certain ways and why the world continues to change

¹⁸ Brown A 1993 (Pg 14-17) (Up Close From a Distance…)

¹⁹ Marxism: the idea that those owning the means of production modify, change and insert cultural changes in other societies
References


5. Bork, A., “Distance Education in Developing Countries.” http://www.ics.uci.edu/~bork


18. Koul, Badri “Educational Standards and Quality Assurance in Distance Education (DE”) in YOUWE Quality Assurance Forum, UWI, Nov. 6, 2001” University Printery, 2001


26. Perry, R. & Rumble, G “A Short Guide to Distance Education” International


31. ________, “The Global Information Highway; Project for an Ungovernable World” in Brook, J. & Ian A Boal (Ed) Resisting the Virtual Life, The Culture and Politics Of Information.


35. Schmidt, S., Shelly, C. & Van Wart, M., “The Challenges to Distance Education in an Academic Social Science Discipline; The case of political Science”

http://epaa.asu.edu/epaa/v8ru27


40. Williams, H. “A Study of the BSc Management Studies Degree Programme by the use of Distance Teaching at the University of the West Indies Distance Education Cee, 1999.

42. “YOUWE Quality Assurance Forum, UWI, Nov. 6, 2001” University Printery, 2001