INVESTIGATING GOVERNMENT STRATEGIES FOR PROMOTING DISTANCE LEARNING THROUGH INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) EDUCATION

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ABSTRACT

This paper presents a study which was conducted to identify strategies the government can adopt for promoting distance learning through covered was ICT education. The study which covered 19 member countries of the European Union was guided by two research questions. The major findings were that government strategies include working in partnership with stakeholders in the provision of ICT facilities in schools and launching national plans for the promotion of ICT in education.

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INTRODUCTION

Over the years, distance learning has been practiced in different parts of the world through major aim has always been the provision of learning opportunity to people who due to distance avail themselves to learning in normal programmes, there are differences in terms of technological tools. In this regard, Garrison and Anderson (2003) classify the technology of distance education into generations. The first generation was characterize by the use of printed textbooks and accompanying course guide. That was the era often referred to as that of correspondence learning. The second up to the fifth generations were characterized by progressively advanced technological tools notably the Web and other computer mediated facilities. In fact, the present generation which is the fifth, is being engineered by developments in information and communication technologies (ICTs). These technologies facilitate the process of production, documentation, retrieval and dissemination of information.

The impact of ICT on distance learning has given rise not only to a change in nomenclature, from distance learning to e-learning and no-line learning etc, but also to what Battazzati, Coulon, Gray, Mansouri, Ryan and Walker (2004) enumerate as models of e-learning namely, virtual classroom, tele-teaching, blended learning, collaborative learning and supported self-learning.

According to Clarke (2006:9) "ICT covers a wide and diverse range of applications, techniques and systems". This implies that ICT refers not only to tools and materials but also to techniques and systems. Consequently, Tanner (2004) among others consider ICT as a key skill, a resource and a discipline. In fact ICT is now considered as the new skill for life. The numerous benefits of ICT are well documented by the independent ICT in Schools Commission (1997), Department for Education and **Employment DfEE and Qualifications and Curriculum Authority-**QCA (1999), loveless (2003), Potter and Darbyshive (2005), UNDP/APDIP (2006) and Duffy (2006) among others' Suffice it to state that ICT has the potential to enhance learning and human development, facilitate the performance of life activities as well as promote social development. In fact November (2001:79) opines that "of all the potential technology holds, learning online may have the greatest impact on the education system" consequently, Allan (2003:10) - observes that the use of generic IT tools "has become central to the learning process". It is pertinent to note that governments that have recognized the role of ICT in placing countries on the positive side of the digital divide have placed ICT education on the priority list. Such governments have shown serious commitment to the development and implementation of ICT education. While stressing the commitment of British government to the development of ICT education, the Prime

Minister, Tony Blair asserts in the National Grid for learning (1997:I) that

Education is the Government number one priority.

It is key to helping our business to compete and giving opportunities to all...... Two years ago, I said a Labour Government would connect every school in Britain to the information superhighway. This policy is now in place.......

Also to endure the leading position in schools technology, the British government (DfEE, 1997) embarked seriously on the training of teachers, connecting schools, providing content and removing barriers to learning. Apart from making ICT one of their top priorities, in 1977, the UK government published the "National Grid for learning" which presents series of initiatives to be taken by the government over the next five years to establish ICT education in schools. Then in 1999, the four UK Education Departments Superhighways Initiative (EDSI) was set-up with the aim of evaluating and reporting on the extent schools and colleges were using ICT. Governments of other member countries of the European Union (EU) have take similar actions in promoting ICT education in their nations. In 1998, France launched an emergency programme for the training of teachers in the instructional use of ICT. At the same period, Sweden launched the Tools for learning initiatives (1999-2001) and

provide training to over 20% of the teachers while Spain planned to provide internet connection to 40,000 teachers.

It is remarkable to note that in Europe, the countries leading in ICT development are those countries whose governments are taking the lead to initiate ICT education proposals and actions. What ICT proposals and actions can the Nigerian government initiate to encourage the growth of ICT education in the country?. What strategies can the Nigerian government undertake to promote ICT- based distance learning?. These are some of the questions that present the problems necessitating the present study.

Research Question:

The study was guided by the following research questions:

- (1) What strategies can the Nigerian government adopt for the provision of ICT facilities in schools?
- (2) What strategies can the Nigerian government adopt to promote ICT- based distance learning?

METHOD

Design and Area of study: The study which covered 19 member countries of the European Union (EU) was conducted with a survey design.

Population and sample: All the 51 members of the European Commission (EC) work programme on "Implementation of Education and Training 2010-Working Group C: "ICT in

Education and Training" and the 115 members of academic staff in the Faulty of Education at the University of Glasgow constituted the sample for the study.

Instrument: For data collection, a questionnaire comprising two sections was used. The first section presents a description of the Nigerian educational system with regards to the state of development and implementation of ICT in education. The second section comprised items structured on a four point scale ranging from strongly agree to strongly disagree. Each of the 166 respondents was given the questionnaire through the email, twice with an interval of four weeks. The need for sending the questionnaire twice to the same respondents was necessitated by the low response recorded at the first instance. A total of 56 copies of the questionnaire were completed and returned.

Validation and Reliability: After testing the instrument on two doctoral students in the Faculty of Education, University of Glasgow, copies of the modified instrument were sent to two lecturers at the University of Edinburgh for content validation. This led to the modification of two items. Reliability was ascertained by administering the instrument to 10 post graduate students in Education at the University of Glasgow.

A score of 0.82 was obtained for internal consistency when the Kuder-Richardson Formula 20 was applied.

Data Analysis: This was done using frequency and percentage scores.

RESULTS

Table 1
Government Strategies for the Provision of ICT Facilities in Schools

S/N	Government should:	Strongly Agree		Agree		Disagree		Strongly Disagree	
1.	Single handedly provide ICT facilities	F	%	F 2	%	F 34	% 61	F 20	% 36
2.	Instruct schools to source fund for the provision of ICT facilities	-	-	2	3	24	43	30	54
3.	Mandate Parent Teacher Associations (PTAs) to be sole providers of ICT facilities.	•	-	1	2	33	59	22	39
4.	Work in partnership with philanthropists and industrialists	20	3 6	28	5	6	11	2	3
5.	Show no commitment to the provision of ICT facilities	-	-	-	-	26	46	30	54

6.	Welcome input from:								
	schools	16	2	40	7	-	-	-	-
	Parents	20	9	32	1	3	5	1	2
	Individuals	18	3	36	5	1	2	1	2
			6		7				
			3		6				
			2		4				
7	Make the provision of ICT								
	facilities a part of								
	Education budgetary	10	1	28	5	10	18	8	14
	allocations		8		0				
8	Declare projected time for								
	the provision of basic ICT								
	facilities in schools.	26	4	30	5	-	-	-	-
			6		4				
9	Encourage local								
	production of relevant ICT								
	facilities.	14	2	29	5	5	9	8	14
			5		2				
10	Make fund available to								
	school authorities for the								
	provision of ICT facilities.	8	1	12	2	20	36	16	29
			4		1				

In table 1, a total of 5 out of the 10 items scored above 50% at the combination of Agree and Strongly Agree. This indicates that government strategies for the provision of ICT facilities are: working in partnership with people; making the provision of ICT facilities a part of education budgetary allocations, declaring projected time for the provision of basic ICT facilities in schools; encouraging the production of ICT facilities and making fund available to school authorities for ICT facilities.

TABLE 2
Government Strategies for the Promotion ICT Education

S/N	Government should promote ICT education by:	Strongly Agree		Agree		Disagree		Strongly Disagree	
1.	Funding Projects	12	21	24	43	16	29	4	7
2.	Mapping out development strategies for ICT in education within a specified period	23	41	33	59	-	-	-	_
3.	Recognizing teachers and schools that demonstrate good ICT practice	13	23	30	54	8	14	5	9
4.	Initiating Awareness raising activities	20	36	26	46	3	5	7	13

5 .	Launching national plans	14	25	36	64	5	9	1	2
6.	Putting ICT education on the priority list	18	32	38	68	-	-	-	-
7	Refusing to give attention to the development of ICT education					30	54	26	46
8	Allowing school authorities to initiate the development of ICT education.			2	3	30	54	24	43
9	Mapping out plans for in service teacher development in ICT programmes.	16	29	37	66	2	3	1	2
10	Making ICT literacy a compulsory aspect of teacher education programmes.	4	25	42	75	-	-	-	-

In table 2, a total of 8 out of the 10 presented items scored above 50% at the combination of Agree and Strongly Agree. This indicates that funding of projects; recognition of good ICT practice; initiating awareness raising activities; launching of national plans; making plans for inservice teacher ICT-

development and making ICT literacy a compulsory aspect of teacher preparation programmes are the identified government strategies for promoting ICT education.

DISCUSSION

According to the findings of this study, one of the strategies to be adopted by Government for the provision of ICT facilities is to work in partnership with philanthropists, industrialists, schools, parents and other individuals. This is in line with the advice given by the European Commission (EU 2004:3) that many stakeholder groups including public and private sector organizations, academic institutions, NGOs, Trade Unions and mass media institutions "need to work together to reach the widest possible public, to raise awareness of the digital culture and to reinforce pedagogical practice". The implication is that Government alone cannot be expected to do everything required for the effective development and implementation of ICT in education. All hands must be on deck to carry a nation around the information universe. However, Meadows and Leask (2000) insist that though teachers, learners and other stakeholders should be involved in ICT development, the push towards ICT actually comes from the Government. This is for the fact that ICT innovation is so involving, demanding and yet promising that any good government cannot afford to leave its development and implementation to only educationist and learners. The

government takes the lead and initiates actions to involve all stakeholders in education.

The findings on government strategies are in line with the recommendations given by some European Commissions. For instance, the independent ICT in schools Commission (1997) state that the main element of government strategy in promoting ICT education is:

- (1) Announcing that ICT is one of their top priorities
- (2) Presenting an ICT strategy.
- (3) Appointing a departmental ICT Minister to head the execution of the strategy.
- (4) Ensuring the compliance of national education agencies in the implementation of ICT education.
- (5) Encouraging schools to formulate, implement and present a report of their individual school's ICT policy.
- (6) Formulating and launching a set of initiatives for promoting the acquisition of ICT knowledge and capabilities by teachers in training as well as practicing teachers.

Making ICT one of government's priorities and making an announcement to that effect will guide the government's attitude to ICT and also make the people recognize ICT as a national and global issue. A demonstration of the fact that ICT is government's priority is the presentation of an ICT strategy by the government, appointing people to head the execution of the strategy, guiding

schools in formulating and implementing ICT policies and launching national ICT initiatives. The various actions by government to promote the development of ICT in the society have a tremendous effect on the development of ICT education and by implication on online learning which is "also called distance learning" (November, 2001:76). In fact any government that does not encourage ICT based distance learning in the country, runs the risk of pushing the people into technological dark ages characterized by global exclusion, high unemployment rate and poverty among others.

CONCLUSION AND RECOMMENDATIONS.

Both ICT education and ICT in education cannot be institutionalized without the support of a committed government. In fact in Europe the countries leading in ICT development are those countries whose governments are taking the lead to initiate ICT proposals and actions.

For Nigerian government to promote distance learning through ICT education it is hereby recommended that government should adhere to the earlier mentioned main element of government ICT education promotion strategy as recommended by the independent ICT in Schools Commission (1997). It is also recommended that Government should:

- (1) Work in partnership with philantropists, industrialist, educationists, parents, individuals and other stakeholders in the provision of ICT facilities in schools;
- (2) Declare projected time for the provision of basic ICT facilities in schools;
- (3) Map out ICT development strategies;
- (4) Initiate awareness raising activities;
- (5) Recognize schools that demonstrate good ICT in education practice;
- (6) Launch national ICT plans;
- (7) Make the acquisition of ICT literacy mandatory for both servicing and training teachers;
- (8) Grant loans to teachers for the purchase of personal computers.

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