

PREPONDERANCE OF ICT IN FINE ART (VISUAL ART) TEACHING AND LEARNING IN NIGERIA.

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ABSTRACT: *Information and communication technology (ICT) is a force that has changed many aspects of human endeavours. The impact of ICT on various fields of human endeavour such as medicine, tourism, business, law, banking, engineering and architecture over two or three decades has been enormous. But when one looks at the field of education, there seems to have been an uncanny lack of influence of ICT and far less change than other fields have experienced. In other words, though ICT has begun to have presence in education, its impact has not been as extensive as in other fields (Collins, 2002). Education is a social oriented activity, and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. Garrison and Anderson (2003) opine that the application of ICTs in the teaching-learning process can enhance the quality of education in several ways such as increasing learner motivation and engagement, facilitating the acquisition of basic skills, and enhancing teacher training. Since Fine Art is one of the major subjects being offered at all levels of education; that is the primary, secondary and tertiary institutions, its relevance and sustenance in the 21st century requires the adequate application of ICTs like video tapes, television and multimedia computer software that combine text, sound and colorful moving images which can be used to provide challenging and authentic content that will not only engage the student in the learning process but as well make learning concrete.*

KEYWORDS: Preponderance, ICT, Fine (Visual) Art, Teaching, Learning

INTRODUCTION

In the Nigeria, new syllabus documents for primary and secondary promote the integration of computer technology across all mandatory teaching areas. The foreshadowed (although currently delayed) implementation of nationwide computer skills assessments for all primary and secondary students has also emphasised that schools need to take a strategic and concerted approach to students' ICT skill and knowledge development. The impetus to embrace ICT in visual arts classrooms, however, stems not just from such curriculum directives.

The tools and techniques available for visual arts expression have expanded tremendously with the advent of new hardware and software, and ICT provides unique opportunities to extend visual arts teaching and learning. Society now demands new visual literacy's for its citizens to function effectively in social and employment contexts. Furthermore, the very nature and interests of students themselves contribute to the changing face of visual arts education.

What little has been written of visual arts teachers' use of technology consistently indicates that, while some teachers have embraced new technologies, many continue to use ICT in a limited manner. Little, if any, research currently addresses the factors that impact on visual arts teachers' willingness to integrate ICT, particularly within the Nigeria context. This paper proposes that the values, attitudes and beliefs of visual arts teachers can have a significant

impact on whether they embrace and integrate ICT as part of their teaching practice, and whether they choose to take up professional learning opportunities.

Though there are many definitions of Fine Art as provided by many artists, for the purpose of this discourse, we will restrict ourselves to some few ones. Art is a universal form of expression. It contributes to our visual and cultural awareness, to visual communication and to diversity in the private and public environments. As a medium of culture, art is given meaning through personal expression and interpretation and thus takes on cultural meaning. This is what makes art a professional craft embodied in the artist. (Gombrich,1995)

Art has been an integral part of man's culture for many centuries. It has persisted as a continual universal activity from the time of the cave artist to the modern day artist. It revolves round the cultural trait of every society and the pattern of the ever widening human experience and advancement (Gombrich,1995).

The study of Fine Art does not only serve as bedrock for other disciplines but also furnishes man with the understanding of the process of change and continuity in human affairs. In fact, there is no discipline without Fine Art. The relevance of Fine Art in the school curriculum is enormous. These include;

Uses the arts as a tool for equipping students with knowledge and skills across the curriculum to stimulate cognitive development and to encourage innovative and creative thinking. The approach is often explained using the concept of “multiple intelligences”, reflecting the belief that there are many kinds of intelligence and a number of ways of learning.

“Art education is related with all disciplines, concerning its field of study; this field has been developed in parallel with science education in developed countries” (Tepecik, 2003, p. 164). As a support for this statement, Ozsoy (2003, p. 41) also emphasizes the importance of art education by stating that “art is as important as science and social sciences and other fields in our daily lives.”

Art does not solve problems, but makes us aware of their existence, Years of research show that it's closely linked to almost everything that we as a nation say we want for our children and demand from our schools: academic achievement, social and emotional development, civic engagement and equitable opportunity, but art does not solve the problems linked with this.

The art have formed an important dimension of the primary, secondary and higher school curriculum. Arts education is life-enhancing, is central to children's development and is invaluable in stimulating creative thinking. Indeed, arts education makes an important contribution to the wider goal of developing creativity in our society and economy. One of the most crucial roles of teachers is developing young minds through exploration, discovery and creativity. In times of economic downturns and recessions, a focus on the arts in education is timely and rewarding.

Arts education embraces both artistic education, that is the child making art, and aesthetic education, the child as receiver of art. The reproduction of tradition, solidarities and identities is essential to a good broad education. It is delightful to see that arts education in our schools is in a far better position than it was 20 years ago. Teaching itself is an art form and needs to be developed and nurtured through continuing professional development.

A comprehensive arts education provides a rich and engaging curriculum that develops pupils' abilities to think, reason and understand the world and its cultures. It offers pupils opportunities to respond, perform, and create in the arts. The arts instill in our pupils the habits of mind that last a lifetime: analytical skills, the ability to solve problems, perseverance and a drive for excellence. The creative skills children develop through the arts carry them toward new ideas, new experiences and new challenges, as well as offering personal satisfaction. This is the intrinsic value of the arts and it should not be underestimated.

Visual art (Fine Art) education is considered as a field and instrument of education in many developed countries. Art is an indispensable world for growth of an independent, peace-loving humanitarian and creative youth, which is integrated with its society, can renew itself in accordance with changing conditions, and reflects the marks of future.

ICTs stand for information and communication technologies and are defined, for the purposes, as a “diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information.” These technologies include computers, the Internet, broad casting technologies (radio and television), and telephony.

A number of scholars have viewed the concept of ICT from different perspectives and standpoints. The term information and communications technology (ICT) was said to have been introduced in the early 1990s to replace that of information technology (IT) in recognition of the communicating abilities and facilities offered by the computer. However, while most people adopted the term ICT, people in higher education used the term communication and information technology (C and IT) to refer to the same concept (Salau, 2005). The term ICT covers a whole range of applications, techniques and systems (Clarke, 2006). Lallana and Margaret (2003) clearly postulate that ICT “refers to a broad field encompassing computers, communications equipment and the services associated with them.” This means that ICT is not just considered as applications and systems but also as skill for life. In this sense, it is viewed in line with literacy and numeracy as a fundamental skill that every individual needs so as to live “confidently, effectively and independently in a modern or contemporary society (Clarke, 2006).

ICT is also seen as a key skill for learning different subject areas (Tanner: 2003 and Kennewell 2004). This identification of ICT as a skill for life informed its introduction in the school curriculum in the developed nations (Akudolu, 2007). ICT has three positions in the curriculum and these include learning about ICT, learning with ICT and learning through ICT. Learning about ICT refers to ICT concept as a subject of learning in the school curriculum while learning with ICT is concerned with the use of ICT as a medium to facilitate instruction (Akudolu, 2007). This view was also shared by Pelgrum and Law (2003). They maintain that “learning through ICT refers to the integration of ICT as an essential tool into a course/Curriculum, such that the teaching and learning of that course/curriculum is no longer possible without it”. Despite that, most schools do not provide Information and communication technologies for teaching. ICT can be an instructional medium or a source for learning. It can also be integrated in the learning process so that learning takes place through the learner’s interaction with the facilities. Therefore ICT in education is considered as discipline, resource and key skill. Within these three broad areas, ICT offers enormous benefits to the society. This is based on the fact that ICT education and in education is concerned not only with equipping learners with knowledge and skills for the information age but also with boosting the economic and political status of the country (Akudolu, 2007).

Recent report revealed that the readiness of ICT in the Sub-Saharan Africa is still very low with most countries experiencing strong lags in connectivity because of the insufficient development of ICT infrastructures. While the developed world continues to witness development of ICT, sub-Saharan Africa is still lagging behind due to poor quality services (Global ICT Chart Report: Guardian, Friday April, 2012 p.6). The report also ranked African countries on the global ICT Chart. While Nigeria was ranked 112th on the global ICT Chart, other countries in the African continent like Mauritius, South Africa, Rwanda, Botswana, Kenya and Senegal were ranked 53rd, 71st, 82nd, 89th, 93rd and 100th respectively (Guardian, Friday April, 2012 p.6).

The report indicated that African countries suffer from severe weaknesses in all components of the index of ICT which ranges from poor connectivity caused by expensive and poor quality ICT infrastructure to very low levels of basic skills and a weak framework for technology (Guardian, Friday April, 2012 p.6). Generally speaking, a number of factors are said to have militated against the use of ICT in education in Nigeria. These have included such factors as lack of funding to support the purchase of the technology, lack of training of teachers, lack of motivation on the part of teachers to adopt ICTs as teaching tools in the classroom instruction and so on.

ICTs are a potentially powerful tool for extending educational opportunities, both formal and non-formal, to previously underserved constituencies scattered and rural populations, groups traditionally excluded from education due to cultural or social reasons such as ethnic minorities, girls and women, persons with disabilities, and the elderly, as well as all others who for reasons of cost or because of time constraints are unable to enroll on campus.

Anytime, anywhere: One defining feature of ICTs is their ability to transcend time and space. ICTs make possible asynchronous learning, or learning characterized by a time lag between the delivery of instruction and its reception by learners. Online course materials, for example, may be accessed 24 hours a day, 7 days a week. ICT-based educational delivery (e.g., educational programming broadcast over radio or television) also dispenses with the need for all learners and the instructor to be in one physical location. Additionally, certain types of ICTs, such as teleconferencing technologies, enable instruction to be received simultaneously by multiple, geographically dispersed learners (i.e., synchronous learning).

Access to remote learning resources: Teachers and learners no longer have to rely solely on printed books and other materials in physical media housed in libraries (and available in limited quantities) for their educational needs. With the Internet and the World Wide Web, a wealth of learning materials in almost every subject and in a variety of media can now be accessed from anywhere at any time of the day and by an unlimited number of people. This is particularly significant for many schools in developing countries, and even some in developed countries, that have limited and outdated library resources. ICTs also facilitate access to resource persons, mentors, experts, researchers, professionals, business leaders, and peers—all over the world.

ICTs help prepare individuals for the workplace

One of the most commonly cited reasons for using ICTs in the classroom has been to better prepare the current generation of students for a workplace where ICTs, particularly computers, the Internet and related technologies, are becoming more and more ubiquitous. Technological literacy, or the ability to use ICTs effectively and efficiently, is thus seen as representing a competitive edge in an increasingly globalizing job market.

Examples of ICT-based activities

What kind of classroom activities is suited to the use of ICT? The following is a brief guide to some of the most common uses of ICT in teaching and learning.

Finding out: Students can use ICT to find out information and to gain new knowledge in several ways. They may find information on the Internet or by using an ICT-based encyclopedia such as Microsoft Encarta. They may find information by extracting it from a document prepared by the teacher and made available to them via ICT, such as document created using Microsoft Word or a Microsoft PowerPoint slideshow. They may find out information by communicating with people elsewhere using email, such as students in a different school or even in a different country.

Processing knowledge: Students can use ICT as part of a creative process where they have to consider more carefully the information which they have about a given subject. They may need to carry out calculations (e.g. by using Microsoft Excel), or to check grammar and spelling in a piece of writing (perhaps using Microsoft Word), or they may need to re-sequence a series of events (for example by re-ordering a series of Microsoft PowerPoint slides).

Sharing knowledge: Students can use ICT to present their work in a highly professional format. They can create documents and slideshows to demonstrate what they have learned, and then share this with other students, with their teacher, and even via email with people all around the world.

Computers and the Internet use for teaching and learning

There are three general approaches to the instructional use of computers and the Internet, namely:

- 1) Learning about computers and the Internet, in which technological literacy is the end goal;
- 2) Learning with computers and the Internet, in which the technology facilitates learning across the curriculum; and
- 3) Learning through computers and the Internet, integrating technological skills development with curriculum applications.

The potential of ICT in Fine Art (Visual arts) classrooms

ICT presents unique opportunities for supporting creativity (Brown, 2002) and extending visual arts “beyond clay, crayons and paint” (Stankiewicz, 2004: 88). This potential was recognized as far back as the 1980s when Crowe (1988) commented that

ICT could assist with exploring design problems, enhance artistic decision making and provide new opportunities for learning. Since then the literature has continued to highlight the potential for ICT in supporting visual arts teaching: “For visual education these are incredibly exciting times offering new possibilities” (Long, 2001: 262).

The teaching and learning of Fine Art in the Nigerian institutions most importantly in the 21st century have developed within the framework of theory and practice. In this technological age, the effective means of communication in the classroom instruction requires the use of communication technologies.

“The illiterate of the 21st century, will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

Alvin Toffler (cited in Shikshak, 2009). The above statement pointed out the relevance of ICT revolution in the 21st century education.

Haddad and Jurich, (2002) argued that there are four basic issues in the use of ICTs in education in the 21st century. They are effectiveness, cost, equality and sustainability. They pointed out that, in recent years, there has been an upsurge of interest in how ICTs most importantly computers and the internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings (Haddad and Jurich, 2002).

The role of ICT in the teaching and learning of Fine Art in the 21st century can be seen in three major angles, namely, the impact on teacher, learner and the image of fine art as a discipline. Conventional teaching which is still common today in our schools emphasizes content. For many, teachers of fine art in particular have taught through lectures and presentations interspersed with tutorials and learning activities designed to consolidate and rehearse the content (Kamal and Banu, 2010). Meanwhile, contemporary settings are now favouring curricula that promote competency and performance. In the developed countries, curricula are starting to emphasize capabilities and to be concerned more with how the information will be used than with what the information is. The moves to competency and performance-based curricula are well supported and encouraged by emerging instructional technologies (Stephenson, 2001). Such curricula tend to require: access to a variety of information sources; access to a variety of information forms and types; student-centred learning settings based on information access and inquiry; learning environments centred on problem-centred and inquiry-based activities; authentic settings and examples; and teachers as coaches and mentors rather than content experts.

For many years, teachers wishing to adopt competency and performance-based curricula have been limited by their resources and tools but with the proliferation and widespread availability of contemporary ICTs, many restrictions and impediments of the past can now be removed (Otakhor, 2007) As students and teachers gain access to higher bandwidths, more direct forms of communication and access to sharable resources, the capability to support these quality learning settings will continue to grow (Oliver, 2000).

METHODS

The design of this study involved a quantitative paradigm. This study employed a self-designed questionnaire to obtain descriptive information about the importance of ICT in Fine art teaching and learning by secondary school teachers. The study sites were twenty two secondary schools randomly selected by the researcher in Lagos State in both Public and Private schools, 11 in public and 11 in private to determine:

- their background as a secondary visual arts teacher and visual artist;
- how they used computers personally, professionally and as a visual artist;
- their level of ICT confidence;
- how they perceived the role of ICT in visual arts teaching, including benefits and issues;
- the impact ICT has had on students' learning and creativity;
- how supported they felt in their use of ICT; and

- whether they had participated in any professional development workshops and/or ICT training and what influenced their decisions to be involved in these (or not).

The sample included teachers teaching Fine Art in public and private secondary schools across Lagos State, Nigeria. Purposive sampling technique was used to select the sample. A total of 22 secondary school Fine art teachers were selected. The selection in terms of number from each school was not equal as there are more Fine Art teachers in some school than the other. Eventually, a total of 22 Fine Art teachers were selected which represent the sample for this study.

A self-designed questionnaire by the researcher was used to measure Fine Art teacher awareness and importance of ICT in instructional delivery. The questionnaire instrument has two sections: background information, the awareness of the Fine Art teacher's awareness and the importance of ICT in teaching and learning of Fine Art in secondary. The first section asked the participants to provide Sensitizing Nigerian Secondary School Teachers information about gender, teaching level, discipline, and years of teaching practice. The second section gathered information related to the objectives of the study.

Profiling the participants

Of the 22 participating teachers, all of them were male and their ages ranged from early 20s to early 50s with most of them in their 40s. Five had been teaching for more than 25 years and three had been teaching less than ten years (minimum number of years was four). Most had taught at multiple schools in both public and private schools, and began their careers teaching casually. None of them taught additional subjects other than visual arts. Schools generally had two full time visual arts teachers, although few schools had one visual arts teacher.

As outlined in the Table, the teachers had diverse visual arts backgrounds. Most said they currently very active art teacher and had time for their personal art practice. Only few of the teachers used word processing and Internet research in their teaching. Three used specific graphic art software (such as *PhotoShop*) privately not for teaching and nine used digital photography as part of their visual arts teaching.

THE RESPONSES OF THE FINE ART TEACHERS ACCORDING TO THE PARTICIPATING SCHOOLS

| NAME OF SCHOOL | YEARS OF TEACHING EXPERIENCE | VISUAL ART BACK-GROUND | COMMENT |
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| Supreme Education Foundation School, Magodo Estate | 20 | Visual Communicator / Graphics | Used computer professionally as a visual artist, his level of ICT confidence is very good. ICT arouses the interest of young artists / students to involve in art He has never participated in any professional development workshop or training on ICT. Did not currently use any ICT with his own art, although would eventually if available. Teaches only visual art. |

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| Reagan Memorial School, Lagos. | 12 | Painting | Used computer personally as a visual artist. Use of ICT averagely ok. ICT is very important as it facilitates teaching and learning process. ICT boosts the power of creativity, students learn very fast with computer. He supports students' use of ICT because this is information age. He has participated in professional workshop or training on ICT. ICT is needed everywhere. He teaches only Fine Art |
| Lagos State Model College, Kankon | 4 | Painting | Used computer personally and use ICT at a good level. Do not use ICT for teaching and learning of visual art. ICT could be beneficial if used properly in art work. It helps students to get information online. Support the use of ICT by students. Never participate in ICT workshop or training and looking forward for one. Teaches only fine art on a full time basis. |
| Grace schools, Gbagada, Lagos. | 22 | Textile Design | Used computer personally, professionally and as a visual artist. ICT confidence level is average. Encouraged student ICT use, including videoing presentations and having students email assignments. Participated in ICT professional workshop or training before. He was influenced because he wants to be a global art instructor of repute. Teaches only visual art on a full time basis with one or more teachers in the school. |
| British Comparative School | 4 | Painter | Used computer professionally as a visual art teacher in the classroom. ICT confidence level good. Generally very confident, daily personal use of computers. Only made moderate use of ICT in her teaching; a couple of lessons a week with younger students but more frequently with older students. He supports students' use of ICT for fine art. He has not participated in any professional development workshop or training on ICT before. He teaches fine art only on a full time basis. |
| Art and Craft Centre, Badagry Lagos | 28 | Computer Graphics, Artist | Used ICT everyday as part of his teaching as required by his centers. Somewhat confident, but mainly with junior classes. Felt that he would need more help if teaching the senior classes, particularly with digitally produced works; The level of ICT confidence is very good. Without ICT, the teaching and learning visual art is incomplete. 100% support for students' use of ICT. He has participated in many professional development workshops or |

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| | | | training on ICT and it has influence his diverse use and manipulation of 3-D effects on visual Arts. |
| Lagos State Model Junior College, Kankon | 19 | Painting | Confident with ICT. Used computers personally at least every second. Although he was “more than confident to teach the students the basics”, Do not use ICT in the classroom, due to limited availability of computer hardware and software. |
| Ajara Junior Grammar School | 28 | Graphics | He uses computer personally and not for teaching and learning in the classroom. ICT confidence level is average. He sees the role of ICT in teaching and learning Visual Art as very good. It is beneficial because through ICT a lot of Visual works can be done on the net. In his school the impact of ICT is not much because of insufficient of computer sets. He support the use of ICT for Visual Art if computers and ICT network are available. Has participated in ICT professional development workshop and training with an influence to know more about ICT. |
| Pampers Private School, Lekki Lagos. | 10 | Painting / Graphics | He uses computer personally, professionally and as a visual art teacher. His ICT confidence level is very good. Do not fully support student’s use of ICT in Visual art because fine art is more of hand skills than technical aid which might reduce the creativity of students. Has participated in ICT workshop and training to know better and easier ways of creating designs or things. |
| Danvic Leaders Schools Lagos | 8 | Painting | Used computer personally, professionally and as a Visual Artist. ICT confidence level very good. ICT makes visual art teaching easy. ICT is of a great beneficial to visual art teaching and learning. ICT broaden the students thinking and exposes them to new ways / methods of doing things. |
| Downen College, Lekki, Lagos | 10 | Sculpture/ Graphics | Used ICT every few weeks to document of her own artwork and present images to galleries. Used home computer almost every day and was generally confident. Used ICT every day in teaching, including using a digital camera to document student art practice and as part of their body of work. Frequently used a projector and the internet for his teaching. |

Notably, all teachers owned a computer at home. It shows that all the teachers used computers, using word processing, used email frequently and the majority used the Internet for research

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| Ikoga Grammar School. | 20 | Painting | Confident ICT user who enjoyed digital artwork, using laptop for sketching (<i>PhotoShop</i>). Used ICT everyday at home but not for teaching due to unavailability of computers in the school where he teaches. |
| Ajara Jr. Comprehensive, Lagos | 23 | Painting | Very confident with computers used them daily, created diaries of sketches, scanned and used <i>PhotoShop</i> . Included digital artwork with all students using <i>PaintPro8</i> , digital photography, digital video and <i>PowerPoint</i> . Do not use ICT in teaching because there are no computers in the school. |
| Corona Secondary School, Lagos | 25 | Textile design | Used ICT everyday as part of his teaching as it is a must in his school. Level of ICT confident, ok with all classes. Computer. E-Learning teaching and learning. Used ICT every day in teaching, including using a digital camera to document student art practice and as part of their body of work. Frequently used a projector and the Internet with her teaching. |
| AOCOED Staff School, Lagos | 22 | Painting | Confident ICT user who enjoyed digital artwork, using laptop for sketching (<i>PhotoShop</i>). Used ICT everyday in teaching. |
| French Village Int'l College, Lagos | 15 | Painting | Confident with ICT. Used computers personally at least every day. Although he was "more than confident to teach the students the basics", did not use ICT very often in the classroom, due to limited availability of computers. |
| Chrisland Intertional school, Lagos | 25 | Graphics Computer | Only made moderate use of ICT in his teaching; a couple of lessons a term with junior students and not with the senior students. |
| | 20 | Painting | Used ICT every day to document of his own artwork and present images to galleries, television stations,radios. Used ICT every day in teaching, including using a digital camera to document student art practice and as part of their body of work. Frequently used a projector and the Internet with her teaching. |
| Sito Grammar school. | 30 | Sculpture/ Painting | Generally very confident, daily personal use of computers Do not use ICT in teaching because there are no computers in the school. |
| Ikoga Grammar school. | 26 | Textile design | Generally confident with ICT. Used ICT in his own time for work related to art and other tasks. Do not use ICT in teaching because there are no computers in the school. |

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| Topo Grammar school. | 20 | Graphics design | Used ICT everyday privately. Do not use ICT in teaching because there are no computers in the school. |
| Badagry Grammar school. | 18 | Painting | Very confident with computers used. Do not use ICT in teaching because there are no computers in the school. |

and work related activities. Most of the teachers used ICT in some way as part of their own art practice, including storing images, digital cameras, *PhotoShop* and graphic design.

DISCUSSION

The questionnaire indicated that there *is* still considerable diversity in the extent to which visual arts teachers are using ICT in their teaching and that for some teachers, like the importance of ICT in the fine art teaching and learning for it increase the creativity interest of the students in the visual art classroom.

The majority of teachers could articulate advantages and potential for ICT used, particularly related to student engagement and motivation. However, a minority felt obligated to do so by wider educational pressures, imperatives or developments, and only a small number spoke of broader social needs for digital visual art literacy. Less than half of the teachers questioned thought ICT was a fundamental part of the visual arts curriculum, despite recent syllabus changes. Significant diversity was discovered between schools in relation to access to hardware and software, and this certainly did influence teachers' willingness to use ICT in their teaching. School finances, culture and leadership invariably impacted on this resourcing, however where teachers were not interested in the use ICT, it may well be that little pressure was being exerted to pursue technology based resources.

A key finding relates to teacher learning. As has been supported in other research (Tearle, 2003; Phelps, Graham & Kerr, 2004; Phelps, Graham, Watts & O'Brien, 2006) those who are proficient and capable ICT using teachers learn predominantly through self directed play and exploration, while being supported by colleagues, friends and family, rather than remaining reliant on formal training or professional development.

While workshop based approaches can provide a useful means of introducing new ideas, ultimately the most effective learning is occurring for teachers by 'getting in and having a go'. Building networks and encouraging dialogue between teachers specifically in relation to ICT should be seen as important, not just in passing on skills and knowledge but also as a means to addressing discipline specific concerns and influencing values and beliefs. As has been highlighted in other studies (Phelps, Graham & Thornton, 2006; Phelps, Graham, Watts & O'Brien, 2006), explicit collegial discussion concerning learning strategies can promote risk taking and encourage more ICT reluctant teachers to learn with and from their students.

In rural areas of Lagos, where considerable distances stand between secondary schools, and where teachers may find themselves as the only visual arts teacher within a school (or one of only two), the importance of facilitating dialogue and idea sharing between schools is difficult but critical. The study indicated instances where teachers remained quite unaware of the level to which other schools *were using* ICT, and continued to see such integration as inconceivable. The diversity across the schools also reinforced that some level of benchmarking may prove

essential, to attempt to diminish inequities in outcomes for students. Ultimately, however, teachers need to hold values, attitudes and beliefs that will lead them to support integration initiatives.

RECOMMENDATIONS

Based on the above findings reveal in this study, the following are recommended. That the government should provide computers into public schools and also consider finding alternative to electricity failure rate as the study has indicated these as the most prominent factor limiting the awareness, adoption, integration and use of ICT for teaching and learning of Fine Art. There is need to create more awareness on importance of ICT in teaching and learning in Nigeria. This may inform the organizing of a workshop or training where the entire participants will be connected with the Internet. Through this, they will be exposed to importance and uses of ICT and practically see how it can be used to aid teaching and learning.

CONCLUSION

This study indicates that the adoption, integration and use of ICT by visual arts teachers were still largely under spread and underdeveloped especially in the public schools. While some teachers in the private schools have led the way with innovative and exciting applications of technology, others continue to avoid it all together and this is exacerbated and perpetuated by beliefs about the nature of visual arts and the relationship between technology and creativity. This study reinforces the findings of other studies that suggest professional development is not simply about 'attending courses' or 'receiving training', but that it is much more complex and proactive, and requires a clear emphasis on addressing not just 'how' to do it, but on 'why' it should be done (Higgins & Mosley, 2001). Certainly, understanding teachers' beliefs and values is a vital ingredient in effective support (Taylor, 1999) and studies such as this are essential in enabling school systems to support teachers in ways which take account of teachers' values, attitudes, beliefs, motivations, and discipline specific concerns.

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