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Review

Rethinking Teaching: How ICTs learning environments Can and Should Completely Alter Your View of Education in Architecture

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The expanding use of new information technologies has included both initial and maintenance professional education. The present article explores how these new information and communication technologies (ICTs) are transforming the process of professional education, delves into the primary sources of that transformation, and discusses how instructors should learn to teach using the new technologies. Particular attention is given to the increased potential for collaborative work that crosses international and cultural boundaries, molding studies and exercises to the interests of students and teacher rather than solely to prescriptive mandates by external authorities, and altering the pedagogical process to fully utilize the vastly more accessible body of knowledge that has resulted.

Key words: Architecture, ICT, Pedagogy, Professional education, teaching and learning.

INTRODUCTION

ICTs seem to have influenced every area of our society, but it has had very little effect on our conceptions of teaching and learning. We don't lecture to our children; they need to learn by doing, by exploring their world under the guidance of adults who can help them reconstruct their experiences and thus make sense of them. We don't lecture to the people who work for us; we let them do their jobs and try to help as we can. How about us as educators today? There are some studies (Zhao and Frank, 2003; Becker, 2000) challenge teacher training programs should not "teach prospective teachers about technology, but instead, should use technology throughout the programs so that prospective teachers not only gain skills in working with equipment and software but also experience how technology can support the exploration, organization, and communication of knowledge" through an emphasis on natural and discovery approaches to learning in a technologically astute. ICTs have many benefits and disadvantages shifting a new ways of learning and teaching in terms of pedagogical improvement.

In these views, schools education err by training future teachers to use a technology and equipments rather than instructional approach to plan, design, execute, and feedback, to eschew direct instruction in favor of either cooperative or collaborative learning and to pursue minute goals like operating courseware and amusing yourself in classroom (Means, 2004). Instructional technologies should also shoulder a large responsibility for the failures of our education reform. Teachers' inadequate technology-base knowledge, their misguided focus on technology integrated into curriculum reform and teacher-centered classroom curricula, and their attitude of complacency shaped by a uniform as contributing to students' lack of achievement and learning.

The response to this research question requires a review of literature regarding the use of information and communication technologies (ICTs) in professional-level education, especially in architecture. This literature will be

argued and examined in the context of learning to teach using ICTs and the broad contextual conditions of learning to teach with ICT as reported in this literature and document analyzed. Identify issues associated with the use of ICTs in architectural schools and what is missing that makes these issues a significant area of research. An attempt is made to discover issues that affect and impede the effective use of ICTs in architectural schools and why those issues are of significant interest to researchers.

Sharing Information with ICTs Sharing Learning Environments

The ever-expanding use of new information and communication technologies in education has made both initial and continuing professional education more readily available in almost all disciplines. A quick search of the Internet using one of the standard search engines in almost any discipline reveals online offerings from major universities all over the world of courses that can be applied to such purposes as maintaining professional licenses. A Google search on today's date (May 05, 2007), for example, on the exact phrase, "architecture continuing education," produced 436 unsponsored hits, that is, simple links to sites that have not paid to be prominently displayed. A cursory review of these sites strongly indicates that most of them offer online courses that meet the academic and accreditation requirements for contributing to obtaining or maintaining a license to practice architecture in some region or jurisdiction. The offerings are from professional graduate schools at both public and private institutions of higher learning as well as from commercial, for-profit organizations that have found a ready market for such courses.

The same search turned up no fewer than 46 "sponsored links," that is, paid advertisements from various institutions of professional continuing education that include architecture in their offerings. They ranged from New York University's School of Continuing Professional Education to an online Guide to Continuing Education, named simply, "GuidetoContinuingEducation.com," which appears to be a community effort by a large number of both public and for-profit organizations that offer continuing education in a wide variety of fields.

Another source of continuing professional education online appears to be associations of such professionals themselves. On the very first page of the May 06, 2007, Google search, this writer observed a link to the site of the American Institute of Architecture. At that site can be found numerous offerings of online courses and courses that can be taken by attending a variety of institutions. The profession, at least in the United States, appears to be in the vanguard of offering professional education online.

Drilling down into the links produced by this single search clearly will reveal hundreds, if not thousands, of opportunities for continuing professional education offered online to students from all over the world. Clearly, this is a concept that has "caught on."

Similarly, a review of both graduate and undergraduate course and library offerings at major universities around the world reveals that the world of professional education, and many of the professional educators themselves, have eagerly grasped the opportunities for sharing knowledge that have grown out of the Internet. Faculty members post course syllabi on the Internet for their students to access readily. University libraries, including, of course, the library at the University of British Columbia, offer online access to many of their offerings. One or more of the major commercial search engines has begun a project to digitize a very large volume of printed material. There seems almost no end to the drive to digitize information online.

This is not surprising in a way. After all, the Internet itself was the result of a desire by professional educators and researchers, most of them employed at universities, first in the United States, but subsequently, around the world, to share knowledge quickly and easily. So, we are looking at a phenomenon that is, at the very least, maturing rapidly both with respect to formal, in-university training and initial and continuing education of professionals in almost every conceivable discipline.

Interpreting Technology Uses from Teaching and Learning Perspective

This, of course, is but one example of the use of emerging Information and Communication Technologies (ICTs) in professional education. Ever more sophisticated ways of sharing information are constantly under development, knowledge is stored and transmitted with increasing density, ways of depicting information graphically are becoming ever more precise, "higher definition," the developers call it, and these technologies clearly have applications in such professional fields as architecture and engineering. The question, then, is whether those who educate professionals, and their students, are using these tools to maximum benefit. Again, it should not be surprising to learn that a large body of studies on the effective uses of ICTs has grown up. The purpose of this research is to explore some of the relevant literature in that field with a view to discovering how effectively new ICTs are being used in professional education and how they may be used more effectively.

It is entirely possible that the emergence of new information and communication technologies in the last several decades has had, and will continue to have, an effect on the attitudes of educators regarding both the practice of their profession and the substance of their own particular disciplines (Milliken and Barnes, 2002, p. 234). Becker and Ravitz observed in 1999 that, Teachers' pedagogical philosophies and practices are not static. Despite patterns of teaching that persist across decades..., the climate in which teachers practice their craft sometimes contains discourse that encourages or pressures teachers to modify their teaching styles and even their underlying beliefs about good teaching. (p. 356).

Cuban (1993) had noted a tendency for teaching practices to endure for very long times, but others, among them Brooks and Brooks (1993) have noted a consistent tendency toward discourse that encourages such practices advocated by Dewey (1916) and Piaget (1952), and, more recently, Pea (1996). Summarizing these practices, Becker and Ravitz outline them as follows:

- designing activities around teacher and student interests rather than in response to an externally mandated curriculum,
- having students engage in collaborative group projects in which skills are taught and practiced in context rather than sequentially,
- focusing instruction on students' understanding of complex ideas rather than on definitions and facts,
- teaching students to self-consciously assess their own understanding, (and)
- engaging in learning in front of students rather than presenting oneself as fully knowledgeable. (p. 356)

These are activities that are compatible with the "constructivist" theories of education espoused by some of our most innovative and influential educators. Obviously, both the state and a given profession have considerable in assuring that certain materials are covered in a curriculum. No one is arguing that the basics not be covered in either initial professional education or continuing professional education in favor of a freewheeling curriculum based entirely on student and teacher interests alone. That clearly would be tipping too far in one direction. But within the context of assuring that necessary facets of the discipline be fully covered, it should be possible to design courses and entire curricula that engage the creative energies of both students and teachers in the learning process.

It seems obvious that the new information and communication technologies have an important contribution to make in this respect. And, a review of both theory and practice in education reveals that many educators, in a great many disciplines agree. Professional education is no exception to the trend of incorporating these technologies in courses both at the professional school and online. Architectural education poses an interesting challenge: not only is the discipline being affected by the emerging information and communication technologies, there remains within the discipline contention regarding what the objective of architectural education should be. Some advocate that it should train primarily for creativity so that buildings become works of art. But another school advocates that the "nuts and bolts" of the discipline, that is, how to get a project completed on time and within budget should be the primary objective (Architectural Education, 2005). The role of ICTs in architectural education will clearly be developed, and be influenced, by the interactions between these different schools in the discipline.

Changing Educational and Professional Standards

Clearly, though, new developments and technologies for sharing information and communicating with others will change education in important ways. Abbott (2000) noted as much in the title of his small volume: ICT: Changing Education. Among the changes he notes are:

1. that the very definition of "literacy" is being changed to include an understanding of diverse means of transmitting literature,
2. that geographical separation is ever becoming less important in the formation of "groups,"
3. that the very purpose of school may be changing as a direct result of ICT making the home or some other setting the base of education technology rather than the school, and
4. that computers are changing the ways in which education takes place by concentrating the focus on interaction between participants in the process rather than simply on transmission of knowledge (pp. 1–2).

Abbott goes on to observe that, Links between educational theory and the use of ICT are made, and the notion of post-geographical learning is proposed: learning, that is, which takes place through the online social interaction of groups whose members may not reside in physical proximity. (p. 2)

Abbott was focusing primarily on literacy training and mostly concerned with the ways in which ICTs are changing the educational environment for children and adolescents. But it is clear that such changes are taking place as well in higher and professional education as well.

A wealth of material discusses ways in which colleges, universities, and professional schools can use ICTs in expanding and making more effective their curricula. Among the researchers who have addressed such issues are Benenson and Piggot (2002), who noted the value of technology and a subject for education itself; Carbone (2002), who advocated a studio-based model for instruction in information technology (a concept to which professional architecture educators might well refer); Dirckinck-Holmfeld and Lorentsen (2003), who explored changes in university teaching practices and perspectives as a result of incorporation of ICT technologies; Pollalis, Huang, and Hirschberg (2004), who compared methods and outcomes in two courses that differed in both purpose and uses of ICTs; and Fallows and Bahnot (2005) who, together with a group of collaborators, explored a variety of quality issues in teaching and research at the university level.

This list could be expanded almost indefinitely, because this is a field that has generated a huge amount of research and very recently. It seems likely that one reason for this wealth of research is that the development of ICTs has itself generated a great deal of just plain wealth. And that wealth is looking for things to do and for ways to generate ideas to generate even more wealth in what has become a dominant global industry.

One key, however, to understanding the importance that the new technologies have assumed in education, is found in this observation by Fallows and Bahnot in the introduction to their collection of scholarly works on the subject.

As academics we have come to view ICT as such a basic toolkit that it is almost impossible for us to envisage how our predecessors performed their various duties of teaching, assessment and research without it. But, of course, the previous generations were taught and did learn without technology - some would even argue that the teachers were able to get on with their responsibilities with greater efficiency than their modern counterparts. Education thrived without everyone having to develop the additional proficiencies that are deemed essential in the twenty-first century. However, most of us are not Luddites; we are willing to adapt to changing times even if not always keen to embrace every element of the new developments.... (pp. 1-2).

Among the questions they attempt to answer are the following:

- Can the use of ICT-based approaches enhance the quality of learning and teaching?
- Does the use of ICT-based approaches enhance the quality of learning and teaching? (Or are we using expensive equipment to achieve no more than our predecessors did with cheap and dusty chalk and talk?)
- How does the use of ICT-based approaches enhance the quality of learning and teaching?
- Are we (as teachers and learners) fully enabled to maximize the quality of the benefits that can arise from the use of ICT? (p. 2).

Concerned primarily with quality of education in the United Kingdom, Fallows and Bahnot deal with everything from uses of technology to enhance the learning experience to ways in which to counter the proliferation of sources students can draw on from the Internet to avoid doing their own work. But the conclusions that they and their contributors reach are several:

- The technologies are here to stay and by and large enhance the capabilities and educational experiences of both educators and students.
- Quality will be increasingly important to students, who are coming to see themselves as much as customers as students.
- Ensuring that online and interactive offerings exhibit quality will be a continuing challenge for educators, and that meeting it will be carried out largely under the scrutiny of the customers (Fallows and Bhanot, 2005).

Barriers to e-Education

For the purposes of the research here, one of the most interesting articles in the Fallows and Bhanot (eds.) volume is by Gillian Jordan and Jill Jameson (pp. 61–73). In their article, titled “Unlocking Key Barriers for Staff on the Path to an e-University,” they note a near “stampede” to convert course content of all types for online delivery among universities. In such a rush, quality obviously becomes an issue, as do the things that prevent individual faculty members and disciplines from entering the current. They develop a “key barrier matrix” and identify a number of such barriers that characterize their university setting. They believe these to be generalizable, and they are worth noting here.

- Institutional Distractions: Events that are occurring institution-wide. In their own case, the university itself was undergoing a major restructuring aside from the application of ICTs. In their view, the key to unlocking this barrier is to stay focused on one's own objective.
- Confused perceptions of leadership and decision-making: Over-involved strands of management responsibility contribute here. The key is to simplify and make clear; achieve consensus.
- Skills and staff-development issues: It is necessary to identify at the beginning the skills needed, the people who have them, or, lacking them in some respect, to be willing to develop them along the way.
- E-critics, communications, and overload problems: In this category fall such issues as perceived threats to their futures by some faculty members arising out of the necessary renegotiations of pedagogy and authority. Also critical is simply the added workload of participating in the project. Good communication and committing sufficient additional staff resources to relieve onerous workloads is critical to dealing with this issue.
- Quality problems faced by staff: Staff, while working hard, may very well be tempted into some shortcuts. The key is a simple commitment to quality and avoidance of such shortcuts. Make rules about it and be sure to get everyone to sign on to the commitment.

Others have explored the potential of, and the potential for disruption of the education process, that is inherent in the move to online curricula. Newman (1994), for example explored some of the ways in which computer networks can present both opportunity and obstacles to the educational process. Cuban (1987, 1988, 1993, and 1997) has devoted considerable energy to both the promise and the perils of new information technologies in the classroom. Overall, he views their adoption as inevitable, but not without risk. Dale, Robertson and Shortis (2004) similarly view the adoption of these technologies in education as inevitable, but offer a number of cautions and advice on how management policy and pedagogy should interact at the institutional level to expedite the process.

In one of a series of such works published by Routledge Falmer in England, Loveless and Ellis (2001) have compiled a volume of articles on the ever-changing picture of ICTs, pedagogy, and curricula. Overall, the editors and their contributors argue, the new technologies will not catalyze radical change in education merely by their presence. Rather, they see these technologies as changing education in a continuous process, beginning with efforts of varying success to fit them into existing models of education and followed by a period in which the technologies will come to be used in ways that were not expected by anyone.

The editors were motivated in part by what they viewed as a disconnect between the ways in which ICTs are being introduced at the institutional level and the ways in which they are being used by students, others outside the educational institutions, and even individual teachers themselves. In their words,

We felt that the introduction of these technologies into classrooms and schools is having an impact on teaching and learning that does not necessarily reflect the ways in which children and young people experience and appropriate the technology in their lives outside school. Neither is the prophetic claims being made about the role of ICT in learning being realized in classroom practice as a whole. There was a shared concern that the nature of teacher training in new technologies has focused more on skills and techniques. Radical change requires a deeper understanding of the challenges ICT makes to ways of knowing curriculum subjects and of the changes it might bring to the practice of the profession in terms of time, place and authority. (pp. 1-2)

Interestingly, they argue that the acronym that has become almost a word in the language (at least the language of professional educators and computer jockeys), ICT, is problematic. They argue that the uses for what has come to be described by this term reach far beyond merely storing and communicating information. In their view, the scope and uses of these technologies are so widely varied across users and disciplines that we do ourselves a disservice by limiting them with this description. Indeed, they argue that the description itself has too much of an Anglophonic tone and that it also builds a detrimental image of what constitutes literacy in a wildly varied world (p. 2).

In a 2000 article in the *Journal of Technology and Teacher Education*, Loveless argued that information and communication technologies are not neutral tools for learning but are instead is "cultural artifact" in the hands of both students and teachers. As such they are affected by, and themselves affect, the culture in which they are found. These differences are likely to be profound in some cases (p. 380), a concept to which we will return when considering the proposed project in Taiwan.

A number of researchers have addressed the issues of quality in education and how ICTs can affect it either negatively or positively. Among the more recent publications that address these issues are those by Davidson (2003), Davis et al. (1997), and two major compilations by the United Kingdom Department for Education and Skills (2002, 2003). The general view expressed in these works and others like them is that the new technologies hold considerable promise for enhancing the quality and availability of education in virtually all areas, but that they cannot simply be grafted onto the old ways of doing things. They will demand their own accommodations, but when those are recognized and used to advantage, the advantages will be manifold.

We can probably already see that a proliferation of unexpected uses of the technology is indeed the case, since the initial view of the new information and communication technologies was simply that they would be a way to transmit and store information more efficiently. They were not initially seen as vehicles by which the roles of students and teachers would be dramatically altered. Yet they are effecting such changes quite often.

Professional education in architecture, of course, is not immune to the changes, and in many areas schools of architecture has eagerly jumped on the ICT bandwagon both in their traditional course offerings and in courses designed to meet the continuing education needs of professional architects and designers. This enthusiasm is reflected in a flurry of publications on the subject, both books and articles in scholarly and professional journals in the field. Whole conferences have been devoted to the uses of information and communication technologies in architectural, engineering, and design education.

Indeed, a review of such conferences reveals not only a number of conferences, but several separate organizations devoted to the study of, or advancement of, the use of information and communication technologies in professional education in architecture. Cheng (1996, 1997, 1998, and 1999) has been particularly prolific in advocating a stronger role for ICTs in architectural education. Her works have both described and advocated the use of ICTs in studio-based instruction and in instruction in graphic design.

Medraza and Vidal (2002) described an exercise in “concept mapping” that utilized an ICT-based learning environment characterized by a specific theoretical framework built up from “theory bits,” “individual and collaborative exercises,” and “a web system that provides representation of the collective work.” The subject matter for their study used five texts on architectural theory and examined how students treated them in this collaborative environment. Their conclusion was that the system yielded a pedagogy that could be extrapolated to most other disciplines. But they offered this caution:

The effectiveness of this learning environment, however, relies on the equilibrium between technology and pedagogy. Technology must be subsumed under a pedagogic program, whose ultimate goal is to develop the capacity of students to think creatively in collaboration, using information and communication technologies. (p. 387).

Chiu (2002) explored the organizational ramifications of using ICTs in design education. Holland and de Valasco (1999) explored the potential for ICTs in building a network of international studies in engineering, while Kvan et al. (1999) have advocated the use of computer technologies as a means of improving collaborative study and work in design. Other studies and presentations advocating the expanded use of ICTs in professional education, especially as instruments that encourage collaboration among professionals, include Mandour (2004), Schon (1987), and McCormick (2004).

A Broad Stream of Innovation and Study

From the above, it can be seen that the stream of study and application of information and communication technologies in education, and even specifically in education in architecture, engineering, design, and related fields is quite broad. A recurring theme in all the literature on this subject is that these technologies cannot simply be grafted onto a discipline, an educational institution, or into a culture without there being profound effects on all of them. Those effects will also be reflected in the technologies themselves and the cultures in which they are found.

Hancock (2002) argues we should take the position that teachers who are expected to redefine their ideas about teaching and learning must have opportunities to examine instructional methods in light of reform recommendations and current information about learning. It presents a developmental picture of a strategy for creating “beliefs” about how students learn and who should learn and what is important to learn, progressing from theoretical underpinnings of integrating technology with learning and instructional design to the issues of teacher preparation.

It is a characteristic of studies of ICT in professional education that they have been conducted in societies that are largely stable both politically and economically, and that have rich histories of professional education in just such settings. Taiwan is a society that is considerably less stable, and while there is a history of professional education in that society, everything there is done in the context of a society and an economy that has undergone rapid change in the last half century.

Until recently, the government of Taiwan was not formally democratic, for example, though it was certainly disposed toward alliances and affinity with the western democracies. That has been in spite of an expressed determination over the decades by the government of the mainland that the island would one day be reunited with that of the mainland. Indeed, for most of the last several decades, and even today, the official position of both governments has been that there is only one China.

Today, Taiwan is formally a democracy, with multiple political parties, a formidable domestic economy with strong technological manufacturing roots, a growing population characterized by both descendants (and still some survivors) of

the retreat of what were termed the Nationalist Chinese and native Taiwanese, a sense of separate identity that grows more profound the longer the separation, substantial earned pride in its accomplishments and existence, and expressed desires to preserve some of its past for the future.

Taiwan has well-established professional education programs in many fields, specifically including architecture. Like other professional education programs, they are in upheaval as well, at least in part because of the perception that new technologies will inevitably transform them. Both eagerness to adopt new methods and fear of the outcomes in adopting them are characteristic of professional architecture education in Taiwan.

Unlike the other areas in which these changes have been explored by academics, in Taiwan they are taking place in a setting of rapid cultural and political change. It seems reasonable that the surrounding changes will also affect how these institutional and pedagogical changes occur. Will professional educators in Taiwan, specifically professional educators in architecture, embrace the changes and challenges attendant with the new ICTs, even while they are managing the professional and institutional changes that are occurring around them? The future research for studying acceptance and use of ICTs in architectural education in Taiwan should shed some light on how effective such technologies can be as they are adopted in a world of change.

CONCLUSION

The choice to use information and communication technologies (ICTs) for curriculum construction has both a conceptual and a utilitarian rationale. As emerging information and communication technologies expand the dimensions of the classroom, demands that education professionals be familiar with not only their potential but their application increase as well. Because what is required of an individual to be technologically literate is something of a moving target, creating the curriculum in a constantly changing digital environment constitutes the kind of ongoing learning process encouraged by constructivist pedagogy. As Dewey (1916) interprets living as having its own intrinsic quality and education should be kept up to that quality of learning and teaching. Providing quality education should be the ultimate target of educators. We shall be very active of seeking quality instruction of ICTs to pay us the competition strength.

Dewey (1956) views curriculum studies as something fluid, embryonic and vital. Therefore, the objective of the individual belief of school education must be consistent with that of the business world and the world of information and communication technologies industry in terms of human resources management and collaboration, which will have to be the vital catalyst for a flexible labor relation and the vertical integration. To control the steer of the economic development, integrated academic and practice accumulation plus high quality human resource are also required. In fact, when approached with its track of progress confront modern education, the development of the school education matches perfect with the social change. Life is a series of situations (Dewey, 1938, p.43). Within the conceptual framework of life learning, I believe that the general public shall develop the idea of always learning as long as one lives. The idea of the school education itself is the very life teaching material of life learning.

Finally, the researcher firmly believes that the school education in future plays the same important role as the upgraded industry does. Future school reform by encouraging free enquiry, critical thinking which results in creativity, imagination and innovation, this should be within the framework of rethinking and creating a critical pedagogy for the information and communication technologies age. To that end, this above augments provides varied opinions on the issue of assessing the impact of educational technology on the learning environment and how to rethink in teaching about how ICTs learning environments can provides the insight necessary for individuals to formulate the appropriate questions for themselves.

REFERENCES

- Abbott C (2000). *ICT: Changing education*. London: Routledge Falmer.
- American Institute of Architecture. (2007). *The AIA Continuing Education Series*. <<http://www.architecturemag.com/architecture/business_resources/continuing_ed.jsp>> Retrieved 23 Jan. 2007.
- Architectural Education (2005). *Architectural Science Review*, 48(2), 196. Retrieved January 23, 2007, from Questia database: <<<http://www.questia.com/PM.qst?a=o&d=5009876889>>>
- Becker H, Ravitz J (1999). The influence of computer and Internet use on teachers' pedagogical practices and perceptions. *Journal of Research on Computing in Education*, 31(4):356-384.
- Becker H (2000). Findings from the teaching, learning, and computing survey: Is Larry Cuban right? *Education Policy Analysis Archives*, 8(51). Available at <http://epaa.asu.edu/epaa/v8n51>
- Benenson G, Piggott F (2002). Introducing technology as a school subject: a collaborative design challenge for

- educators. *Journal of industrial teacher education*, 39(3).
- Carbone A, Sheard J (2002). Pedagogical design: A studio-based teaching and learning model in IT. *Proceedings of the 7th Annual Conference on Innovation and Technology in Computer Science Education* (pp. 213-217).
- Cheng N (1995). By all means: multiple media in design education. *Proceedings of the 13th Conference on Education in Computer Aided Architectural Design in Europe (ECAADE)*. University of Palermo, Italy.
- Cheng N (1997). Networks, architecture and architectural education. *Negotiating architectural education*, a symposium at the University of Minnesota, February 1997.
- Cheng N (1998). Digital identity in the virtual design studio. *Proceedings of the 86th Associated Collegiate Schools of Architecture's Annual Meeting*. Cleveland, OH.
- Cheng N (1999). Playing with digital media: enlivening computer graphics teaching. *Proceedings of the Association for Computer Aided Design in Architecture (ACADIA)*. Salt Lake City, UT.
- Chiu M (2002). An organizational view of design communication in design collaboration. *Design Studies*, 23, 187-210.
- Cuban L (1986). *Teachers and machines: The classroom uses of technology since 1920*. New York: Teachers College Press.
- Cuban L (1988). A fundamental puzzle of school reform. *Phi Delta Kappan*, 70(5), 341-344.
- Cuban L (1993). *How teachers taught: Constancy and change in America classrooms: 1890–1990* (2nd ed.). New York: Teachers College Press.
- Cuban L (1997). High-tech schools and low-tech teaching. *Education Week on the Web*, Editorial, May 21, 1997. <<<http://www.edweek.org>>> Viewed Dec. 18, 2006).
- Dale R, Robertson S, Shortis T (2004). 'You can't not go with the technological flow, can you?' constructing 'ICT' and 'teaching and learning: the interaction of policy, management and technology. *Journal of Computer Assisted Learning*, 20:456-470.
- Davidson J (2003) A new role in facilitating school reform: The case of the educational technologist. *Teachers College Record*, 105(5):729-752.
- Davis N, Desforges C. et al. (1997) Can quality in learning be enhanced through the use of IT?' in Somekh, B. and Davis N. *Using information technology effectively in teaching and learning*, London: Routledge.
- Dewey J (1916). *Democracy and education*. New York: The Macmillan Company.
- DfES (2002) *Transforming the way we learn: A vision of the future of ICT in schools*. London: DfES.
- DfES (2003) *Fulfilling the potential: Transforming teaching and learning through ICT in schools*. London: DfES.
- Dirckinck-Holmfeld L, Lorentsen A (2003). Transforming university practice through ICT – integrated perspectives on organizational, technological, and pedagogical change. *Interactive Learning Environments*, 11(2):91-110.
- Fallows S, Bhanot R (Eds.) (2005). *Quality issues in ICT-based higher education*. New York: Routledge Falmer.
- Google. (Jan. 23, 2007). Search: "Architecture Continuing Education." <<<http://www.google.com>>>.
- Hancock DR (2002, Spring). Influencing post-secondary students' motivation to learn in the classroom. *College Teaching*, 63–66.
- Holland N, de Velasco G (1999). The internationalization of undergraduate programs: a model program using reciprocal distance education, traditional study abroad programs and international internships. *Journal of Engineering Education*, October, 1999.
- Jordan G, Jameson J (2005). Unlocking key barriers for staff on the path to an e-University. In Fallows, S. & Bhanot, R. (Eds.). (2005). *Quality issues in ICT-based higher education*. New York: Routledge (pp. 61–73).
- Kvan T, Yip W, Vera A (1999). Supporting design studio learning: An investigation into design communication in computer-supported collaboration. *CSCL '99*. Stanford University, Stanford, California, 12-15 December
- Loveless AM (2000). Where do you stand to get a good view of pedagogy?. *Journal of Technology and Teacher Education*, 8(4):337–385.
- Loveless A, Ellis V (Eds.) (2001). *ICT, Pedagogy, and the Curriculum: Subject to Change*. London: Routledge Falmer.
- Madrazo L, Vidal J (2002). Collaborative concept mapping in a web-based learning environment: A pedagogic experience in architectural education. *Journal of Educational Multimedia and Hypermedia*, 11(4):345–390.
- Mandour M (2004). From hard architecture to soft architecture: architecture form in the 21st century. 1st ASCAAD International Conference, e-Design in Architecture. Dhahran, Saudi Arabia.
- McCormick R (2004). Collaboration: The challenge of ICT. *International Journal of Technology and Design Education*, 14:159-176.
- Milliken J, Barnes L (2002). Teaching and technology in higher education: student. *Computers & Education*, 39 (2002) 223–235. perceptions and personal reflections.
- Newman D (1994). Computer networks: Opportunities or obstacles? In B. Means (Ed.), *Technology and education reform*. (pp. 133-168). New York, NY: Jossey-Bass.
- Pea R (1996). Seeing what we build together: Distributed multimedia learning environments for transformative

- communications. In T. Koschmann (Ed.) CSCL: Theory and practice of an emerging paradigm. (pp. 171–186). Mahwah, NJ: Lawrence Erlbaum.
- Piaget J (1952). The origins of intelligence in children. New York: International Universities Press.
- Pollalis S, Huang J, Hirschberg U (2004). Teaching methods: Stretching time and space - using new technologies to improve professional education. Center for Design Informatics at the Harvard Design School. << <http://www.cdi.gsd.harvard.edu/research.cfm?id=80>>> Viewed: 12 Jan. 2007.
- Schon D (1987). Educating the reflective practitioner: toward a new design for teaching and learning in the professions. San Francisco: Jossey-Bass.
- Zhao Y, Frank K (2003). Factors affecting technology uses in schools: an ecological perspective. American Educational Research Journal, 40(4):807-840.

Full Length Research

Evaluation of student teachers' presentation strategies and self-efficacy

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Classroom presentations in methodology courses of teacher training departments are very practical ways for student teachers to revise and evaluate themselves in teaching practices. The behaviours of student teachers during the presentations may be constructive for their teaching performances. But the success and failure of their performances may depend on various factors. By assessing the possible factors, necessary feedback can be provided for creating consciousness about their performances. One of the factors may be the degree of their self-efficacy. In this study, therefore, it was aimed at ascertaining what student teachers think about classroom presentations, whether their success and failure in their presentations are affected by the degree of their self-efficacy and if there is any correlation between their presentation strategies and the degrees of their self-efficacy. For data collection, observation reports, interview records and questionnaires were used. The research findings proved that student teachers had positive attitudes towards the presentation activities and gained experiences about teaching practices by applying presentations repeatedly in the classroom. Moreover, positive correlation between the student teachers' presentation performances and their self-efficacy degrees was ascertained.

Key words: Presentation, presentation strategies, self-efficacy, teacher students and teaching practice.

INTRODUCTION

Teachers who stand in front of a class and teach to a group of learners are responsible for both learning and teaching processes. Such responsibility may be more complicated for foreign language teachers. Because they should both present information and use the foreign language they teach efficiently.

The general belief about the success and failure in presentation of a lesson is mainly bound to the teacher (Brophy and Good, 1986; Cajkler and Adelman, 1992). Efficient teaching can be identified by some factors which are teacher enthusiasm, clarity of presentation, variety of activities in courses, achievement-oriented behaviour in classrooms, opportunity to learn criterion material, acknowledgement and stimulation of learner ideas, criticism, and use of structuring comments at the beginning and during lessons by guiding the learner answers (Williams and Burden, 2000). In this sense, increasing learners' motivation and performance has always been the primary concern of language teachers. Therefore, for providing teaching efficiency in teacher training process, classroom presentations in the courses can be promising ways to enhance student teachers to gain experiences about how to teach efficiently and to encourage them to practise all language systems such as vocabulary, grammar, phonology and language skills - speaking, reading, writing and listening-.

Classroom presentations contribute significantly to student teachers' spoken language which they will teach during

their professional life; in addition, during the presentations, they are also improving their knowledge of social topics and relevant vocabulary as well (Ruso, 2007). Accordingly, eligible and satisfactory presentations and the management of learners' behaviours are the main concepts which determine effective learning and teaching (Swartz, White and Stuck 1990). The qualified presentations can be assessed among the skills to be achieved by student teachers in teacher training programs. Since the presentations of student teachers are assessed by educators and other classmates, those assessments are acknowledged as supportive and motivating tools (Falchikov, 1986, 1988; Boud, 1995; Dochy, Segers and Sluijman, 1999; Lapham and Webster, 1999). Moreover, involvement, assertiveness and system awareness of the learners are triggered by the evolution and assessment processes (Ellis, 2001; Hanrahan and Isaacs, 2001).

The success and failure of presentations may be affected by some factors. Among those factors, the degree of self-efficacy is assumed to be efficient on the quality of presentations. Moreover, self efficacy is thought to be efficient on the applications of educators and student teachers in the classroom and it is stated that self-efficacious teachers are enthusiastic and eager to teach (Bikmaz, 2004; Gibson and Dembo, 1984; Tuckman and Sexton, 1990). In this sense, self efficacy is at the root of self-esteem, motivation, and self-regulation (Bandura, 1997; Scholz, 2002; Allinder, 1995; Ross, 1994) and so it may enhance the teaching/learning performances and achievement of learners.

Depending on these views, in this study, it is aimed at investigating how student teachers' presentation performances are affected by their degree of self efficacy.

METHOD

In this research study, both qualitative and quantitative research methods were used. For qualitative data collection, classroom observation reports and interview records were used. The qualitative data was collected to highlight the student teachers' attitudes towards presentation tasks and their performances in classroom. For quantitative data collection, questionnaires were administered on the participants in order to ascertain if there existed any correlation between the levels of their self efficacy and presentation performances.

The data of the study was collected in three phases:

The initial phase: classroom observations

As the initial phase, the student teachers were observed while presenting their topics for six weeks in the classroom (eight students for one week and seven students for five weeks). The classroom presentations were designed depending on the following steps and scopes:

Before presentation:

- outlining the presentation
- planning presentation length
- planning the materials and technological aids
-

While-presentation

- fluency, lucidity, intelligibility, consistency
- competency in using body language
- intonation, voice, eye-contact,
- taking attention to focal point
- giving examples, interaction with class, elucidating ambiguities
- summarizing presentation
- asking and responding questions

After presentation

- self-assessment and evaluation

The second phase: interviews

After all student teachers presented their topics, they were interviewed to determine how they appraised presentation tasks they implemented and how beneficial these tasks were for them as teacher candidates of English.

The third phase: questionnaires

The third phase of the research was to investigate the correlation between student teachers' presentation strategies and self-efficacy levels. Two questionnaires were administered on the student teachers so as to obtain quantitative data. The evaluation of data gathered by means of questionnaires was computed through SPSS program.

The research questions

The main topic question of the research is "if there exists any correlation between student teachers' presentation strategies and self-efficacy levels". Following this main question, the following questions are thought to be highlighted in the research process:

- How do student teachers prepare and present their topics in the classroom?
- What do they think about presentation tasks?
- How useful are presentation tasks for their teaching practice

Participants

43 fourth class student teachers from English Language Teaching Department at Trakya University, in Turkey, participated in the research. The aim of conducting the

Table 1. The Coefficient for Correlation

Correlation between Self-Efficacy and Presentation Strategies		
N	43	r = .524 p = .10

$p < .05$ Correlation is significant at the 0.05 level (2-tailed) research on the fourth year student teachers is that they actively have been involved in presentation tasks during their education processes and are assumed to have gained experiences.

Instruments

Observation reports, interviews, and two questionnaires- one is dealing with the presentation strategies of student teachers comprising 20 items with four choices (never, rarely, sometimes, usually) developed by the researcher and a ten-item self-efficacy questionnaire (English version by Ralf Schwarzer and Matthias Jerusalem)- were administered on the participants (the questionnaires are presented in the appendices part of the study).

Findings

The findings of the study are presented in three parts of a set. Initial phase findings: the summaries of observation reports; second phase findings: the findings of interview records; third phase findings: the findings of the questionnaires.

The initial phase findings

During the observation phase, it was reported that the student teachers, in general, were competent enough and determined. They mostly presented efficiently. Although they sometimes got excited, they were generally in control. Most of them managed to use English fluently, whereas a few were hesitant to speak fluently and loudly. Moreover,

most of them could use body language proficiently. They managed to take the attention of the class by giving meaningful and explanatory examples and asking questions. In general, they tried to keep eye-contact. Moreover, information provided by them was treated with caution. While presenting their topics, technological aids and materials produced before the presentations were used fruitfully, but a few of them read the slides they prepared. On the other hand, most of them had trouble in consuming time; they could not manage to present their topics in planned presentation length. At the end of the presentation, they asked questions about their presentations to ascertain whether they were clear and comprehensible. They also coped with summarizing their topics and ending up the presentations.

The second phase findings

The overall ideas reported from the interviews are that the student teachers had positive attitudes towards the presentation activities in the classroom. They stated that they gained experiences about how and when to find solutions to the difficulties by applying presentations repeatedly in the classroom. Most of them also declared that they could defeat the problems and struggle with the difficulties they faced. Moreover, they could overwhelm the ambiguities in their presentations. The student teachers, additionally, noted they were highly satisfied with this communication task by declaring the efficiency of presentations.

The third phase findings

For the analysis of the third phase data gathered through the questionnaires, Pearson Correlation Coefficient was calculated. This analysis is displayed in Table 1.

As reported in Table 1, self-efficacy and presentation strategy correlations were found out to be positive.

RESULTS

The results of interview records and observation reports are consistent with each other. The student teachers were, in general sense, reported as self-confident individuals when they accomplished their tasks during their presentations. The same confidence was inferred from their responses during the interviews.

The overall findings of the interviews indicate that the student teachers consider the presentation tasks as beneficial for gaining experience in teaching practice, finding solutions to the problems they face, and involving in communicative tasks for teaching profession. Such statements emphasize the advantages of presentation tasks and may be an indication of the student teachers' self-efficacy degree. Depending on those positive statements, it was examined whether there is any correlation between the levels of their presentation performances and self-efficacy. The statistical analysis of the questionnaires proved that positive correlation exists between the student teachers' presentation strategies and self-efficacy. This means the more self-efficient the individuals are, the more successful they are in their tasks.

DISCUSSION AND CONCLUSION

The overall findings of the study indicated that the student teachers' classroom presentation performances are affected positively by the degree of their self-efficacy. Such an outcome is significant for student teachers of English or any foreign language. If they feel themselves efficient enough while presenting a topic in front of a group, they can be confident and fluent foreign language speakers while teaching in real classroom environments. Therefore, student teachers need to be encouraged to apply presentation tasks, which lead to significant outcomes, during their education process.

The most significant outcome of presentation tasks can be evaluated with regard to its communicative point. As has been argued by Lightbown and Spada (1993), communicative need is a factor that defines motivation in second language. Through developing communicative competence, they learn how to behave in a classroom environment and how they can interact with class members. The same interaction was reported during the observations in this study. Such achievement could be thanks to the presentations they implemented during their education process as the requirements of the courses in the curriculum. Therefore, in order to engage in classroom teaching, student teachers need to be motivated through classroom presentation applications. The more they apply presentations, the more

confident they feel themselves for and during the presentation practices as mentioned by Gibson and Dembo, (1984) and Tuckman and Sexton (1990).

In this sense, presentation tasks can be valued as a channel for learners in education process to share with others what they have learned. Those tasks are the opportunities for teaching practices of student teachers through which they can expand their understanding of the subject topic by informing and having others ask questions. In addition, the degrees of self-efficacy are extremely effective on the development of the presentation skills. Therefore, by practicing teaching through presentations, they can build more self-efficacy. Furthermore, presentation tasks raise awareness, persuade people and enhance speaking skills in second language. The research results indicated that the self confident or self efficacious student teachers were more successful at their presentation process. Such an outcome is consistent with the statements of Swartz, White and Stuck (1990) and Scholz (2002).

The research findings of this study may help educators in teacher training institutions in assisting their trainees. By motivating them for practicing presentations, educators can assist student teachers to develop personal efficacy and teaching expectations, because presentations, which provide opportunities for student teachers to use teaching time efficiently and to make self evaluation and observation, can be appraised as helpful and directive applications for student teachers before involving into teaching profession.

Class members also can support and encourage each other during the presentations; thus, they may affect each other in professional sense. Such applications can be helpful for getting the hesitant members to be involved in classroom presentations. Because observing a classmate as a model may enhance the rest to prepare themselves for their presentations and to gain self-efficacy for teaching practice. Thus, high degrees of self-efficacy in teaching profession may boost communicative competence and teaching performance.

REFERENCES

- Allinder RM (1995). An examination of the relationship between teacher efficacy and curriculum based measurement and learner achievement. *Remedial Spec. Educ.* 27.141-152.
- Bandura A (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman Company.
- Bıkmaz FH (2004). Öz Yeterlik İnançları. *Eğitimde Bireysel Farklılıklar*. Y.Kuzgun and D.
- Boud D (1995). *Enhancing Learning through Self Assessment*. London: Kogan Page.
- Brophy JE, Good TL (1986). Teacher Behavior and Learner Achievement. In M. C. Wittrock (Ed.), *Handbook Research*, 3rd ed. New York: Macmillan.
- Cajkler W, Addelman R (1992). *The Practice of Foreign Language Teaching*. Great Britain: David Fulton Publishers Ltd.
- Dochy F, Segers M, Sluijman S (1999). The use of self-, peer and co-assessment in higher education: a review, *Stud. Higher Educ.* 24:331-350.
- Ellis G (2001). Looking at ourselves—self-assessment and peer assessment: practice examples from New Zealand, *Reflective Practice*, 2(3):289-302.
- Falchikov N (1986). Product Comparisons and Process Benefits of Collaborative Peer Ground and Self-Assessments, *Assess. Evaluat. Higher Educ.* 11:146–166.
- Gibson S, Dembo MH (1984). Teacher efficacy: A construct validation. *J. Educ. Psychol.* 76(4):569-582.
- Hanrahan SJ, Isaacs G (2001). Assessing Self and Peer Assessment: The Learners' Views, *Higher Educ. Res. Develop.* 20:53-70.
- Lapham A, Webster R (1999). Peer assessment of undergraduate seminar presentations: motivations, reflections and future directions. In S. Brown and A. Glasner (Eds) *Assessment matters in higher education: choosing and using diverse approaches*. Buckingham, Society for Research in Higher Education and Open University Press, pp.183-190.
- Lightbown PM, Spada N (1993). ***How languages are learned***. Oxford: Oxford University Press.
- Ruso N (2007). The Influence of Task Based Learning on EFL Classrooms, Retrieved March 10, 2008 from http://www.asian-efl-journal.com/pta_February_2007_tr.pdf
- Scholz U, Dona BG, Sud A, Schwarzer R (2002). Is General Self-Efficacy a Universal Construct?, *European Journal of Psychological Assessment*, 18(3):242-251.
- Swartz CW, White KP, Stuck GB (1990). The Factorial Structure of the North Carolina Teacher Performance Appraisal Instrument, *Educ. Psychol. Measurement*, 50:175-185.
- Tuckman BW, Sexton TL (1990). The relationship between self- beliefs and self- regulated performance. *J. Educ. Psychol.* 80:111-117.
- Williams M, Burden R (2000). *Psychology of Language Teachers*, Cambridge: Cambridge University Press.

Appendices

Presentation Strategies Questionnaire

	never	Rarely	sometimes	usually
Before presentation I investigate my topic in detail				
I try to include the most informative points to my presentation				
I make eye contact with my audiences				
I try to be effective on my audiences				
In order to evoke interest I speak with easy language structures				
Before the presentation, I present the same presentation in front of a mirror				
To be fluent, I repeat my presentation a few times before the presentation day				
I use body language during the presentation				
I get help from my teaching staff while preparing the presentation				
I get help from my friends while preparing the presentation				
When I forget how to say something appropriately I try to find appropriate statements during my presentation				
I try to control my friends' faces so as to get idea about how clear I am during the presentation				
I interact with my friends while presenting				
I assume my friends as my learners while presenting and give information in this way				
I prepare effective materials for my presentation				
I consume the presentation time efficiently				
I try to find solution whenever ambiguity appears				
I am self assured during my presentation				
I forget my words when I am excited				
I always want to hear the criticisms about my presentations				

Self-Efficacy Scale

	Not at all true	Hardly true	Moderately true	Exactly true
I can always manage to solve difficult problems if I try hard enough				
If someone opposes me, I can find the means and ways to get what I want				
It is easy for me to stick to my aims and accomplish my goals				
I am confident that I could deal efficiently with unexpected events				
Thanks to my resourcefulness, I know how to handle unforeseen situations				
I can solve most problems if I invest the necessary effort				
I can remain calm when facing difficulties because I can rely on my coping abilities				
When I am confronted with a problem, I can usually find several solutions				
If I am in trouble, I can usually think of a solution				
I can usually handle whatever comes my way				
Response Format				
1: not at all true				
2: hardly true				
3: moderately true				
4: exactly true				

Full Length Research

A Tapestry of Special Educational Needs (SEN) in Mainstream Schools of London Boroughs

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This study focuses the issues and arguments about SEN and its provision in mainstream schools. The objective of the study is to evaluate the effectiveness and management of SEN to explore the impediments in its affective way. The study based on qualitative research paradigms for which in-depth semi-structured interviews were selected tool for data collection. The sample includes the head teacher, deputy head, SEN Co-ordinator (SENCO) and teaching and teaching assistants (TAs) who were randomly selected from one of the middle schools in London Borough. The methodology is content and themes analysis to express the views and experiences of the sample about SEN children, their attitudes, models of disabilities, definitions and types of SEN and the support providing in their school. Furthermore, critical discussion of the findings and the methodological issues germane to the research findings elaborated analysis of teacher's perceptions towards mainstreaming SEN students. The study concludes that lack of funds/resources, inadequate SEN component in initial teacher-training curriculum and untrained supporting staff make SEN provision ineffective in the mainstream.

Key words: SEN, inclusion and exclusion, management, learning difficulties.

INTRODUCTION

A great deal has been written about SEN because since the last decade it has emerged as a key educational issue. This study explores various aspects of the SEN provision and related issues to co-related research findings with one or other aspect of the existing research studies. This study is also a combination of mixed findings of contemporary research studies. The selection of this topic was due my personal interest and curiosity about SEN and its provision in mainstream. Because SEN are of immense importance – often the most critical factor contributing to the quality of children lives in childhood. It is essential, therefore, to ensure that the characteristics of SEN provision enable individuals to optimise their abilities and to overcome, minimise or circumvent their learning difficulties. The purpose of the study is to investigate the process of inclusion and the supporting attitude of schools within the existing frameworks of SEN. Many influences have shaped the nature of provision for SEN. They include philosophical and political standpoints, location, history and tradition, parental views and the very different and changing needs of children. They have resulted in an ever widening range of provision across schools. What matters is that the provision made is suited to the individual's age, stage of development, and educational, social and emotional needs. The starting point in making decisions about educational placement is consideration of mainstream provision in the individual's own area. Most pupils with SEN in England attend their local schools. Where the quality of the individual's educational and social experience is in doubt in such a setting, or where it is not feasible to provide the exceptional levels of support required, then other, more specialised forms of education will be necessary. However, the overriding concern must be to ensure that the SEN provision takes account of all-round needs and that the individual is not socially isolated. This study is worth by exploring the variation, elaboration and adaptation needed from professionals to ensure continued effective provision to meet the

very wide and increasingly complex SEN now found in schools. Furthermore the study highlights key features of SEN practice in mainstream and provides a stimulus for further consolidation, development and research.

Aims and Objectives of the Study

- To evaluate the meanings and understandings of SEN in mainstream.
- To ascertain types of SEN and how the students cope with their peers.
- To triangulate the role of teachers, TAs and SENCO in an inclusive environment.
- To map-out common impediments in effective inclusion.

Research Questions

The federal government has defined thirteen categories of disabilities these included:

autism, deaf-blindness, deafness, hearing impairment, mental retardation multiple disabilities, orthopedic impairment, other health impairment, serious emotional disturbance, special learning disability, speech or language impairment, traumatic brain injury, and visual impairment (DfEE, 2001:13).

Keeping in mind the above list of disabilities, the main research question and framework of this study was structured to investigate whether the existing provision of SEN is effective, according to the requirements of SEN students? Furthermore how to promote a successful inclusion in mainstream?

LITERATURE REVIEW

This literature search conceptualises; definitions, features of policies and practices and their implementation in the mainstream schools. SEN were defined as physical or mentally disabilities under the Education Act 1944, children with SEN were categorised by their disabilities defined in medical terms. Many children were considered 'uneducable' and were labelled in categories; 'maladjusted or 'educationally sub-normal' and given SEN in private schools.

A child is disabled if he is blind, deaf or dumb or suffers from a mental disorder of any kind or is substantially and permanently handicapped by illness, injury or congenital deformity (Legislation, 2005-6:7).

Furthermore, the Department for Education and Employment (DfEE, 1994:11) defined;

A person has disability, if he has a physical or mental impairment which has a substantial and long-term adverse effect on his ability to carry out normal day-to-day activities.

At time, only the physical or sensory challenged children were considered SEN and the other learning disabled children were kept in mainstream without noticing their special needs. However the limited and specific meanings of the SEN become more comprehensive and broad with the passage of time. The Code of Practice (DfES, 2001) describes; children who have a disability which prevents or hinders them from making use of educational facilities. However children who speak English as a second language, their language problem is not considered to be learning difficulty. The SEN students include all learning difficulties groups, not just physically and mentally disabled children, whether those children are facilitated with SEN in special school or in the mainstream. SEN has been variously defined, described or explained by different people at different times. Their explanations are based on their individual, personal and professional experiences and their cultural backgrounds. These definitions of SEN are useless unless the provision can be implemented which is only possible if an effective implementation of SEN policies are developed in schools.

SEN Policies and Practices

The SEN policies can be traced back to the Education Act 1944 when efforts were started for SEN provision in state schools. The SEN concept in the mainstream was not introduced because the government did not realise its need and importance. Although the Handicapped and Pupils and School Health Service Regulations 1945, the Underwood Report of 1955, the Plowden Report 1968 and 1970 and Handicapped Children's Act carried out their struggle for the effective provision of SEN in the state special schools with special children of physical/sensory or mental disability.

The Warnock Report 1978 and the Education Acts 1981 changed the typical concept of SEN students and introduced the idea of SEN, 'statements' and 'integrative' which later became known as the 'inclusive' approach, based on common educational goals for all children (Farrel, 2011). The introduction of SEN Children Assessment Statements (CAS) encouraged the government to revise their SEN policies in the mainstream but did not give additional funding for the

new processes involved in statements of SEN children or SEN teachers training in special schools (Legislation, 2005-6). The CAS and improper SEN teachers training programme block its effective implementation in mainstream because parents complained the ineffective long, time-wasting lengthy assessment procedure delay the education of SEN students. However, the increased number of SEN students increases the LEAs workload so their assessment tests criteria change every year (Ofsted, 2007). Additionally initial teacher training (ITT) failed to develop teachers' skills and confidence to help SEN children to reach their full potential in mainstream (Golder et al. 2009).

The government inherited the existing SEN framework and sought to improve it through the SEN and Disability Act (SENDA) 2001 and 2002, and the 2004 SEN Strategy Removing Barriers to Achievement which claimed to set-out the government's vision for the education of SEN children. The government substantially increased investment in SEN but these policies worked well in their own frame of time and targets, with major insufficiency of practical involvement of mainstream SEN qualified teachers (Ainscow, 2013). Warnock et al., (2010) argue, teachers are 'policy makers in practice' and the importance of teachers' professional judgments in SEN implementing is a sense creating, education policy for successful implementation. The SEN teachers should have a major role in the development of a SEN policy to promote effective inclusion an increased academic performance of SEN students in inclusive settings, while Norwich (2013) found low-self-esteem and question its ineffectiveness due to inflexible curriculum is one of the issues of SEN provision. Curricular changes are introduced in order to benefit students with learning difficulties. This requires school staff, in particular teachers, to be more reflective and analytical of their current practice (Warnock et al., 2010). In general, the current situation gives teachers neither the time nor the confidence to make a bridge between the students in the mainstream, the Code of Practice (DfES, 2001) was being introduced to increase the flexibility of the National Curriculum. However this flexibility is minimal (Ofsted, 2007).

Successful SEN includes: specifically trained professional educators, special curriculum content, special methodology and special instructional materials (UNESCO, 2010: 24). The determination and coordination of headteacher, class-teacher, SENCO and TAs in school general policy is vital and greatly influenced on SEN provision. Additionally appropriate funds, resources, TAs' support, regular and partnership of parents, school and Local Educational Authority (LEA) boost SEN provision. Farrell (2011) criticises inadequate resources, and funds for the SEN students, low-payment for SEN teacher's professional development and refresher courses jamming this effective inclusion. Moreover most of the schools rely on unqualified TAs or learning support assistants (LSAs) who have no specific qualifications or training to support SEN students (Ainscow, 2013). It entirely depends on school management how effectively they use their TAs/LSAs.

METHODOLOGY

This study is based on qualitative research paradigm as multiples of realities exist in any given situation by the individuals involved in the research situation (Miles and Huberman, 1994). This is the naturalistic/constructivist approach, also known the interpretative approach or the post-positivist or post-modern perspective. Semi-structured interviews technique was the tool chosen for data collection according to the nature of enquiry and socio-cultural constraints. The methodology for the interview data was content and theme analysis, a technique that inferences by objectively and systematic coding of the interview scripts into categories (Chadwick, et. al, 1984). The school was randomly selected for nine intensive interviews; headteacher, deputy-head, SENCO, teachers and TAs. The small sample size was decided due to the small scale project however it does not invalidate qualitative research because issues raised and discussed in the interviews in order to focus more sharply on the perceptions of the interviewees (Miles and Huberman, 1994). The interviews were coded according to respondents and subject; HT; DH; CT1; CT2; CT3 SENCO; TA1; TA2; TA3; for reference to identify the interviewees. The interviews were transcribed in verbal and non-verbal thoughts of my interviewees.

Data Analysis and Discussion

The study explored three aspects of interviewees' lives; their personal beliefs, values and expectations; classroom experiences and interpretation and professional training and its impact on their professional development. The codes were pattern, descriptive and interpretive main-codes and sub-codes as shown in Table 1.

The pattern codes described the interviewees' perceptions of disability derived from their values and belief systems and individual experiences. The descriptive codes described the types of learning difficulties and support; the interviewees' identified and provided to the children that they considered the causes of learning difficulties additionally their evaluation and provision of National Curriculum and Code of Practice. Grouping the codes according to the areas of agreements and exceptions, the following broad themes were emerged;

1. The teacher's perceptions of SEN

The teachers perceived disability in terms of medical conditions, visible physical/sensory or mental conditions that required medication and left permanent impairment. These were discerned certain models of disability described by Sandow (2004), the medical, magical and moral models respectively. Four interviewees, explained disability in terms of a 'within child' syndrome or nature.

It is in a child nature, when a child developed his/her nature then none of the teachers can change it because nature does not change. CT1. PD- CF

Table 1. The codes were pattern, descriptive and interpretive main-codes and sub-codes

Type of Codes	Main Code	Mode of Code	Sub Code
Pattern Code	PD	Perceptions of disability	
		▪ Medical condition	PD- MC
		▪ Within- child factor	PD-CF
		▪ Environmental factors	PD-EN
	DSN	Definitions of special needs	
		▪ Physical impairment	DSN-PI
		▪ Sensory impairment	DSN-SI
		▪ Mentally disabled	DSN- MD
		▪ Slow learning/learning disabled	DSN-SL
		▪ Special attention	DSN- SA
Descriptive Code	TLD	Types of Learning Difficulties	-
		Slow learning	TLD-SL
		Physical disabilities	TLD- PI
		Visual impairment (plus blindness)	TLD VI
		Hearing impairment (plus deafness)	
		Mental disability	TLD- HI
		Reading writing and mathematics	
		Speech and language	TLD MD
		Emotional and behavioural	TLD- RWM
		Gifted and talented	TLD-SpL
	TSP	Type of Support Provided	TLD-EB
		Home/ school partnership	TLD-GAT
		Counselling	
		Reading Recovery programmes	TSP-HSP
		Individual Support Plans	TSP-C
		Ability setting and in-class support	TSP-RRP
		Withdrawal for individual tuition	TSP-ISP
			TSP-AS
			TSP- WIT
Interpretative Codes	CLD	Causes of learning Difficulty	CLD-P
		Lack of parental awareness	CLD-LPA
		Environmental influence	CLD- ENV
		Natural and Medical factors	CLD-NMF
		Inadequate educational resources	CLD-IER
		Poor teaching	CLD-PT
		Interviewees' evaluation	-
	ITE	Motivation	ITE-M
		Inadequate teaching resources	ITE-ITR
		Inadequate teaching training	ITE-ITT
		Inadequate SEN funds	ITE-ISF
		Continuing professional development	ITE-CPD

A child nature could be moulded by individual attention and conducive learning environment with his/her peers, because learning difficulties might be a result of social deprivation, parental indulgence, poor teaching and inappropriate curriculum (Dyson, 2012). The interviewees recommended special schools for severe SEN children.

2. Definitions of SEN

The definitions were based interviewees' training, experience and individual perceptions. These were combinations or influenced by old and narrow concepts of SEN.

SEN children, who are slow learners or mentally/sensory disabled/handicapped or need help during lesson. DH, DEF-SL, DEF-SI, DEF-PI

However, the SENCO had understanding;

It is a kind of support/help for children who having any type of learning difficulty/ies. SENCO, DEF-SA

TAs and teachers lacked of understanding their responses. Their perceptions of SEN were contradictory, restrictive and narrow. Although they agreed upon emotional and behavioural difficulties affected child's learning. Similarly Croll and Moses (2009) argue that the mainstream teachers lacking awareness about SEN and its provision that reflects through their lesson plans, class room management and resources. However majority of children experience temporary learning difficulties which can be quickly remedied by additional help from the class-teacher or with the assistance specialist TAs and/or some curricular adaptations.

3. Types of Learning Difficulties

a. Slow Learning: (SL)

The sample referred slow learners as SEN students;

These children cannot go at the same rate so we arranged secluded class for all subjects SENCO. TLD-SL

The slow learners always stay behind from their peers (Halliwell, 2011). Schools arrange this group or one-to-one support within school hours. Halliwell argue that the content of the curriculum should specifically design to meet the needs of SL with delayed or seriously disrupted general development.

b. Reading Writing and Mathematics Difficulties (RWM)

The study found children with specific learning difficulties in reading, writing, and mathematics:

Some students mostly girls, find science and mathematics are difficult subjects. HT. TLD-RWM.

They considered these subjects as stereotypes that the boys are more interested than girls. The school has a number of boys with learning difficulties in these subjects. Most SEN arise from curricular difficulties, such as gaining access to the curriculum or problems in grasping and retaining concepts and skills in areas such as English language, mathematics, science and the expressive arts. The causes of such difficulties are most likely to lie in a mismatch between delivery of the curriculum and pupils' learning needs (Halliwell, 2011).

c. Speech and Language Difficulty (SpL)

The assumption for language difficulty was seen in terms

of English language because the school is situated in a mixed-racial cultural population; lack of proficiency in English language is a major problem, rather the children's lack of proficiency in their mother-tongue is more disturbing difficulty. HT TLD-SPL

Nevertheless, the Code of Practice (DfES, 2001:3) declared children must not be regarded SEN solely because the language of their home is different from the language in which they will be taught. However, the teachers and TAs put them same category of SpL difficulty;

They can't read English reading books how their reading skill will improve. CT1. CT2. TS2. TLD-SPL

However some schools have SpL units and therapist/specialist to assess child's SpL.

d. Emotional and Behavioural Difficulty (EB)

Bullying, aggression, disruption, withdrawal and restlessness were some of the identified EB. Some teachers were keen to investigate the causes with school councillor;

I have pupils with certain emotional and behavioural problems. Majority of these pupils from broken homes, their main concern is poor concentration. CT1 TLD-EB

SEN may arise from delays or disturbances in emotional and behavioural development family life which may affect the individual's capacity to learn.

e. Difficulty due to Exceptional Ability (GAT)

The interviewees were eager to provide data of their GAT children;

These children are challenging if the work is not set according to their calibre. CT3. TLD GAT

There was good balance management of the class work;

GAT children are all rounders. We encourage them by giving more challenging work not to feel them dejected. CT1. TLD-EB.

Thus GAT students were more challenging for teachers and TAs because they have top set one group rather than specific GAT. Halliwell (2011) recommended that the content of the curricular areas or courses is expanded to ensure that abler pupils are suitably stimulated and challenged to reduce their disruption. Most of the interviewees were more comfortable, discussing general type education issues rather than specific SEN issues.

4. Types of Support Provided to SEN Children

a. Home School Partnership (HSP)

The interviewees emphasised the idea of HSP in addressing learning difficulties.

We celebrate open days and invite parents to discuss about their children plan accordingly. CT3 TSP-HSP.

However, Norwich (2013) dealt a comprehensive discussion about the importance of home, school and LEAs relationship to make SEN provision more effective. 'The schools' LEA failed in developing successful co-ordination because only schools' efforts are not enough for successful inclusion,' the sample complained.. Thus the interviewees did not show any positive attitude to develop home, school and LEA partnership.

b. Counselling (C)

The interviewees believed on counselling therapies to restore the children's self-esteem and confidence, thereby reducing/eliminating children's learning difficulties.

We have the facilities of school counselling for children with emotional and behavioural issues. CT1. CT2. TSP-C

A child statement is the only required document that gives a picture of his/her SEN. The LEA sends a child's with statement and requests the school counselling for support therefore most of the schools rely on LEA's statements only. Additionally Halliwell (2011) suggests that the Individual Educational Plan (IEPs) should be prepared with short and long term goal to be attained with indications of: expected time-scale; approaches to learning and teaching; assessment and recording; staff involved; resources; learning contexts; and involvement of parents.

5. Special and Specific Intervention Programme

a. Reading Recovery Programme (RRP)

We have special intervention reading-classes under the supervision of SENCO, teachers and TAs such as guided reading. SENCO. HT. TSP- RRP.

We divided students in groups; gifted, advanced, average and SEN. CT1 TSP-RRP.

However, it can be argued that the teacher will find hard to manage four groups at a time because there are usually one TA per year. TA job is to assure task completion and signed students' Reading Records (Ainscow, 2013). There is

no proper timetable for Reading recovery programme the students supported by SENCO or TA (Halliwell, 2011). Nevertheless this situation is varying from school to school and their individual class room and staff management.

b. Individual Support Programme(ISP)

The school adopted ISP for specific subject learning difficulties.

We arranged separate booster sessions for SEN students like reading, writing or mathematics and science. TA1. TA2. TA3. SENCO TSP-ISP

This one-to-one support is very worth while for individual improvement. The school had very positive response from the students and their parents. It positively affected a child's academic progress. A child's dependency is eliminated and a sense of self-confidence and reliance and habit is developed (Halliwell, 2011).

c. Ability Setting and in Class Support (AS)

The teachers acknowledged that children learn at different levels of achievements;

The class teacher allocates TAs for individual or group support, sometimes in one lesson there are 2 to 3 TAs. HT. SENCO. TSP-AS.

The teachers allocate TAs according to the needs and abilities of the children. However (Ainscow, 2013) criticised that the mainstream schools over or misuse their support staff because most of them are inexperienced and unqualified for SEN support.

d. Withdrawal (WIS)

Withdrawals of students from classroom make the classroom management easy for teacher. However; withdrawal students are supported by TAs in a reserved room. CT1. HT.DH.WIS

This constant withdrawal of SEN students put negative impact on their learning, sharing and team work abilities (Halliwell, 2011). To minimize this practice an effective lesson plan is vital with combinations of varieties of tasks according to the calibre of SEN students within the classroom. Although very few SENCO support class-teachers in lesson planning their main focus are SEN support (Ainscow, 2013).

6. Causes of Learning Difficulties

a. Lack of Parental Awareness and Lack of Interest (LPA)

Lack of parents' involvement and interest in their child's education is the main cause of learning difficulties they always complaining lack of time and other engagements.

Most of the parents do not understand the importance LPA in their child education. They always lacking of time and even don't turn-up on parents-meeting. HT. DH. CLD-LPA

The rights and responsibilities of parents should respected and they are actively encouraged to be involved in making decisions about the approaches taken to meet their children's SEN. Parents can do much to support the work of the schools when the teachers involve them in assessing and reviewing SEN; making decisions about the content of the curriculum; and monitoring and reporting on progress as observed at school (Dyson, 2012). However, sample teachers and TAs were disappointed with parental response.

b. Environment Influence Peer-group Pressure (ENV)

Children home and social environment contribute a significant role in pedagogy;

Peer groups and environment affect the child's performance and ability. CT3 CLD ENV

Home and social environment have positive or negative effect on a child's abilities usually children from split families have negative impacts. The study found more negative aspects in terms of parental attention and interaction with students' families.

c. Inadequate Provision of Educational Resources (IER)

The interviewees complained about lack of educational resources to prepare their lessons.

Sometimes the borough delays the provision of resources, or the school lacks funds. HT, CLD IER.

This is one of major issues now that LEAs have failed in the provision of teaching and learning resources to schools on time (Ainscow, 2013). As a result, the school has struggles for an effective SEN provision. There was an impression among the teachers and TAs that it is the responsibility of the head and deputy to make this supply possible in time.

e. Inadequate SEN Funds (ISF)

ISF obstructed the way of successful SEN provision.

First we were getting individual SEN funds per child but now it is for the school therefore its insufficient for SEN students. HT, DH, SENCO, CLD-IER

However, the concerned school's LEA mostly delays the provision of funds and resources that causes ineffective SEN provision and management (Ainscow, 2013). Both the head and deputy were not happy with the present allocation of funds, resources and revised policies of its provision. The government revised their strategies due to increased number of SEN students every year. The interviewees were in favour of individual SEN student funds. Frederickson and Cline (2009) further supported the argument that teachers in the mainstream are confident in their ability to implement inclusion effectively. Nevertheless, the main barriers are the inadequate funds and educational resources.

f. Poor Teaching (PT)

A poor teaching methods increase children's learning difficulties. The system could be developed to raise the profile of the profession, increase professionalism and competency and ensure good practice.

A lesson is interesting, no matter how dull the child is there will be an aspect of lesson that a child enjoyed. CT1, CLD PT.

The sample school has all qualified teachers. There is no proper arrangement for their training or refresher courses to introduce them to the new strategies and techniques to make their lessons more interesting for SEN students. Their lesson plans mostly rely on the availability of material and their knowledge. The teachers had PGCE or GTP without specific SEN qualifications. Similarly TAs had no proper training and qualifications only few have considerable experience working with children but not with the SEN exclusively. Schools rely on TAs for SEN provision (Ainscow, 2013). Interestingly the school avoid hiring a supply-qualified teacher in teachers' absence they give the class under the supervision of unqualified TA or split the students into groups (5-7) and send them to different classrooms.

6. Teacher evaluation and Implementation of National Curriculum/Code of Practice

The National Curriculum and Code of Practice affect teaching practice. In this regard, a theme that constantly emerged in all interviews was that of teacher motivation, resources availability, teacher training curriculum, funds for SEN students and professional development. Most of the teachers were interested in the SEN classroom arrangement and SEN lesson plans.

We need workshops and seminars and refreshers courses to merge Code of Practice in National Curriculum. CT1 CT2 CT3 TA1 TA2 TA3, ITE-CPD.

Golder et al., (2009) recommend teachers in-service training regarding necessary understanding and skills for SEN provision to make a bridge between the National Curriculum and Code of Practice for an inclusive setting. Therefore teacher-training curriculum in colleges/universities should be revised to include generic broad based SEN as a compulsory element in initial teacher training. Further tailoring of the curriculum to meet individual needs is possible through a degree of flexibility within programmes to enable students to select subject areas of individual relevance.

CONCLUSION

This study concluded that teachers do not regard the SEN that helped in identifying children with special needs. The study theorise lack of funds, resources, SEN trained staff and partnership between parents, school and LEAs blocking the effective provision of SEN. Additionally it is vital to involve SEN qualified teachers from mainstream for an effective

review of inclusion policies and practice. They are the real means or policy makers for the evaluation and review of existing policies to be effectively implemented in the mainstream. Every policy has been judged by its effective provision in practical environments. Because we have to start asking what is wrong with the school rather than what's wrong with the child! (Ainscow 2013:17).

This small-scale research study has limited scope of generalisation because the qualitative data analysed does not allow many strong conclusions regarding differentiating the various SEN issues described here. The sample hardly interpreted an accurate picture of the present situation of policies and practices. Inclusion represents a complex system of education and need more time and practice to absorb each other. However, it may be concluded, that inclusion has not gained much ground in the country since the mid 1990s, it seems that SEN needs more practical reforms and policy organisation. Educational segregation provision in mainstream presented mixed views, that a gradually increasing number of parents want their children with SEN to attend a regular school. Furthermore, inclusion requires a rethinking of the role of SEN in mainstream; why some students are failing to learn, and the teachers fail in effective teaching. The present policies of the schools are mostly theoretical and formal documents. Overall, the research found no evidence in the school of systematic discrimination or unfavourable treatment of students with SEN in the classroom setting or in admissions process. For students with SEN there were no statements, schools simply did not have an opportunity to do this, as information about pupils' abilities and needs was not available when the admissions criteria were being applied. All schools respected the legal position of SEN students and arranged special provision for such students. To conclude this discussion both opponents and proponents of SEN can find scattered research to support their respective views, since the current research is inconclusive. Opponents point to research showing negative effects of the provision of SEN, often citing low self-esteem of students with disabilities in the general education setting and poor academic grades. For those supporting inclusion, research exists that shows positive results for both special and general education students, including academic and social benefits. Currently, the issues of SEN appear to be under discussion. The practical definitions of government policies supporting the practice, schools need to continue their search to find out the ways to include SEN students in the mainstream schools successfully.

REFERENCES

- Ainscow M (2013). From special education to effective schools for all in: Florian, L. (Ed); ***The Sage Handbook of Special Education; Sage Publications London (SPL)***; pp. 146-159.
- Chadwick A, Bahr M, Albrecht L (1984). Social Science Research Methods; Prentice Hall, New Jersey.
- Croll P, Moses D (2009). Pragmatism, ideology and educational change: the case of special educational needs. British J. Edu. Studies. 4 (6):11-25.
- (DfEE) Department for Education and Employment, (2001). Code of Practice on the identification and the Assessment of Special Educational Needs; DfEE, London.
- (DfEE) Department for Education and Employment, (1994). Excellence for all children: meeting special educational needs; DfEE, London.
- (DfES) Department for Education and Skills, (2001). Special Educational Needs Code of Practice; DfES, London.
- Dyson A (2012). Special educational needs and the world out there in: ***Contemporary Issues in Special Educational Needs***. Open University Press London (OUPL); pp.13-27.
- Farrell P (2011). Special education in the last twenty years: Have things really got better. British J. Sp.Edu. 28 (1): 3-9.
- Frederickson N, Cline T, (2009). ***Special Educational Needs, Inclusion and Diversity: A Textbook***; Open University Press, London.
- Golder G, Norwich B, Bayliss P, (2009). Preparing teachers to teach pupils with special educational needs in more inclusive schools: evaluating a PGCE development. British J. Sp.Edu. 32 (2): 92-99.
- Halliwell M (2011). Supporting Children with Special Educational Needs; David Fulton Publishers London.
- Legislation and Guidance in relation to SEN (2005-06)
- <http://teach.newport.ac.uk/sen/SEN0405/Law/Legislation0405.htm> (Retrieved 7/1/13).
- Miles B, Huberman M (1994). Qualitative Data Analysis; Sage Publications London.
- Norwich B, (2013). Addressing tensions and dilemmas in inclusive education: living with uncertainty; Routledge London.
- (Ofsted) Office for Standard in Education (2007). A survey of the provision in mainstream primary and secondary schools for pupils with a statement of special educational needs related to specific learning difficulties; Ofsted London.
- Sandow S, (2004). Whose special need? in: Sandow S, (Ed). Whose Special Need? Some Perceptions of Special Educational Needs; Paul Chapman Publishers London (PCPL); pp. 153-159.
- UNESCO Report, (2010). http://www.unesco/report.html/0000_231 (Retrieved 7/1/13).
- Warnock M, Norwich B, Terzi L (2010). Special educational needs: a new look; Continuum Publishers, London.

Review

Rethinking Teaching: How ICTs learning environments Can and Should Completely Alter Your View of Education in Architecture

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The expanding use of new information technologies has included both initial and maintenance professional education. The present article explores how these new information and communication technologies (ICTs) are transforming the process of professional education, delves into the primary sources of that transformation, and discusses how instructors should learn to teach using the new technologies. Particular attention is given to the increased potential for collaborative work that crosses international and cultural boundaries, molding studies and exercises to the interests of students and teacher rather than solely to prescriptive mandates by external authorities, and altering the pedagogical process to fully utilize the vastly more accessible body of knowledge that has resulted.

Key words: Architecture, ICT, Pedagogy, Professional education, teaching and learning.

INTRODUCTION

ICTs seem to have influenced every area of our society, but it has had very little effect on our conceptions of teaching and learning. We don't lecture to our children; they need to learn by doing, by exploring their world under the guidance of adults who can help them reconstruct their experiences and thus make sense of them. We don't lecture to the people who work for us; we let them do their jobs and try to help as we can. How about us as educators today? There are some studies (Zhao and Frank, 2003; Becker, 2000) challenge teacher training programs should not "teach prospective teachers about technology, but instead, should use technology throughout the programs so that prospective teachers not only gain skills in working with equipment and software but also experience how technology can support the exploration, organization, and communication of knowledge" through an emphasis on natural and discovery approaches to learning in a technologically astute. ICTs have many benefits and disadvantages shifting a new ways of learning and teaching in terms of pedagogical improvement.

In these views, schools education err by training future teachers to use a technology and equipments rather than instructional approach to plan, design, execute, and feedback, to eschew direct instruction in favor of either cooperative or collaborative learning and to pursue minute goals like operating courseware and amusing yourself in classroom (Means, 2004). Instructional technologies should also shoulder a large responsibility for the failures of our education reform. Teachers' inadequate technology-base knowledge, their misguided focus on technology integrated into curriculum reform and teacher-centered classroom curricula, and their attitude of complacency shaped by a uniform as contributing to students' lack of achievement and learning.

The response to this research question requires a review of literature regarding the use of information and communication technologies (ICTs) in professional-level education, especially in architecture. This literature will be

argued and examined in the context of learning to teach using ICTs and the broad contextual conditions of learning to teach with ICT as reported in this literature and document analyzed. Identify issues associated with the use of ICTs in architectural schools and what is missing that makes these issues a significant area of research. An attempt is made to discover issues that affect and impede the effective use of ICTs in architectural schools and why those issues are of significant interest to researchers.

Sharing Information with ICTs Sharing Learning Environments

The ever-expanding use of new information and communication technologies in education has made both initial and continuing professional education more readily available in almost all disciplines. A quick search of the Internet using one of the standard search engines in almost any discipline reveals online offerings from major universities all over the world of courses that can be applied to such purposes as maintaining professional licenses. A Google search on today's date (May 05, 2007), for example, on the exact phrase, "architecture continuing education," produced 436 unsponsored hits, that is, simple links to sites that have not paid to be prominently displayed. A cursory review of these sites strongly indicates that most of them offer online courses that meet the academic and accreditation requirements for contributing to obtaining or maintaining a license to practice architecture in some region or jurisdiction. The offerings are from professional graduate schools at both public and private institutions of higher learning as well as from commercial, for-profit organizations that have found a ready market for such courses.

The same search turned up no fewer than 46 "sponsored links," that is, paid advertisements from various institutions of professional continuing education that include architecture in their offerings. They ranged from New York University's School of Continuing Professional Education to an online Guide to Continuing Education, named simply, "GuidetoContinuingEducation.com," which appears to be a community effort by a large number of both public and for-profit organizations that offer continuing education in a wide variety of fields.

Another source of continuing professional education online appears to be associations of such professionals themselves. On the very first page of the May 06, 2007, Google search, this writer observed a link to the site of the American Institute of Architecture. At that site can be found numerous offerings of online courses and courses that can be taken by attending a variety of institutions. The profession, at least in the United States, appears to be in the vanguard of offering professional education online.

Drilling down into the links produced by this single search clearly will reveal hundreds, if not thousands, of opportunities for continuing professional education offered online to students from all over the world. Clearly, this is a concept that has "caught on."

Similarly, a review of both graduate and undergraduate course and library offerings at major universities around the world reveals that the world of professional education, and many of the professional educators themselves, have eagerly grasped the opportunities for sharing knowledge that have grown out of the Internet. Faculty members post course syllabi on the Internet for their students to access readily. University libraries, including, of course, the library at the University of British Columbia, offer online access to many of their offerings. One or more of the major commercial search engines has begun a project to digitize a very large volume of printed material. There seems almost no end to the drive to digitize information online.

This is not surprising in a way. After all, the Internet itself was the result of a desire by professional educators and researchers, most of them employed at universities, first in the United States, but subsequently, around the world, to share knowledge quickly and easily. So, we are looking at a phenomenon that is, at the very least, maturing rapidly both with respect to formal, in-university training and initial and continuing education of professionals in almost every conceivable discipline.

Interpreting Technology Uses from Teaching and Learning Perspective

This, of course, is but one example of the use of emerging Information and Communication Technologies (ICTs) in professional education. Ever more sophisticated ways of sharing information are constantly under development, knowledge is stored and transmitted with increasing density, ways of depicting information graphically are becoming ever more precise, "higher definition," the developers call it, and these technologies clearly have applications in such professional fields as architecture and engineering. The question, then, is whether those who educate professionals, and their students, are using these tools to maximum benefit. Again, it should not be surprising to learn that a large body of studies on the effective uses of ICTs has grown up. The purpose of this research is to explore some of the relevant literature in that field with a view to discovering how effectively new ICTs are being used in professional education and how they may be used more effectively.

It is entirely possible that the emergence of new information and communication technologies in the last several decades has had, and will continue to have, an effect on the attitudes of educators regarding both the practice of their profession and the substance of their own particular disciplines (Milliken and Barnes, 2002, p. 234). Becker and Ravitz observed in 1999 that, Teachers' pedagogical philosophies and practices are not static. Despite patterns of teaching that persist across decades..., the climate in which teachers practice their craft sometimes contains discourse that encourages or pressures teachers to modify their teaching styles and even their underlying beliefs about good teaching. (p. 356).

Cuban (1993) had noted a tendency for teaching practices to endure for very long times, but others, among them Brooks and Brooks (1993) have noted a consistent tendency toward discourse that encourages such practices advocated by Dewey (1916) and Piaget (1952), and, more recently, Pea (1996). Summarizing these practices, Becker and Ravitz outline them as follows:

- designing activities around teacher and student interests rather than in response to an externally mandated curriculum,
- having students engage in collaborative group projects in which skills are taught and practiced in context rather than sequentially,
- focusing instruction on students' understanding of complex ideas rather than on definitions and facts,
- teaching students to self-consciously assess their own understanding, (and)
- engaging in learning in front of students rather than presenting oneself as fully knowledgeable. (p. 356)

These are activities that are compatible with the "constructivist" theories of education espoused by some of our most innovative and influential educators. Obviously, both the state and a given profession have considerable in assuring that certain materials are covered in a curriculum. No one is arguing that the basics not be covered in either initial professional education or continuing professional education in favor of a freewheeling curriculum based entirely on student and teacher interests alone. That clearly would be tipping too far in one direction. But within the context of assuring that necessary facets of the discipline be fully covered, it should be possible to design courses and entire curricula that engage the creative energies of both students and teachers in the learning process.

It seems obvious that the new information and communication technologies have an important contribution to make in this respect. And, a review of both theory and practice in education reveals that many educators, in a great many disciplines agree. Professional education is no exception to the trend of incorporating these technologies in courses both at the professional school and online. Architectural education poses an interesting challenge: not only is the discipline being affected by the emerging information and communication technologies, there remains within the discipline contention regarding what the objective of architectural education should be. Some advocate that it should train primarily for creativity so that buildings become works of art. But another school advocates that the "nuts and bolts" of the discipline, that is, how to get a project completed on time and within budget should be the primary objective (Architectural Education, 2005). The role of ICTs in architectural education will clearly be developed, and be influenced, by the interactions between these different schools in the discipline.

Changing Educational and Professional Standards

Clearly, though, new developments and technologies for sharing information and communicating with others will change education in important ways. Abbott (2000) noted as much in the title of his small volume: ICT: Changing Education. Among the changes he notes are:

1. that the very definition of "literacy" is being changed to include an understanding of diverse means of transmitting literature,
2. that geographical separation is ever becoming less important in the formation of "groups,"
3. that the very purpose of school may be changing as a direct result of ICT making the home or some other setting the base of education technology rather than the school, and
4. that computers are changing the ways in which education takes place by concentrating the focus on interaction between participants in the process rather than simply on transmission of knowledge (pp. 1–2).

Abbott goes on to observe that, Links between educational theory and the use of ICT are made, and the notion of post-geographical learning is proposed: learning, that is, which takes place through the online social interaction of groups whose members may not reside in physical proximity. (p. 2)

Abbott was focusing primarily on literacy training and mostly concerned with the ways in which ICTs are changing the

educational environment for children and adolescents. But it is clear that such changes are taking place as well in higher and professional education as well.

A wealth of material discusses ways in which colleges, universities, and professional schools can use ICTs in expanding and making more effective their curricula. Among the researchers who have addressed such issues are Benenson and Piggot (2002), who noted the value of technology and a subject for education itself; Carbone (2002), who advocated a studio-based model for instruction in information technology (a concept to which professional architecture educators might well refer); Dirckinck-Holmfeld and Lorentsen (2003), who explored changes in university teaching practices and perspectives as a result of incorporation of ICT technologies; Pollalis, Huang, and Hirschberg (2004), who compared methods and outcomes in two courses that differed in both purpose and uses of ICTs; and Fallows and Bahnot (2005) who, together with a group of collaborators, explored a variety of quality issues in teaching and research at the university level.

This list could be expanded almost indefinitely, because this is a field that has generated a huge amount of research and very recently. It seems likely that one reason for this wealth of research is that the development of ICTs has itself generated a great deal of just plain wealth. And that wealth is looking for things to do and for ways to generate ideas to generate even more wealth in what has become a dominant global industry.

One key, however, to understanding the importance that the new technologies have assumed in education, is found in this observation by Fallows and Bahnot in the introduction to their collection of scholarly works on the subject.

As academics we have come to view ICT as such a basic toolkit that it is almost impossible for us to envisage how our predecessors performed their various duties of teaching, assessment and research without it. But, of course, the previous generations were taught and did learn without technology - some would even argue that the teachers were able to get on with their responsibilities with greater efficiency than their modern counterparts. Education thrived without everyone having to develop the additional proficiencies that are deemed essential in the twenty-first century. However, most of us are not Luddites; we are willing to adapt to changing times even if not always keen to embrace every element of the new developments.... (pp. 1-2).

Among the questions they attempt to answer are the following:

- Can the use of ICT-based approaches enhance the quality of learning and teaching?
- Does the use of ICT-based approaches enhance the quality of learning and teaching? (Or are we using expensive equipment to achieve no more than our predecessors did with cheap and dusty chalk and talk?)
- How does the use of ICT-based approaches enhance the quality of learning and teaching?
- Are we (as teachers and learners) fully enabled to maximize the quality of the benefits that can arise from the use of ICT? (p. 2).

Concerned primarily with quality of education in the United Kingdom, Fallows and Bahnot deal with everything from uses of technology to enhance the learning experience to ways in which to counter the proliferation of sources students can draw on from the Internet to avoid doing their own work. But the conclusions that they and their contributors reach are several:

- The technologies are here to stay and by and large enhance the capabilities and educational experiences of both educators and students.
- Quality will be increasingly important to students, who are coming to see themselves as much as customers as students.
- Ensuring that online and interactive offerings exhibit quality will be a continuing challenge for educators, and that meeting it will be carried out largely under the scrutiny of the customers (Fallows and Bhanot, 2005).

Barriers to e-Education

For the purposes of the research here, one of the most interesting articles in the Fallows and Bhanot (eds.) volume is by Gillian Jordan and Jill Jameson (pp. 61–73). In their article, titled “Unlocking Key Barriers for Staff on the Path to an e-University,” they note a near “stampede” to convert course content of all types for online delivery among universities. In such a rush, quality obviously becomes an issue, as do the things that prevent individual faculty members and disciplines from entering the current. They develop a “key barrier matrix” and identify a number of such barriers that characterize their university setting. They believe these to be generalizable, and they are worth noting here.

- Institutional Distractions: Events that are occurring institution-wide. In their own case, the university itself was undergoing a major restructuring aside from the application of ICTs. In their view, the key to unlocking this barrier is to stay focused on one’s own objective.
- Confused perceptions of leadership and decision-making: Over-involved strands of management responsibility contribute here. The key is to simplify and make clear; achieve consensus.

- Skills and staff-development issues: It is necessary to identify at the beginning the skills needed, the people who have them, or, lacking them in some respect, to be willing to develop them along the way.
- E-critics, communications, and overload problems: In this category fall such issues as perceived threats to their futures by some faculty members arising out of the necessary renegotiations of pedagogy and authority. Also critical is simply the added workload of participating in the project. Good communication and committing sufficient additional staff resources to relieve onerous workloads is critical to dealing with this issue.
- Quality problems faced by staff: Staff, while working hard, may very well be tempted into some shortcuts. The key is a simple commitment to quality and avoidance of such shortcuts. Make rules about it and be sure to get everyone to sign on to the commitment.

Others have explored the potential of, and the potential for disruption of the education process, that is inherent in the move to online curricula. Newman (1994), for example explored some of the ways in which computer networks can present both opportunity and obstacles to the educational process. Cuban (1987, 1988, 1993, and 1997) has devoted considerable energy to both the promise and the perils of new information technologies in the classroom. Overall, he views their adoption as inevitable, but not without risk. Dale, Robertson and Shortis (2004) similarly view the adoption of these technologies in education as inevitable, but offer a number of cautions and advice on how management policy and pedagogy should interact at the institutional level to expedite the process.

In one of a series of such works published by Routledge Falmer in England, Loveless and Ellis (2001) have compiled a volume of articles on the ever-changing picture of ICTs, pedagogy, and curricula. Overall, the editors and their contributors argue, the new technologies will not catalyze radical change in education merely by their presence. Rather, they see these technologies as changing education in a continuous process, beginning with efforts of varying success to fit them into existing models of education and followed by a period in which the technologies will come to be used in ways that were not expected by anyone.

The editors were motivated in part by what they viewed as a disconnect between the ways in which ICTs are being introduced at the institutional level and the ways in which they are being used by students, others outside the educational institutions, and even individual teachers themselves. In their words,

We felt that the introduction of these technologies into classrooms and schools is having an impact on teaching and learning that does not necessarily reflect the ways in which children and young people experience and appropriate the technology in their lives outside school. Neither is the prophetic claims being made about the role of ICT in learning being realized in classroom practice as a whole. There was a shared concern that the nature of teacher training in new technologies has focused more on skills and techniques. Radical change requires a deeper understanding of the challenges ICT makes to ways of knowing curriculum subjects and of the changes it might bring to the practice of the profession in terms of time, place and authority. (pp. 1-2)

Interestingly, they argue that the acronym that has become almost a word in the language (at least the language of professional educators and computer jockeys), ICT, is problematic. They argue that the uses for what has come to be described by this term reach far beyond merely storing and communicating information. In their view, the scope and uses of these technologies are so widely varied across users and disciplines that we do ourselves a disservice by limiting them with this description. Indeed, they argue that the description itself has too much of an Anglophonic tone and that it also builds a detrimental image of what constitutes literacy in a wildly varied world (p. 2).

In a 2000 article in the *Journal of Technology and Teacher Education*, Loveless argued that information and communication technologies are not neutral tools for learning but are instead is “cultural artifact” in the hands of both students and teachers. As such they are affected by, and themselves affect, the culture in which they are found. These differences are likely to be profound in some cases (p. 380), a concept to which we will return when considering the proposed project in Taiwan.

A number of researchers have addressed the issues of quality in education and how ICTs can affect it either negatively or positively. Among the more recent publications that address these issues are those by Davidson (2003), Davis et al. (1997), and two major compilations by the United Kingdom Department for Education and Skills (2002, 2003). The general view expressed in these works and others like them is that the new technologies hold considerable promise for enhancing the quality and availability of education in virtually all areas, but that they cannot simply be grafted onto the old ways of doing things. They will demand their own accommodations, but when those are recognized and used to advantage, the advantages will be manifold.

We can probably already see that a proliferation of unexpected uses of the technology is indeed the case, since the initial view of the new information and communication technologies was simply that they would be a way to transmit and store information more efficiently. They were not initially seen as vehicles by which the roles of students and teachers would be dramatically altered. Yet they are effecting such changes quite often.

Professional education in architecture, of course, is not immune to the changes, and in many areas schools of

architecture has eagerly jumped on the ICT bandwagon both in their traditional course offerings and in courses designed to meet the continuing education needs of professional architects and designers. This enthusiasm is reflected in a flurry of publications on the subject, both books and articles in scholarly and professional journals in the field. Whole conferences have been devoted to the uses of information and communication technologies in architectural, engineering, and design education.

Indeed, a review of such conferences reveals not only a number of conferences, but several separate organizations devoted to the study of, or advancement of, the use of information and communication technologies in professional education in architecture. Cheng (1996, 1997, 1998, and 1999) has been particularly prolific in advocating a stronger role for ICTs in architectural education. Her works have both described and advocated the use of ICTs in studio-based instruction and in instruction in graphic design.

Medraza and Vidal (2002) described an exercise in “concept mapping” that utilized an ICT-based learning environment characterized by a specific theoretical framework built up from “theory bits,” “individual and collaborative exercises,” and “a web system that provides representation of the collective work.” The subject matter for their study used five texts on architectural theory and examined how students treated them in this collaborative environment. Their conclusion was that the system yielded a pedagogy that could be extrapolated to most other disciplines. But they offered this caution:

The effectiveness of this learning environment, however, relies on the equilibrium between technology and pedagogy. Technology must be subsumed under a pedagogic program, whose ultimate goal is to develop the capacity of students to think creatively in collaboration, using information and communication technologies. (p. 387).

Chiu (2002) explored the organizational ramifications of using ICTs in design education. Holland and de Valasco (1999) explored the potential for ICTs in building a network of international studies in engineering, while Kvan et al. (1999) have advocated the use of computer technologies as a means of improving collaborative study and work in design. Other studies and presentations advocating the expanded use of ICTs in professional education, especially as instruments that encourage collaboration among professionals, include Mandour (2004), Schon (1987), and McCormick (2004).

A Broad Stream of Innovation and Study

From the above, it can be seen that the stream of study and application of information and communication technologies in education, and even specifically in education in architecture, engineering, design, and related fields is quite broad. A recurring theme in all the literature on this subject is that these technologies cannot simply be grafted onto a discipline, an educational institution, or into a culture without there being profound effects on all of them. Those effects will also be reflected in the technologies themselves and the cultures in which they are found.

Hancock (2002) argues we should take the position that teachers who are expected to redefine their ideas about teaching and learning must have opportunities to examine instructional methods in light of reform recommendations and current information about learning. It presents a developmental picture of a strategy for creating “beliefs” about how students learn and who should learn and what is important to learn, progressing from theoretical underpinnings of integrating technology with learning and instructional design to the issues of teacher preparation.

It is a characteristic of studies of ICT in professional education that they have been conducted in societies that are largely stable both politically and economically, and that have rich histories of professional education in just such settings. Taiwan is a society that is considerably less stable, and while there is a history of professional education in that society, everything there is done in the context of a society and an economy that has undergone rapid change in the last half century.

Until recently, the government of Taiwan was not formally democratic, for example, though it was certainly disposed toward alliances and affinity with the western democracies. That has been in spite of an expressed determination over the decades by the government of the mainland that the island would one day be reunited with that of the mainland. Indeed, for most of the last several decades, and even today, the official position of both governments has been that there is only one China.

Today, Taiwan is formally a democracy, with multiple political parties, a formidable domestic economy with strong technological manufacturing roots, a growing population characterized by both descendants (and still some survivors) of the retreat of what were termed the Nationalist Chinese and native Taiwanese, a sense of separate identity that grows more profound the longer the separation, substantial earned pride in its accomplishments and existence, and expressed desires to preserve some of its past for the future.

Taiwan has well-established professional education programs in many fields, specifically including architecture. Like other professional education programs, they are in upheaval as well, at least in part because of the perception that new

technologies will inevitably transform them. Both eagerness to adopt new methods and fear of the outcomes in adopting them are characteristic of professional architecture education in Taiwan.

Unlike the other areas in which these changes have been explored by academics, in Taiwan they are taking place in a setting of rapid cultural and political change. It seems reasonable that the surrounding changes will also affect how these institutional and pedagogical changes occur. Will professional educators in Taiwan, specifically professional educators in architecture, embrace the changes and challenges attendant with the new ICTs, even while they are managing the professional and institutional changes that are occurring around them? The future research for studying acceptance and use of ICTs in architectural education in Taiwan should shed some light on how effective such technologies can be as they are adopted in a world of change.

CONCLUSION

The choice to use information and communication technologies (ICTs) for curriculum construction has both a conceptual and a utilitarian rationale. As emerging information and communication technologies expand the dimensions of the classroom, demands that education professionals be familiar with not only their potential but their application increase as well. Because what is required of an individual to be technologically literate is something of a moving target, creating the curriculum in a constantly changing digital environment constitutes the kind of ongoing learning process encouraged by constructivist pedagogy. As Dewey (1916) interprets living as having its own intrinsic quality and education should be kept up to that quality of learning and teaching. Providing quality education should be the ultimate target of educators. We shall be very active of seeking quality instruction of ICTs to pay us the competition strength.

Dewey (1956) views curriculum studies as something fluid, embryonic and vital. Therefore, the objective of the individual belief of school education must be consistent with that of the business world and the world of information and communication technologies industry in terms of human resources management and collaboration, which will have to be the vital catalyst for a flexible labor relation and the vertical integration. To control the steer of the economic development, integrated academic and practice accumulation plus high quality human resource are also required. In fact, when approached with its track of progress confront modern education, the development of the school education matches perfect with the social change. Life is a series of situations (Dewey, 1938, p.43). Within the conceptual framework of life learning, I believe that the general public shall develop the idea of always learning as long as one lives. The idea of the school education itself is the very life teaching material of life learning.

Finally, the researcher firmly believes that the school education in future plays the same important role as the upgraded industry does. Future school reform by encouraging free enquiry, critical thinking which results in creativity, imagination and innovation, this should be within the framework of rethinking and creating a critical pedagogy for the information and communication technologies age. To that end, this above augments provides varied opinions on the issue of assessing the impact of educational technology on the learning environment and how to rethink in teaching about how ICTs learning environments can provides the insight necessary for individuals to formulate the appropriate questions for themselves.

REFERENCES

- Abbott C (2000). *ICT: Changing education*. London: Routledge Falmer.
- American Institute of Architecture. (2007). The AIA Continuing Education Series. <<http://www.architecturemag.com/architecture/business_resources/continuing_ed.jsp>> Retrieved 23 Jan. 2007.
- Architectural Education (2005). *Architectural Science Review*, 48(2), 196. Retrieved January 23, 2007, from Questia database: <<<http://www.questia.com/PM.qst?a=o&d=5009876889>>>
- Becker H, Ravitz J (1999). The influence of computer and Internet use on teachers' pedagogical practices and perceptions. *Journal of Research on Computing in Education*, 31(4):356-384.
- Becker H (2000). Findings from the teaching, learning, and computing survey: Is Larry Cuban right? *Education Policy Analysis Archives*, 8(51). Available at <http://epaa.asu.edu/epaa/v8n51>
- Benenson G, Piggott F (2002). Introducing technology as a school subject: a collaborative design challenge for educators. *Journal of industrial teacher education*, 39(3).
- Carbone A, Sheard J (2002). Pedagogical design: A studio-based teaching and learning model in IT. *Proceedings of the 7th Annual Conference on Innovation and Technology in Computer Science Education* (pp. 213-217).
- Cheng N (1995). By all means: multiple media in design education. *Proceedings of the 13th Conference on Education in Computer Aided Architectural Design in Europe (ECAADE)*. University of Palermo, Italy.
- Cheng N (1997). Networks, architecture and architectural education. *Negotiating architectural education, a symposium at the University of Minnesota*, February 1997.

- Cheng N (1998). Digital identity in the virtual design studio. Proceedings of the 86th Associated Collegiate Schools of Architecture's Annual Meeting. Cleveland, OH.
- Cheng N (1999). Playing with digital media: enlivening computer graphics teaching. Proceedings of the Association for Computer Aided Design in Architecture (ACADIA). Salt Lake City, UT.
- Chiu M (2002). An organizational view of design communication in design collaboration. *Design Studies*, 23, 187-210.
- Cuban L (1986). *Teachers and machines: The classroom uses of technology since 1920*. New York: Teachers College Press.
- Cuban L (1988). A fundamental puzzle of school reform. *Phi Delta Kappan*, 70(5), 341-344.
- Cuban L (1993). *How teachers taught: Constancy and change in America classrooms: 1890–1990* (2nd ed.). New York: Teachers College Press.
- Cuban L (1997). High-tech schools and low-tech teaching. *Education Week on the Web*, Editorial, May 21, 1997. <<<http://www.edweek.org>>> Viewed Dec. 18, 2006).
- Dale R, Robertson S, Shortis T (2004). 'You can't not go with the technological flow, can you?' constructing 'ICT' and 'teaching and learning: the interaction of policy, management and technology. *Journal of Computer Assisted Learning*, 20:456-470.
- Davidson J (2003) A new role in facilitating school reform: The case of the educational technologist. *Teachers College Record*, 105(5):729-752.
- Davis N, Desforges C. et al. (1997) Can quality in learning be enhanced through the use of IT? in Somekh, B. and Davis N. *Using information technology effectively in teaching and learning*, London: Routledge.
- Dewey J (1916). *Democracy and education*. New York: The Macmillan Company.
- DfES (2002) *Transforming the way we learn: A vision of the future of ICT in schools*. London: DfES.
- DfES (2003) *Fulfilling the potential: Transforming teaching and learning through ICT in schools*. London: DfES.
- Dirckinck-Holmfeld L, Lorentsen A (2003). Transforming university practice through ICT – integrated perspectives on organizational, technological, and pedagogical change. *Interactive Learning Environments*, 11(2):91-110.
- Fallows S, Bhanot R (Eds.) (2005). *Quality issues in ICT-based higher education*. New York: Routledge Falmer.
- Google. (Jan. 23, 2007). Search: "Architecture Continuing Education." <<<http://www.google.com>>>.
- Hancock DR (2002, Spring). Influencing post-secondary students' motivation to learn in the classroom. *College Teaching*, 63–66.
- Holland N, de Velasco G (1999). The internationalization of undergraduate programs: a model program using reciprocal distance education, traditional study abroad programs and international internships. *Journal of Engineering Education*, October, 1999.
- Jordan G, Jameson J (2005). Unlocking key barriers for staff on the path to an e-University. In Fallows, S. & Bhanot, R. (Eds.). (2005). *Quality issues in ICT-based higher education*. New York: Routledge (pp. 61–73).
- Kvan T, Yip W, Vera A (1999). Supporting design studio learning: An investigation into design communication in computer-supported collaboration. *CSSL '99*. Stanford University, Stanford, California, 12-15 December
- Loveless AM (2000). Where do you stand to get a good view of pedagogy?. *Journal of Technology and Teacher Education*, 8(4):337–385.
- Loveless A, Ellis V (Eds.) (2001). *ICT, Pedagogy, and the Curriculum: Subject to Change*. London: Routledge Falmer.
- Madrazo L, Vidal J (2002). Collaborative concept mapping in a web-based learning environment: A pedagogic experience in architectural education. *Journal of Educational Multimedia and Hypermedia*, 11(4):345–390.
- Mandour M (2004). From hard architecture to soft architecture: architecture form in the 21st century. 1st ASCAAD International Conference, e-Design in Architecture. Dhahran, Saudi Arabia.
- McCormick R (2004). Collaboration: The challenge of ICT. *International Journal of Technology and Design Education*, 14:159-176.
- Milliken J, Barnes L (2002). Teaching and technology in higher education: student. *Computers & Education*, 39 (2002) 223–235. perceptions and personal reflections.
- Newman D (1994). Computer networks: Opportunities or obstacles? In B. Means (Ed.), *Technology and education reform*. (pp. 133-168). New York, NY: Jossey-Bass.
- Pea R (1996). Seeing what we build together: Distributed multimedia learning environments for transformative communications. In T. Koschmann (Ed.) *CSSL: Theory and practice of an emerging paradigm*. (pp. 171–186). Mahwah, NJ: Lawrence Erlbaum.
- Piaget J (1952). *The origins of intelligence in children*. New York: International Universities Press.
- Pollalis S, Huang J, Hirschberg U (2004). Teaching methods: Stretching time and space - using new technologies to improve professional education. Center for Design Informatics at the Harvard Design School. <<<http://www.cdi.gsd.harvard.edu/research.cfm?id=80>>> Viewed: 12 Jan. 2007.
- Schon D (1987). *Educating the reflective practitioner: toward a new design for teaching and learning in the professions*.

San Francisco: Jossey-Bass.

Zhao Y, Frank K (2003). Factors affecting technology uses in schools: an ecological perspective. American Educational Research Journal, 40(4):807-840.

Full Length Research Paper**Students' perspective on female dropouts in Nigeria*****¹Ahmad Kainuwa and Najeemah Binti Mohammad Yusuf**^{*1}School of Educational Studies, Universiti Sains Malaysia. E-mail: ahmadkainuwa@yahoo.comSchool of Educational Studies, Universiti Sains Malaysia. E-mail: najineen@usm.my

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Education of the female children has become a universal issue for African nations hence the need for striving to achieve a balance between the enrollment and retention rates of their male counterparts. Although there are many reasons for female children dropping out of school as given in various studies on the subject, this paper tries to explore the reasons from the students' perspective. The goal of the paper was to find out why a significant percentage of female students drop out of the Nigerian school system every year. The findings in this paper are drawn from a research study on female students' dropouts in Nigeria based on the data collected from junior secondary schools of Shinkafi local government Zamfara state. The major reasons behind drop outs were mentioned in the findings of the paper with some little explanations on each reason. In the course of discussion, the paper reviews literature on how socio-economic status, cultural traditions and practice and religious belief from the students' perspectives affects the education of female children; in addition, studies and researches from the previous works of scholars relating to the students' perspectives on female students' dropout were also analyzed and discussed throughout the paper. The study has discovered that enrolment rate of female students is still very low and still remains worrisome, where by dropouts' rate is very high. This is further worsened by traditional system and belief pattern of gender disparity, and high incidence of early marriage of very young girls based on value system.

Key Words: Students' perspective, female students' dropouts, socio-economic status, cultural traditions and practice, religious belief.

INTRODUCTION

Education is as important and very essential to man as life itself on this planet, earth. In fact it is a very important means of developing any nation. The term education has not lent itself to any strict consensual definition as it depends on the perspective from which one views it. It can be considered as the process of acquiring knowledge, skills, factors, interest, abilities, competence and the cultural norms of a society by people to transmit this life to the coming generations so as to enhance perpetual development of the society (Okoro, 2011).

However, in Spite of the importance attached to education both nationally and internationally, female children's education is still facing a lot of problems in Nigeria among which is the issue of dropout. This may be due to the parental factors which include socio-economic support, cultural traditions and practice and also religious beliefs towards the education of female students. The situation of female student's non-school attendance and dropout has become a worldwide concern and a global problem confronting the education industry round the world, in both rich and poor countries. In either context, children from disadvantaged socio-economic backgrounds are the most vulnerable to

dropping out of schools generally and Nigeria in particular (Nesselrodt and Alger, 2005). Researchers like; Mohsin et al., (2004); De Cos (2005); Bridgeland et al., (2006), and Oghuvbu (2008) have since buttressed this fact. In many developing countries, dropping out is most prevalent in rural areas. Poor children are much more likely to be out of school than their wealthier contemporaries so also female children than the male children (Filmer and Pritchett, 2004; Akyeampong, 2009; Rolleston, 2009). A number of researchers have attempted to investigate the factors which lead to low educational attendance, attainment and dropping out in developing countries (Ramachandran et al., 2003; Palmer, 2005; Verspoor, 2005). Some of the factors which have been identified relate to household income which has to do with socio-economic support, parental education, cultural, religious and others reflect school conditions (Hunt, 2008). Other literature points to the fact that children from poor socio-economic backgrounds, particularly in rural areas, never enroll or drop out of school mainly because of family poverty, child labor and a low value being placed on education (Filmer and Pritchett, 2004; Nesselrodt and Alger, 2005).

A review of the literature on dropout, provides detailed analysis of studies that have all cited poverty, with all its many forms and related issues including physical, social and psychological disempowerment in different contexts, as one of the reasons for parents' and guardians' inability to pay for their daughters direct and indirect educational costs, thus forcing them to terminate their education (Colclough et al., 2000; Brown and Park, 2002; Dachi and Garrett, 2003; Hunter and May, 2003, all in Hunt, 2008). Premature departures or dropping out from schools by female students is among the serious and notable obstacle to female education in Sub-Saharan Africa Nigeria inclusive. In its simplest meaning school dropout is the untimely withdrawal from school. The students who dropout and withdraw from school prematurely end up not obtaining any certificate of graduation. The issue of school dropout in Nigeria in particular has been with us for a very long time. Fafunwa (1983) noted that dropout is one of the most serious problems that have continued to bedevil our educational system since independence in 1960 from the colonial administration. Even before we got our independence, the problem of dropout has already established its grip on our educational system. This can be supported and buttressed with the remark made by Nuffield foundations in 1953 that in the West coast of Africa, a considerable proportion of student's dropout of school each year.

Background of the Study

It is a well recognized and acclaimed statement that education is the most potent instrument for development and for mental and social emancipation. Enrolments in basic education worldwide have increased and there has been a sharp drop in the number of out-of-school and dropout children worldwide (UNESCO, 2007). The total number of school-age children not in primary or junior secondary school is said to have fallen between 2002 and 2005 compared to 1999 and 2002. Additionally in spite of these promising trends, sub-Saharan Africa accounts for about over 72 million out of school children globally in 2005 (UNESCO, 2007).

Moreover, in the case of female children, the problem of dropping out is the topic of discussion more especially in Nigeria. From students' perspectives, the problem may be related to some parental factors which are characterized by parent's socio-economic support, cultural traditions and religious beliefs of the parents with regards to female education. The analysis of access to basic education in Nigeria builds on the education policy of "free, compulsory and universal basic education policy" (F G N, 1999) and on the World Bank (2000) sector studies. While it is now acknowledged that access to education has improved, it has also been observed that female access to education is seriously slow because it has not grown fast enough to achieve the universal level of participation in primary and junior secondary schools.

In Nigeria, despite its free education policy (F G N, 2004) at all levels of schooling, access to education for all remains unattainable more so for female children and women UNICEF (2002). Indeed in some Nigerian administrative states like Sokoto and Zamfara the female literacy rate is low compared to boys (UNESCO, 2003) the statistics indicated a wider gender disparity with 65.5% of male' being literate against 39.5% literate females. The same period revealed that the nearly 7.3 million children of primary school age not in school about 62% were female. In fact only about 33% and 28% percent of female children respectively attend primary and secondary schools in sub-Saharan Africa. The low rate of female access to education is therefore not peculiar to Nigeria but applies to other countries in sub-Saharan Africa. This could be generally as a result of negative challenges which include ineffective and inefficient implementation of the National policy on education (F G N, 2004) and reforms in the Nigerian education system, poor economy and poor management, of scarce resources (UNESCO, 2002). Poverty, early marriage, teenage pregnancy, culture and gender bias in content, teaching and learning process are some of the additional factors militating against female education in Nigeria. As a result of which achieving education for the female children remains beyond the grasp of Nigeria and many developing countries of the world (Onocha, 1985; Song and Hattie, 2004; Akyeampong, 2009, Schunk et al., 2008; Rothman, 2004; Kassim, Abisola and Kehinde, 2011)

Islam, which is the dominant religion of the north, provides its own system of education through Quran and Islamiyya

schools. Formal Western-styled education was brought by Christian missionaries and was therefore treated with suspicion by Nigerians as something alien and threatening to their religion and culture. The missionaries, too, did not hide the fact that Christianizing Nigeria was one of their primary aims. Western education was therefore strongly resisted (Fafunwa, 1974). It is only in more recent years that the realization of the benefits of formal education, which is no longer so closely associated with Christianity or foreign culture, has resulted in the expansion of schooling. With the launching of the Universal Primary Education (UPE) program in 1976, increase in school enrolment has been phenomenal.

Despite rapid changes in the sphere of education in post-independent Nigeria and the attempt to create a unified system of education that is primarily Nigerian, there is a lingering fear, especially among the illiterate parents, that education would expose their children to alien Christian influences. Parents feel that Western-styled education is "contrary to their faith and way of life" (Sulaiman, 1978 cited in Yusuf, 2008). It is believed that women, who are the embodiment of Islamic values and custodians of Islamic morality, should be guarded against the corruption of unsuitable schooling. Further, the Islamic injunction restraining the mingling of women with men has always been an important reason for parents especially mothers, not wanting to send their daughters to school. In addition, cultural factor may be considered as another reason for low female enrolment and dropping out from school. The people of northern Nigeria in particular are largely Hausa Muslim. The culture of the Hausa people defines the woman's role as primarily that of housewife, and many women are in seclusion (*purdah*). Girls are usually given in marriage as early as 11 and 12 years of age, so education seems to have little relevance for the role women are expected to play. Further, early marriage makes it impossible for girls to receive even 6 years of schooling.

Nevertheless, whatever evidence we have on this subject reflects overall negative factors among parents toward the education of their daughters. A study conducted in the 1960s by Hake (1972) shows significant percentage (45%) of a sample of 360 parents was opposed to Western education for their daughters. Several reasons were given. One was that education interfered with the practice of early marriage in Hausa society. Many parents believed that Western education was against their religion and traditions. People also seemed to hold the erroneous belief that Islam does not encourage education for females. Hake found that parents express the fear that going to school led to different sorts of misbehavior—that girls would become lazy and insolent and lose their interest in their role of house-wife. Parents also did not favor coeducational institutions and did not wish to have their girls taught by male teachers. Other smaller unpublished studies seemed to support the findings that parents believed education was against the customs and traditions of their society and that education would make girls unsuitable as wives and mothers. A very real fear was that sending girls to school led to moral laxity in behavior (Abdullahi, 2001).

Moreover, some parents as gatekeepers of behavior and influential figures tend to give priority to the schooling of boys, rather than female children, especially in large families where funds are insufficient to enroll all children. In some families, investing in female children education is regarded as investing for the benefit of the family which they will eventually marry into, unlike in the case of boys. This has socio-economic implication for the poor families or parents. Like in many situations, the economic factors are key determinants to most decisions as well as conditions with house hold set ups. The implication of poverty is a spectrum of issues ranging from lack of essentials low prioritization of education to the lure of the money to name but a few (UNESCO, 2003; Eccles, 1983).

Therefore, in determining school attendance and academic achievement and also minimizing the problem of dropouts, Parental factors which include parent's socio-economic support, cultural traditions and practice, religious beliefs towards female children education are important. Parent's attitude towards their children's education is affected adversely by low socio-economic support and since the parents in some of Nigeria communities constitute the disadvantaged population, it is expected that the attitude of parents of those communities will be unfavorable towards education and vice-versa. However, this study aims to examine the issue of female students' dropout from students' perspective. It is also imperative to examine the significant differences of parent's socio-economic support, cultural traditions and practice and religious beliefs on female students' dropout from student's perspectives.

Problem Statement

The problems facing Nigeria educational system cannot, however, be over generalized because of the diversity characterizing its history which makes some problems peculiar to certain regions. In Nigeria, variations in female educational participation between geographical regions and within the socio- economic strata is quite significant and the similarity of problems in most rural parts of the country nevertheless, makes concern over female education pertinent and deserving of special attention.

Thus, the problem of female students' dropout in Nigeria seems worth stressing. The 2005 National school census (NSC) revealed that there are large geographical and gender disparities between Southern and Northern Nigeria partly due to parental socio-economic support, cultural, religious and educational factors. Female net enrolment Ratio (NER) in some states in the South are as high as 70% while some in the North are as low as 10%. In rural schools, the

percentage of dropout was as high as 35.39%. The female dropouts in rural schools were higher than males, 42.10% as against 28.67% (Ajaja, 2011). But in urban communities and communities where the International organizations are working the situation is entirely different. The percentage of dropout in urban schools was lower when compared with rural schools, 22.92% as against 35.39%. Percentage of dropout was still higher among female students in urban schools, 24.28% for females as against 21.47% for males (Ajaja, 2011). In another studies it has shown that the participation of the female children in these Communities is far greater than in other rural communities of Northern Nigeria with an increase of over 60% in female children enrolment, while attendance has risen over 25% in the supported schools (DFID, 2006). It has also been discovered that more female students drop out from school due to poverty and early marriage culture. According to "This day" Newspaper (2005), a case in a village, Gamji in Zamfara state, where in its history, no female students had gone beyond the fifth year in the elementary school before being withdrawn for marriage due to parental factors. To the best of the knowledge of the researcher, it appears much has not been done to investigate the probable causes to the problem at hand. It is in the light of this that the researcher was initiated to undertake this study in the aforementioned area. However, it is an indisputable fact that without positive parental support, any efforts to improve female participation in education will be greatly hampered (UNESCO, 2010; Ajaja, 2011).

Moreover, parents' socio-economic support, cultural tradition and practice, and also religious beliefs of the parent are some of the parental factors affecting the system. Most of the inhabitants of the rural areas are farmers who have a very low socio-economic support to the extent that they are always struggling for their survival talk less of the education of their daughters. Traditionally, they attached less important to the education of female children therefore any attempt to contribute to its development is rendered useless. In a study conducted on school dropout pattern among senior secondary schools in Delta state Nigeria, Ajaja Patrick (2011), was quoted to have said that "Globally, reasons why students dropout from school can be categorized into four clusters. These include; School related, Job related, family related, and community related." His finding was supported by Freudenberg and Ruglls (2007) who identified parental occupation, parent's socio-economic support and parent's educational background among twenty four factors under family cluster that leads to student's dropout. Misperception of the real teaching of Islam about female education also leads them to show negative attitudes to the education of their daughters.

Although a great deal of literature point at the low level of education among female children in Nigeria, most of these studies attributed to low level of female children education to economy, religious and cultural beliefs, (Deininger, 2003; Sperling, 2005; FGN and UNICEF, 2001; UNESCO, 2002; ACTIONAID Nigeria, 2003), but little if not none examine the female students' dropout from students' perspective and various strategies to be integrated and adopted in solving the problem, the findings of this paper attempts to address this research gap. This study is therefore very timely and significant.

Interaction with female children in Nigeria shows that these female children want to go to school; these female children are likely to succeed but the opportunity is not given to them to explore their potentials possibly due to some parental factors which need to be seriously examine. Others are being forced to drop out of school and later on be married without seeking for even their personal views by the parents or guardians. As such the researcher felt the need to undertake research to investigate the reasons from the students' perspective in order to minimize the problem and improve educational quality and consequently educational attainment.

METHODOLOGY

The qualitative research design was adopted for this study. The study sought to determine the reasons for dropping out from school among female students in Nigeria from students' perspective. The main population of this study consisted of all female students' dropouts in junior secondary schools, whereby non dropouts, were also used in supporting the collected data from the actual population. The findings in this paper are drawn from a research study on dropouts in Nigeria based on data collected from junior secondary schools of Shinkafi Local government Zamfara state. Data were collected from the female students' dropouts through questionnaires. A stratified random sampling procedure was adopted in selecting the junior secondary schools, on the basis of their status that is all girls' schools and all co-educational schools. The estimated number of the main population stands at 1,112 female students. The sample size for this study was 278 for each category of the respondents (female dropouts and non-dropouts). The choice of 278 samples, out of the estimated population is based on the table of Israel, (1992), Krejcie and Morgan, (1970) cited in Yusuf A, (2008), which stated that the best sample for a total of 1000 should be 278. Table 1 gives the breakdown.

Objectives of the Study

1. To examine the significant differences of parent's socio-economic support on female students' dropout from students' perspective, in Nigeria
2. To examine the significant differences between parent's cultural traditions and practice on female students' dropout from students' perspective, in Nigeria.
3. To examine the significant differences of parent's religious belief on female students' dropout from students' perspective in Nigeria.

Table1. Selected Sample Size.

S/N	Research area	Female students' dropout age Range	Number of female students' dropout	Selected sample size for female students' dropout
1.	Shinkafi government Nigeria	local Zamfara 13-14	1,112	278
	Shinkafi government Nigeria	local Zamfara female students' dropouts age range 13-14	Non- Number of female student's non-dropout 2,358	Selected sample Size for female student's non-dropout 278

Source: Table of Israel, (1992), Krejcie and Morgan, (1970) cited in Yusuf A, (2008).

Table 2. Causes of Dropout: Female students' Response.

No.	Causes of Dropout	Views (In Percent)
1	Poor economic conditions of families	52.1%
2	Involvement in household chores,	47.8%
3	lack of school facilities	46.1%
4	early marriage	44.5%
5	Absence of proper security	41.1%
6	Lack of child Interest	39.9%
7	Parents' illness and death	39.1%
8	Engagement in street hawking	38.6%
9	Disrespect and stubbornness	10.5%
10	Western education is against Islamic Religion	10.0%

Research Questions

1. Is there any significant difference between parent's socio-economic supports on female students' dropout from students' perspective, in Nigeria?
2. Is there any significant difference between parent's cultural traditions and practice on female students' dropout from students' perspective, in Nigeria?
3. Is there any significant difference of parent's religious belief on female students' dropout from students' perspective, in Nigeria?

FINDINGS

Causes of drop out as perceived by female students

The female students are the recipients of education and therefore the focal point for any study on these issues. They are the ones who are directly and indirectly impacted. Their views are therefore pivotal for the purposes of this study or any study on this topic. The explanation in Table 2 below shows the responses of female students' dropout.

According to the female students the most compelling reason for not completing schooling was poor economic conditions of their families. This was mentioned by 52.1% of the respondents. There were numerous other reasons given which were held responsible for drop outs in female students. Prominent among these were lack of school facilities as and involvement in household chores as agreed by 46.1% and 47.8% of the respondents respectively. 38.6% of female students also wanted to stop education because they wanted to engage in street hawking. Parents' illness and death also contributed towards female students' dropping out of school as manifested in the table with 39.1%. Interestingly, nearly 4 percent of female students admitted that their parents wanted them to become Hafiz-e-Quran. According to some female students, majority of the parents also wanted to involve them in household chores. Others mentioned lack of school facilities and early marriage as other important factors hindering female educational participation with 46.1% and 44.5% of the respondents agreed respectively. Absence of proper security 41.1%, Lack of child Interest 39.9%, and female students' disrespect and stubbornness 10.5% are some of the other reasons agreed by the respondents at the said percentage. 10.0% of the respondents also were of the opinion that Western education is against Islamic Religion.

DISCUSSIONS

The findings of this study revealed that poverty is indeed a barrier to female children's, particularly female students' educational participation. In Nigeria the situation is worsened by the societal norms, values, beliefs, practices and patterns which maintain a gendered household division of labour, decision-making and resource allocation. For instance children from poor households have to increasingly help their families with tasks such as working on the family farm or business and domestic chores. Some female students said that girls in particular have to work every day before going to school by taking part in various household chores like fetching water and cleaning the homestead. This explains why girls usually arrive at school later than boys and/or participate less in classroom activities because they are extremely tired and later result to withdrawal and dropping out. The study further revealed that, Most of the female students when asked about the reason of dropping out used to mention that poverty and lack of socio-economic support prevent parents from sending their female children to school. Some of the female students also mentioned that their parents are interested in sending their female children to school, but they were discouraged by economic problems. In fact, the incidence of poverty in Nigeria is very high, which affects children's education in general, and in particular that of female children.

The findings of this study is like that of Atayi (2008), where he mentioned in his work titled "Disabling Barriers to Girls' Primary Education in Arua District" that "Poverty lessens the possibility and opportunities of children from affected house-holds to acquire/progress in education....." His research, however, revealed that girls' school attendance and their access to learning materials were greatly influenced by their socio-economic status. Many female students complain about the high demands of education (text books, school uniform, pocket money, transportation, financial contributions for schools etc.) especially when it concern female children. Consequently, this trend leads to female students' dropout more especially those from low income families. And this sometimes resulted to discrimination on the part of female children by parents in when a choice has to be made as to who would go to school. Most of female students agreed with the fact that lack of socio economic support of the parents hinders their full participation in education. The findings agree with the World Bank Review Report (2000) which indicates that developing nations have the largest number of children who don't have access to primary education. This report reviews that 72 million out of the 113 million primary schools age children are estimated to be out of school by 2015.

Some female students mentioned the negative social attitudes and cultural practices like the belief of some parents that it is of no use sending their female-child to school because another person will marry her and she becomes that person's family member; that sending a female-child to school makes her more exposed and civilized and can't be under 2a man any longer; and that a woman's job is in the home and she doesn't need to go to school to learn it. These beliefs are more common in rural areas where most parents are less or not educated. Consequently, female children typically have to assume a multitude of household chores including cooking, cleaning and even serving as a principal caregiver for younger siblings—responsibilities that boys are virtually never expected to assume. This study found that these competing demands on female students' time had translated into relatively poorer academic performance than their male counterparts, often leading to high repetition and, ultimately, higher dropout rates.

The above mentioned findings is similar to that of Abena (1991), cited by Atayi (2008) where he writes: in African traditional societies, cultural norms and values dictate that the major role of the woman is centered on maintaining the home-front, whereby she was expected to marry soon after puberty. In this role, she does not need formal education to fit in. Traditionally, patriarchal attitudes lead to preference by parents for boy's education. In Nigeria, many girls are married off at young ages to husbands who are often much older than themselves. It is also a very common practice that

earlier daughters are often kept at home to care for younger siblings.

The finding of this study has revealed a very slow progress in female children participation over the years. The enrollment, retention and completion have been in favor of the boys, which is a clear expression of male dominance in academic activities and a rift in the gender issue. UNESCO study (1980) aligns with this study proving that 64% of women in Africa are illiterate and can neither read nor write. UNESCO also noted that in the mid 1980s, fewer than half of school-age girls were enrolled into primary schools. Ejembi (1994) also discovered that 77.8% of women in Africa got married before 15 years of age. This trend should be checked, particularly, Nigeria in order not to keep reducing the productive base of the society at large and Nigeria in particular.

In fact, many studies have shown that religious factors largely determine female children participation to education. The study also revealed that many female students like their parents, prefer to attend Quranic schools. Some female students believed that western education breeds immoralities through the inculcation of western culture to children in Nigeria. According to Odaga and Henveld (1995), Religion is frequently associated with low female participation in schools and the reasons have to do with the fear of parents based on the assumption that western education promotes values and Behavior for girls that is contrary to cultural norms. Brock and Cammsih (1991), imply that religion is a proxy for cultural views about appropriate female roles as there are examples among entrepreneurial Muslim communities which invest their wealth in the education of their daughters. Christian communities also withdraw their daughters because they fear that formal schooling brings about non-traditional customs to female children. The possibility of pregnancy in particular, among teenage girls and the economic responsibility for their adult daughters and grandchildren induces Christian parents to marry off girls rather than keep them in schools.

The research result further indicated that one of the impediments to the female students' full participation in formal schools is the rigid formal school calendar and time schedules. This according to some female students is conflicting with Islamiyyah schools time. This calendar is established to suit to the modern western schools in the country, but not consider the Islamic education lessons conducted by other segment of the society at those hours, which could not enable them to attend schooling.

CONCLUSION

Contrary to the previous studies which either took the prevalence of female dropouts for granted or generalized evidences from enrolment data on the basis of questionable assumptions, this study confirms that there is a problem of female dropouts in Nigeria. There is no doubt that the existence of this problem significantly reflects not only the wastage in the educational systems but also the benefits missed from educating females. When compared to the international statistics, this wastage seems more significant in Nigeria than in other parts of the world. In the latter, experiences indicate that stronger mechanisms of controlling the problem of dropouts have been employed at the community level than in the former.

One of the personal characteristics of female dropouts is that they enter school late in life, above the official starting age defined in the National Policy of Education. The problem of over age enrolment is that female children reach puberty while still at school. This in turn increases the risk of sexual abuse that may influence female children to drop out of schooling. The marital status of dropouts may provide an important explanation for drop outs in Nigeria, but appears to be much less relevant in other countries. The fact that the absolute majority of female dropouts come from Muslim families shows that religion in general, and Islam in this particular case, could play a role in influencing female education.

The majority of female dropouts come from households headed by females, uneducated and low income families. Findings about parental occupation and income also ascertain the above truth since most parents of female dropouts are engaged in low income generating occupations in the informal sector and earn or possess an insignificant amount of property. In other words, the school in Nigeria is for those who can afford it, in contrast to the aims of the national education policy, which envisages serving the underprivileged parts of society by introducing Universal Free Basic Education (UBE). The dropping out of female students in this study has generally been related to the low education of parents. This is particularly true for villages and less so in towns. Although direct school costs are highly related to female dropouts, the single most influential factor for female dropouts in Nigeria are the costs of instructional materials. The reasons why other factors were less influential may partially be explained in terms of the reforms already instituted by UBE.

Overall, domestic work represents the single most important area for which parents need the labor of their daughters. Dropout from school is particularly high during harvest time and on market days. In Nigeria the contribution of domestic work to female dropouts has been rated as low. This seems so only because there is an abundance of labor on the labor market. Otherwise, this demand affects female education. Cultural practices and

institutions including early marriage, , home parental services, pregnancy, harassment, religious beliefs and employment in domestic market, significantly contribute to female dropouts in both Nigeria and some other countries in the world. Immediate action is needed on many of these issues. Schools also play their own part in the drop out of female students. In Nigeria, the shortage of instructional materials and textbooks were found to be the crucial ones. This implies that any innovation, which promotes female children education, require meeting these needs for success.

REFERENCES

- Abdullahi UG (2001). The Relevance of Girl-child education in our society .Being a paper presented at the workshop on teaching focal primary schools organized by Zamfara state Female Education Board Gusau, Nigeria.
- Abena FD (1991). The Emancipation of Women An African Perspective. Accra: Ghana Universities Press.
- Akyeampong K (2009). Revisiting free compulsory universal basic education (FCUBE) in Ghana. *Comparative Educ.*, 45 (2):175-195
- Atayi JB (2008). Disabling Barriers to Girls' Primary Education in Arua District – An Intersectional Analysis A Research Paper presented in partial fulfillment of the requirements for obtaining the degree of masters of Arts in development studies Specialization: rural Livelihoods and Global Change (RLGC).
- ACTIONAID Nigeria (2003), Biannual Report 2005-2007: 'Uprooting the Challenges of Girls Education: Giant Strides of EGBENN project'.
- De Cos PL (2005). High school dropouts, enrollment, and graduation rates in California. California: California Research Bureau, California State Library.
- Kassim AO, Abisola L, Kehinde OM (2011). Parents' Education, Occupation and Real Mother's Age as Predictors of Students' Achievement in Mathematics in some selected secondary schools of Ogun State, Nigeria. *Int. J. Afr. Stud.* ISSN 1451-13X Issue 4 (2011), pp.50-60© EuroJournals Publishing, Inc.2011 <http://www.eurojournals.com/African.htm>
- Krejcie RV, Morgan DW (1970). Determining sample size for research activities. *Educ. Psychol. Measurement*, 30: 607-610.
- Lawal AH Nigeria (2010). Research paper presented on Development intervention in Basic Education: Enhancing the Girl-child Education in rural communities of Northern Nigeria. Graduate school of Development studies. The Hague, The Netherlands month, Year. International institutes of Social Studies (Iss). Measuring Exclusion from Primary Education. Montreal: UNESCO UIS.
- Mohsin AO, Aslam M, Bashir F (2004) Causes of dropouts at the secondary level in the Barani areas of the Punjab (a case study of Rawalpindi district). *Journal of Applied Sciences*, 4(1):155-158. <http://dx.doi.org/10.3923/jas.2004.155.158>.
- Nesselrodt PS, Alger CL (2005). Extending opportunity to learn for students placed at nt_flagship.pdf [Accessed August 2007].
- Odaga A. and Heneveld W. (1995). Girls and Schools in Sub-Saharan Africa: From Analysis to Action. Technical Paper No. 298. Washington, D.C. World Bank Report.
- Oghuvbu EP (2008). The perceived home and school factors responsible for dropout in primary schools and its impact on National development. *Ekpoma. J. Behavioural Sci.* 1: 234-235.
- Ojo DO, Ogidan AM, Olakulehin FK (2006). Attitudes and perceptions of students to Open and Distance Learning in Nigerian. *The Inter. Rev. Res. in Open and Distance Learning*, 7(1):24 – 36.
- Okoro NP (2011). Comparative Analysis of Nigerian Educational System. *International Journal of Business and Social Science* ISSN 2219-1933 (Print), 2219-6021 (Online)
- Onocha CO. (1985). Pattern of Relationship between Home and School Factors and Pupils' Learning Outcomes in Bendel Primary Science Project. *Journal of Science Teachers Association of Nigeria (STAN)*. 23(1) 56-63.
- Palmer R (2005). Beyond the basics: Post-basic education, training and poverty reduction in participation in primary education: A case study from Tanzania. London: DFID. Persons with Disabilities: Towards Inclusion. Available from: Policy Lessons, Options and Priorities' hosted by the Government of Ethiopia. Available at: Primary Education': UNICEF. Progress-report.pdf (Retrieved on August 25, 2008)'. Public Education New York (2004): Teachers College Press, Schools. New York: Oxford University Press.
- Ramachandran V, Jandhyala K, Saijee A (2003). Through the life cycle of children: Report. Available at <http://www.dfid.gov.uk/pubs/files/education/girlseducation-risk>. *Journal of Education for Students Placed at Risk (JESPAR)* 10(2): 207–224.
- Rolleston C (2009). The determinant of exclusion: Evidence from the Ghana Living Standards Surveys 1991–2006.

- Comparative Education 42(2): 197–218.
- Rothman JM (2004). A Study of Factors Influencing Attitudes towards Science of Junior High School Students: Mexican – American pupils. *J. Res. Sci. Teach.* 66(1):40 – 54
- Schunk DH, Pintrich PR, Meece JL (2008). *Motivation in Education: Theory, Research, and Applications* (3th ed.). Upper Saddle River, New Jersey: Pearson / Merrill Prentice Hall. sds.ukzh.ac.za/files/WP35%20web.pdf.
- Sperling G, Balu R (2005) Designing a Global Compact on Education Free, quality universal basic education is achievable A quarterly magazine of the IMF, Volume 42, Number 2
- UNESCO (2002). Strategy for the Acceleration of Girl's Education in Nigeria. Federal Republic of Nigeria, Abuja.
- UNESCO (2010). Education for All Global Monitoring Report,
- UNESCO (2003) 'Education for All Global Monitoring Report 2003/4. Gender and Education for All: The Leap to Equality. Available at http://portal.unesco.org/education/en/ev.php-URL_ID=23023&URL_DO=DO_TOPIC&URL_SECTION=201.html (Retrieved on August 13, 2008)'
- UNESCO (2003). Asia and Pacific Regional Bureau for Education. Bangkok: Thailand
- UNESCO study (1980). The school education of girls: an international comparative study on school wastage among girls and boys at the first and second levels of education.
- UNESCO (2007). Education for all by 2015. Will we make it? Summary. Paris: UNESCO. United Nations Children's Fund (UNICEF). 2001. "Children's and Women's Rights in Nigeria: A Wake-up Call." Abuja.
- Verspoor AM ed.(2005). The challenge of learning: Improving the quality of basic education
- World Bank (2000), sector studies. Attacking poverty: Opportunity, Empowerment, and Security Literacy, a UNESCO perspective
- Yusuf A (2008). Economic and socio-cultural impediments to Girl-child Education in Sokoto, Implication for Universal Basic Education (Unpublished)
- Eccles JS (1983). Expectations, values and academic behaviors. In J.T. Spence (Ed.), *Achievement and achievement motivations* (pp. 75-146). San Francisco: Freeman.
- Ejembi C (1994) "A study on Rural Women in Igabi L.G.A. The girl child: The future of mankind. Kaduna State Women Commission and UNICEF.
- Fafunwa AB (1983). Cultural dimensions of indigenous Nigerian Education in Cultural Heritage in Education in Nigeria (Pai Obanya and Emma Arinze Eds) Ibadan.
- Fafunwa AB(1974). A History of Education in Nigeria London: George Allen & Unwin Development and Modernization in Yoruba Society.
- Hunt F (2008). Dropping out of School: Across Country Review Literature. Create Pathways to Access Research Monograph No. 16.
- Hake J M (1972). Child rearing practices in Northern Nigeria. Ibadan,, Nigeria: Ibadan University Press.
- Federal Republic of Nigeria (2004). National policy on education (NPC)
- Federal Republic of Nigeria (2004): National Policy on Education (revised), Lagos NERC Press
- FGN, UNICEF (2001). Master Plan of Operations: Country Programme of Co-operation, 1997-2001. National Planning Commission, Abuja.
- Filmer D and Pritchett L (2004). Educational Attainment and Enrollment Around the World
- Freudenberg N, Ruglls J (2007). Reframing school dropout as a public health issue. [Online] Available: <http://www.cdc.gov/pcd/issues/oct/07> (July 6, 2010)
- Hunter N, May J (2003). Poverty, shocks and school disruption episodes among adolescents in South Africa. CSDS Working Paper, no. 35. University of KwaZulu-Natal. [http:// in sub-Saharan Africa](http://in.sub-Saharan.Africa). Paris: ADEA.
- Deininger K (2003) 'Does Cost of Schooling Affect Enrolment by the Poor? Universal Primary Education in Uganda', *Economics of education review* 22 (3): 291.
- DFID (2006) 'Girls' Education: Towards a better future for all. First Progress
- Bridgeland JM, Dilulio JJ, Morison KB (2006). The silent epidemic. New York: Civic Enterprises, LLC.
- Brock and Cammsih NK (1991). Stute, Status and Status Quo: Factors Affecting the Education of Girls in Cameroon. *International Journal of Educational Development.* 14/3.
- Brown, P. and Park, A. (2002) Education and poverty in rural China. *Econo. Educ. Rev.* 21(6): 523-541.
- Newspaper (2005) (2005). This day Nigerian news paper June 3
- Colclough C, Rose P, Tembon M (2000) Gender inequalities in primary schooling: the roles of poverty and adverse cultural practice. *Inter. J. Educ. Develop.* 20: 5–27.
- Dachi HA, Garrett RM (2003). Child labour and its impact on children's access.
- Ajaja OP (2011). School Dropout Pattern among Senior Secondary Schools in Delta state, Nigeria. *Int. Educ. Stud* Vol. 5, No. 2. Published by Canadian Center of Science and Education 145
- ACTIONAID Nigeria (2003). Biannual Report 2005-2007: 'Uprooting the Challenges of Girls Education: Giant Strides of

EGBENN project'.

Ajaja OP (2011). School Dropout Pattern among Senior Secondary Schools in Delta state, Nigeria. Int. Educ. Stud Vol. 5, No. 2. Published by Canadian Center of Science and Education 145

Hunt F (2008). Dropping out of School: Across Country Review Literature. Create Pathways to Access Research Monograph No. 16.

Public Education New York (2004): Teachers College Press, Schools. New York: Oxford University Press.

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