

Embedding ICT in English Second Language Teacher Professional Development: Challenges and Prospects for Kenya

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ABSTRACT: In this age of globalization, the use of technology is advancing at an exponential rate and is taking root within many fields including education. The changed face of education predisposes pressure to the modern teacher due to a sense of knowledge and skills inadequacy. Apart from content and pedagogical knowledge, today's teacher requires knowledge, skills and expertise in the use of information communication technology (ICT) in order to enhance the instructional process. This calls for a deliberate paradigm shift in the manner in which the teacher is prepared and taken through various teacher professional development (TPD) programmes. Professional growth of a teacher is a life-long process of development beginning with pre-service training and climaxing in retirement. Theories of TPD show that teachers exhibit needs at different times in their professional lives. An analysis of these needs prompts a differentiated approach to their professional development. The teacher has to contend with various changes and therefore needs education in addition to initial pre-service training, thus the need for revitalized TPD programmes. Educationalist at all levels of learning must acknowledge and realize that the adoption, utilization and infusion of ICT in education is fundamental to effective teaching and consequently, successful learning. Teacher education as a component of education therefore requires to be revolutionized to suit the trends and needs of the modern society through the nature of training and professional development the teacher trainees and already practicing teachers are exposed to respectively.

It is from this perspective that we do in this paper argue for the infusion of ICT into English language TPD processes, both at personal and institutional levels. This will enable the teachers of English in Kenya to operate within new and modern educational trends thus modelling life-long learning strategies that are closely linked to facets within facets of TPD. We do believe that the infusion of ICT into TPD will enable the skills and knowledge of the older teachers of English to evolve into a rich tapestry of knowledge that can only serve to create inclusive, richer and innovative teaching styles that will ultimately promote language learning among student.

KEYWORDS: English Second Language, teacher professional development, Information Communication and Technology.

1 INTRODUCTION

TEACHER PROFESSIONAL DEVELOPMENT

The teacher has to contend with various changes throughout his professional life. To cope with these changes, he needs to develop professionally. This development is a life-long process that spans from training to retirement. Professional development is much more than training, though technology training may be one part of TPD. Professional development—including the ongoing workshops, follow-up, study, reflections, observations and assessment that comprise TPD—accommodates teachers as learners, recognizes the long-term nature of learning, and utilizes methods that are likely to lead teachers to improve their practice as professionals. Professional development takes many forms, such as: when teachers plan activities together; when a master teacher observes a young teacher and provides feedback; and when a team of teachers observes a video lesson and reflects on and discusses the lesson. These methods of TPD are all more effective models of teacher learning than simple training. Teachers need a wide variety of ongoing opportunities to improve their skills. TPD (also known as “in service” or “teacher education”) is the instruction provided to teachers to promote their development in a

certain area (e.g., technology, reading instruction, subject mastery, etc.). TPD is the tool by which policymakers' visions for change are disseminated and conveyed to teachers. Though the recipient of TPD is the teacher, the ultimate intended beneficiary is the student. There is general agreement that learning to teach is a lifelong process, and teachers must be equipped with sufficient knowledge, skill, and awareness in order to carry out their jobs (TESL-EJ 10.2, Sept. 2006 Atay).

The crux of this paper concerns supporting continuing professional development (CPD) of teachers. Lee (2007) posited that PD systems can largely be categorized into two major forms based on the principles and characteristics underpinning them, i.e., a dominant form that is 'knowledge and skill transmission-oriented' (KSTO), and an alternative form that is 'community-of-practice oriented' (CPO). Briefly summarized, KSTO PD systems can be summarized as involving teachers in essentially private, individual activity; sessions are typically brief, often one-shot; an external 'expert' presenter is often relied on; topics are offered in a disconnected fashion; teacher listeners are cast in passive role and little provision is made for teacher interaction; skill development is emphasized; quick, visible results are expected; and, in general, teaching methods are dealt with in a theoretical way. The main principles and characteristics of the CPO PD system, on the other hand, can be summarized as those that emphasize substantive, school-related issues; stress the why as well as the how of teaching; expect teachers to be active participants; involve learning that is shared and public; promote sustained interaction; rely on internal expertise; articulate a theoretical research base; and anticipate that lasting change will be a slow process (Lee, 2007).

ESL teacher development is informed by one model to English second language teacher education referred to as the 'person-centred approach' which highlights the need to focus on the teacher developing their own personal theories of teaching, exploring the nature of their own decisions-making and classroom practices and developing strategies for critical reflection and change. These perceptions of the ESL teacher we believe can be enhanced through provision of ICT blended TPD programmes. Teacher education in Kenya is not in particular offered using ICT which would expose teachers to the practical aspects of ICT integration across their curriculum. ICT skills for teachers of English are not simply about how to use technologies but also about why and when to use them in transforming their teaching practices, subsequently the language instructional process. Therefore, without capacity building of the teachers of language through TPD, the potential benefits of ICT in enhancing development of communicative competence among learners in the education system will not be realized.

Kafu suggests that to better the face of teacher education programmes, teaching profession and school teachers respectively, there is need to adapt to and adopt new educational communication and technology materials. That is design, develop and use modern educational technology to prepare school teachers. This will improve the training and instruction of teachers and teacher-trainees. These packages (computers, satellite technologies, etc and their accessories) will educate, inform and expose these individuals to the needs and challenges of the modern Kenyan society that they are expected to serve. The initial costs of adapting to and adopting these systems may be high but the eventual benefits are rewarding. Indeed the infusion of ICT into TPD will enable the skills and knowledge of the older teachers of English to evolve into a rich tapestry of knowledge that can only serve to create inclusive, richer and innovative teaching styles that will ultimately promote language learning among students.

2 HOW ICT CAN BE EMBEDDED INTO TPD

As pointed out above, there are various ways through which the teacher develops. In this paper we emphasize on the ESL teacher development through ICT. ICT use in general terms is any use of "computing devices such as desktop computers, laptops, software, or Internet for instructional purposes" (Hew & Brush, 2007, p. 225). However, more specifically it refers to the use of technology by teachers for instructional preparation, instructional delivery, and technology as a learning tool for students (Inan & Lowther, 2010). The use of ICT in foreign language (FL) education, has developed from the earliest stages in audio tapes, word processing, and CD-ROM (Becker et al., 1999; Evelyn & Oliver, 1987) to Internet browsing, online interaction with peers and people of similar interests using Computer Mediated Communication (CMC), synchronous and asynchronous, such as chat, video teleconferencing, whiteboard, discussion forum, social networking sites, email and other forms of technology including blogs, wikis, IPod, and MP3s (Murray, 2005). The extensive use of Web 2.0 components, Internet, blogs, e-groups, emails, socializing portals, e-dictionaries, e-encyclopaedias, PowerPoint presentations, webcasting, and audio-video, as teaching tools has emerged in the classroom. Combining several of the previous tools and integrating multimedia services one can create a virtual learning environment (VLE) that offers not only content management and exams servicing but also an innovative teaching method that can increase the active role of student in the classroom. How then can ICT be manipulated to enhance TPD? The Internet, particularly, has become a useful tool for communication, a venue for experiencing different cultures and a mediator in diverse political, social and economical situations. Along with the impact of the Internet worldwide, the extensive use of computers at schools has had a critical influence on educational environments. This is where the teacher draws his beliefs from.

Action research is one way of developing the teacher. Studies have shown that teacher research has a profound effect on those who have done it, in some cases transforming classrooms and schools. It has been found to facilitate teachers' critical thought, boost teachers' self-esteem, and increase their awareness of students' needs. However, because of inadequate time and training to conduct research it has been observed that neither pre- nor in-service teachers of English can do much research. Thus, this paper suggests that teachers can use ICT to carry out research. Data collection tools such as postal questionnaires and document analysis could yield a rich knowledge base. More so the teachers can carry out the research from the comfort of their schools by merely clicking their computers. If pre- and in-service teachers all over the world are encouraged to collaborate for research, there would be a lot of benefits.

In-service education and training (INSET) intended to stimulate the professional competence and development of teachers (Kennedy, 1995) can improve classroom teaching practices and/or implement educational innovations decided upon at governmental level and provide teachers with continuous education throughout their teaching career. A general look at current INSET practices reveals the training orientation as "one shot" programs, in which knowledge is usually transmitted by an outside expert (Craft, 1996). The popularity of these programs lies in what Widdowson (1987) calls the "social and professional intensity of the event" (p. 2). Thus, teachers have a break in routine, a chance to meet new colleagues, and to discuss their professional problems. In addition, they are exposed to stimulating new ideas and experience the novelty of being students again. Despite their popularity, one-shot, knowledge-transmission INSET programs have serious limitations, and do not achieve their aims of effecting a change in teacher behavior (Hayes, 1997). One significant reason is that the participants are passive recipients of knowledge, and their existing knowledge, beliefs, and are not acknowledged by the trainers. According to Cochran-Smith and Lytle in-service teacher education programs are typically organized to disseminate a knowledge base constructed almost exclusively by outside experts. This means that through their careers teachers are expected to learn about their profession not by studying their own experiences but by studying the findings of those who are not themselves school-based teachers. (1993, pp. 1-2) The constructivist pedagogies of today, however, emerge from an intellectual world in which knowledge is seen as constructed rather than received (Von Glasersfeld, 1991), and explored rather than remembered as a uniform set of ideas (Rorty, 1979). Influenced by Dewey's line of inquiry, Schön (1987) believes that by questioning, discussing, and checking beliefs and practices with others, teachers make implicit knowledge explicit and progressively gain or improve control of their own teaching. Within this framework, educational research is no longer used only as a way to prescribe teachers' actions. Instead, teacher education programs include opportunities for teachers to become aware of their own practices and the beliefs that underpin them, and teachers are encouraged to construct their knowledge and become active participants in research (Tom, 1985; Cochran-Smith & Lytle, 1993; Zeichner, 1994). Collaborative action research as a form of inquiry requires teachers to engage in a cycle of questioning, planning, acting, observing, reflecting, pre-planning, and often questioning further (Kemmis & McTaggart, 1988), and invites them particularly to question the common assumption that knowledge for and about classroom teaching should first be generated at the university and then used in schools (Lewin, 1946; Stenhouse, 1985; Ogberg & McCutcheon, 1987; Kraft, 2002). Other studies indicate that participation in research promotes continuous learning (Rock, 1999), revitalizes teachers' practice and motivates them by improving their self-confidence as professionals (Lomax, 1995). Case studies involving pre-service teachers and their cooperating teachers have further revealed strong evidence to support collaborative research as a professional development tool (Catelli, 1995; Friesen, 1994; Levin & Rock, 2003).

Another way that teachers can truly develop is through exploration of their teaching. There are a variety of ways to explore teaching. Some of the ways are: (1) self-observation, (2) observation of other teachers, and (3) talk with other teachers about what we observe in a nonjudgmental and non prescriptive way. This exploration can be enhanced through ICT use. As Bailey, Curtis and Nunan (1998, 2001), Richards and Farrell (2005), and Gebhard, (1992), show elsewhere, there are a variety of ways that teachers can explore their teaching. They can read professional books and journals on teaching and learning languages. We can establish a mentoring relationship with a more experienced teacher. They can also learn another language. By doing this they can gain a deeper understanding of the challenges that the learners face. Keeping a teaching journal is another way to explore, especially if they take time to read and think about what they have written. Bailey, Curtis, and Nunan (2001) point out that self-observation is the cornerstone for all professional development. It is through the process of observation that teachers can have something to say in journals, work through action research projects, and talk about their teaching with others. But, self-observation as a way to explore their teaching for the purpose of seeing their teaching differently has its own unique approach separate from other professional development activities. Teachers can explore their teaching by describing, analyzing, interpreting, and generating teaching alternatives in a nonjudgmental systematic way through self-observation. To make self-observation possible, teachers can collect samples of their teaching, and this can be done in a variety of ways. Parts of classes taught can be audio taped because an audio recorder is easy to use. If one is interested in learning about how to treat language errors, one might make and study short transcripts of the times errors are treated. If the interest is on learning about the accuracy of the students' language during group work, one can transcribe and study short sections of interaction among students during group work activities. It is also possible not to focus

on a specific observation objective. For example, it is possible to tape a class, view the tape, and while doing this, make short one minute transcripts of classroom interaction five, ten, and twenty minutes into the class. These transcripts could then be studied simply to see what is going on. After doing an analysis, one can stop to make sense of the descriptions of classroom interaction. Other teachers can also be observed. At first the idea that teachers can explore their own teaching by observing other teachers may seem contradictory. However, as Fanselow (1988) points out, as teachers, we can see our own teaching in the teaching of others. When we observe others to gain knowledge of self, we have the chance to construct and reconstruct our own knowledge. Fanselow articulates this in another way: "I came to your class not only with a magnifying glass to look carefully at what was being done, but with a mirror so that I could see that what you were doing is a reflection of much of what I do" (p. 2). While observing other teachers, it is possible to collect samples of teaching in a variety of ways. Fast notes can be taken, sketches drawn, behaviors tallied, and short transcript-like samples of interaction jotted down. As with collecting samples in our own classes, it is possible to audio- or video-tape other teachers' classes and photograph interaction. These can be used later to analyze classroom behaviors. It would be good to encourage observers and the observed teacher to get together to look at photos, listen to tapes, view videos, study short transcripts, and talk about the class. By doing so, exploration will be enhanced for all. Observing self and observing others can be varied through the use of ICT. Videos of oneself in the process of teaching can be taken and later shared and viewed with others. The same could apply to observing others classes. These experiences, knowledge and skills can be shared through an online platform in order to develop learning opportunities for each other. This can be done through (a) sharing text-based narratives of perceived good lessons through blogs. Teachers can select and comment on teaching episodes, which they considered to have been successful and another which they considered to be less so and post them in the blogs, (b) sharing of video clips of good lessons through the ViP (Virtual interactive Platform). This can enable them to share video clips of their classroom activities online, and (c) forum discussions of lessons.

TeacherTube (www.teachertube.com) is another useful video repository for trainers. TeacherTube is the educational equivalent of YouTube – anyone can upload videos related to education. A lot of the videos available on TeacherTube showcase class work, or are produced by classes themselves, which means that one needs to search through the content to find useable videos, and they are of varying quality. However, uploaded videos have 'tags' (or key words) assigned to them, so the search function is fairly effective. A search for 'ESL class' takes you to several demo classes to see with trainees. There is a handy 'refine your search' function which allows you to add more tags to your search terms too. Jeremy Harmer's recently reprinted teacher's resource book 'How to Teach English' (Longman 2007) has a DVD of experienced teachers teaching EFL classes in the UK, good for demonstration purposes with trainees.

In addition, there are an ever-increasing number of video tutorials available on the Internet, which train viewers in how to use a range of ICT tools. This is a second area that trainers could find useful in their work, not only to get up to speed on how to use ICT tools themselves, but to show in training sessions, or to ask trainees to watch out of class time. There are tutorial sites that have mainly been developed by individual EFL/ESL teachers and trainers. They are all early adopters of technology, and have been exploring ICT tools themselves in their teaching and training for years, so these videos provide good, clear step by step accounts of how to install and use ICT tools, always with the language teacher and trainer (and by extension the learner) in mind. One of them is the (www.teachertrainingvideos.com). Russell Stannard's site includes general teaching and EFL teaching videos. The general teaching videos show you how to use blogs, wikis, PowerPoint, Delicious (a social bookmarking tool) among other useful products. The EFL training videos focus more directly on EFL as well as more on blogs and wikis. Videos show you how to use video from the Internet with EFL classes, how to make worksheets fast, and several sites are recommended for teachers to use with learners – the videos show you how to exploit these.

Another is the Learning Technology Teacher Development Blog (nikpeachey.blogspot.com). Nik Peachey's blog site aims to help English language teachers use technology in their teaching – as such it is of interest to both trainers and trainees. If you browse through the monthly archives on the right hand side of the site, you'll find a wealth of information on a wide range of tools with not only videos on how to install and use these tools, but useful practical tips and ideas of how they can be used in class. Topics covered in the video tutorials and demos include a look at free online pronunciation software, creating simple audiovisual materials with learners, using Second Life to teach English, and how to create an interactive online cloze test, among others. The recent teachers' resource book 'How to Teach English with Technology' (Dudeney & Hockly 2007), in the same Longman series as the Harmer book mentioned above, also includes a DVD with a number of video tutorials on ICT tools for wikis, blogs, and podcasts, as well as how to use RSS, Skype, simple authoring tools, and MS Word functions like 'track changes'.

Computers, TV, the Internet and especially older (and currently unfashionable) technologies with proven track records of cost-effective deployment, such as interactive radio, can help to meet the challenges associated with training and supporting the large numbers of teachers necessary required for achieving EFA targets. The combination of ICTs and TPD has given rise to a wide range of approaches—from radio programming that "walks" teachers through lessons alongside their students, to

the use of computer-aided instruction to improve teachers' math skills, to teachers videotaping each other in action in their classrooms. The many uses of technology in relation to TPD can be grouped in three categories: i) A delivery system providing teachers with information to improve pedagogy and content mastery; ii) A focus of study that develops teachers' abilities to use specific tools, such as computers; and iii) a catalyst for new forms of teaching and learning, such as inquiry-based learning, collaborative learning, and other forms of learner-centered pedagogy.

In conclusion, to be effective and successful, teacher professional development must be of high quality and relevant to teachers' needs. No amount of ICT can compensate for TPD that lacks these characteristics. TPD is the tool by which policymakers convey broad visions, disseminate critical information, and provide guidance to teachers. Effective TPD begins with an understanding of teachers' needs and their work environments—schools and classrooms. TPD then combines a range of techniques to promote learning; provides teachers with the support they need; engages school leadership; and makes use of evaluation to increase its impact. Essential techniques include mentoring, teamwork, observation, reflection and assessment. TPD programs should engage teachers as learners—typically involving the process of “modeling.” When computers are involved, TPD programs must address not only teachers' technical skills, but also their concerns about logistics, about how to use computers with students, and about risks to their status in the classroom. Successful computer-supported or computer-focused TPD provides teachers with hands-on opportunities to build technical skills and work in teams while engaging them in activities that have substantial bearing on their classroom practices or on other aspects of the school workplace.

3 WHY EMBED ICT?

Lam and Lawrence (2002) found that using computers in a communicative classroom brings about the shift of traditional teacher-student roles. In the technology-enhanced environment, learners could manage their own learning process by gathering information and negotiating meaning themselves. The classroom became more learner-centred, that is, learners were able to make their decisions and became responsible for their work more independently. The teacher, on the other hand, became a “facilitator, a resource person and a counselor rather than the only authority and decision-maker” (p. 305). Bancheri (2006) also asserts that the role of teachers in the new era of technology is not only to transmit new knowledge, but to give students tools to acquire knowledge and recognize the value of what they see in books and software as well as on the Internet. In addition, Jeong (2006) emphasizes that the role of teachers in EFL settings is more crucial than ever before because teachers are able to motivate students and try to create language learning environments which are non-threatening, meaningful and affectively supportive by using Web technology.

It is natural to use computers in the classroom. Using technologies in the classroom has many benefits to teachers and students alike. It is helpful for increasing students' motivation with effective audio-visual materials. It is possible for learners to experience more real situations in a technology-enhanced environment. Using computers brings changes in the way of teaching and presentation methods. For example: When teaching with computers, one need not bring a cassette player from classroom to classroom. It saves time for teachers because we don't need to write on the blackboard. By using computers, we can offer students interesting lessons full of real pictures, images, animations and video clips. Computer technologies, especially the Internet, provide non-native speakers of English with a rich learning environment. Thus, students can improve their English skills through the use of the Internet. They can practice the activities as many times as they wish. It is very good for developing writing, reading and listening skills on-line. I know most institutes have their own homepages and teachers upload useful listening, reading and writing materials for their students. As a result, students can review and practice their tasks on-line at home.

In summary, computer technologies can positively contribute to the quality of teaching, mode of presentation and learners' motivation and cross-cultural awareness. Use of computers in the classroom can contribute to the development of students' language skills as well as cultural understanding. For instance, to be good speakers, students should be exposed to the target language as much as possible. Computer technologies, especially the Internet, provide non-native speakers of English with a rich learning environment. Technological aids such as CD-ROMs, audio CDs, DVDs and the Internet are helpful for the development of listening and reading skills. The simultaneous presentation of sound and real images via the World Wide Web could make language input more comprehensible.

The Internet also provides authentic communication with other speakers who have different social and cultural backgrounds. On the Internet, people can access language materials and resources without time restrictions at home, offices and schools. They can communicate and interact with other people all over the world in the target language.

Students can be exposed to the target language and interact with native speakers of English over the Internet in a Korean EFL situation. They can also experience foreign cultures indirectly and they are encouraged to communicate with other people all over the world.

In addition, teaching EFL with technologies is helpful for promoting students' writing. Students who have limited linguistic skills in EFL contexts can discuss ideas and develop their writing abilities by means of the networked computer. Asynchronous e-mail exchanges encourage students to explore ideas and express themselves at their own pace in the target language. E-mail exchanges can be a great way to share information and foreign cultures with native speakers around the world. Through those activities, students can develop their reading and writing skills. Similarly, students can improve their expressions with various kinds of language samples on the Web and eventually their composition in the target language: Writing and reading skills will be improved together. With numerous authentic resources and samples on the Web, students can review and compose their writing. This process encourages them to use the target language with less anxiety.

In summary, it is obvious that the use of computers in the classroom can facilitate the improvement of students' language skills such as listening, speaking, reading and writing. The Internet, in particular, is an invaluable source for providing students with authentic language contexts and materials that contain important cultural aspects of the target language. Such innovative tools for language learning, as MOODLE and Webinar, enable the management of online learning, provide a delivery mechanism, student tracking, assessment and access to resources (JISC, 2008). These tools brought about a more learner-centred approach and an increased focus on interaction among students and teachers. Warschauer (1996) considers that their use creates authentic learning environments and allows the combination of reading, writing, speaking and listening in a single activity. Thus, ICT contributes in creating authentic learning environments.

Studies in English as a Foreign Language (EFL) education have shown that the main benefits of ICT use in the classroom are pupils' motivation for both language learning and linguistic proficiency (Lee, 2000) as well as increased learning competencies (Jorge et al., 2003). The students display an enhanced sense of achievement and increase in self-directed learning, with the ability to communicate, conduct research and present ideas effectively beyond the confines of the class (Shetzer & Warschauer, 2000). Key findings under ImpaCT2 (www.becta.org.uk) show that the use of ICT tools in teaching and learning has positive effects on learning as it gives pupils greater enjoyment and interest, enhanced self-esteem and an increased commitment to the learning task. In this area previous studies have also shown that teachers have positive attitudes toward online learning and web-enhanced language learning resources (Demetriades et al., 2003; Dogoriti, 2010). However, the need for teacher involvement is necessary to avoid leaving the technology to control the lessons. ICT can be effective only with the teacher's role as a "facilitator" who plans and guides the lesson (Brandl, 2002). The ELT teacher must also be prepared to assume new roles (McLaren et al., 2005). The complex role of a FL teacher using ICT is described by Cañado (2010), who asserts that the teacher functions as counsellor, tutor, motivator, facilitator, and observer (Yunus, Lubis, & Lin, 2009). The use of technology as a tool to develop the different language skills has received great attention (Dudenney, 2000; Chapelle, 2001; Young, 2003; Yunus, 2007) so that FL teachers are exposed to new practices. A number of different ICT tools and applications may be integrated in teaching and learning.

4 CHALLENGES

There are a number of challenges that face the use of ICT in TPD and classroom. Institutional Barriers pose one of the challenges. The main institutional barrier facing teachers attempting to use online tools could include lack of support from the schools. The teachers could have heavy workloads and access to computers is not made more convenient. Besides, their work environment may not be conducive for them to spend more time to work on the online tasks. The teachers may also be frustrated by technical problems.

The other includes Psychological Barriers. Psychological barriers are individually held beliefs, values, attitudes, or perceptions that inhibit participation in organized learning activities. Computer anxiety is the prime psychological concern facing online learners. There can be anxiety related to general use of computer and computer-related technology. Some teachers are negative with regard to the advantages of learning and using ViP before they are even introduced to it. They fear it would be too complicated and difficult to learn. This arises from the fear of technology. Research shows that many teachers lacked confidence as far as using technologically-related programmes is concerned. As for equipment anxiety it is used to refer to anxiety related to the online tools. The Teachers lack the basic knowledge regarding the computer and this makes them approach the ViP with fear and apprehension. Teachers also lack the interests and motivation to want to learn, experiment and try out new methods of teaching. If teachers are unwilling to actively work towards conquering their fear and inhibitions regarding computers and ICT-related technology, most change initiatives will unlikely to take off as envisioned.

According to Atkins and Vasu (2000), teachers' attitudes or concerns have a significant influence on the use of computers in the classroom. Lam (2000) also emphasizes that teachers' personal beliefs of the advantages of using technology for language teaching influence teachers' decision regarding technology use. Similarly, Kim (2002) points out that critical factors affecting successful integration of technology into the classroom are associated with teachers themselves, such as teachers' perceptions and attitudes. She adds that teachers' perceptions and attitudes toward teaching and technology can be regarded as a facilitating or inhibiting factor, giving them more confidence or a major barrier of technology use. Redmond, Albion and Maroulis (2005) also reported that teachers' personal backgrounds such as personal confidence, interests in using ICT and willingness to try something different are significant factors that might promote ICT integration in the classroom.

However, Egbert, Paulus and Nakamichi (2002) assert that a positive attitude toward computer technology does not guarantee that teachers will be able to use the technology in the classroom. Kim (2002) found that teachers' actual use of Web-based lessons was limited, frequently delayed, avoided or withdrawn. They encountered some unexpected difficulties or barriers due to lack of sufficient knowledge and computer skills, lack of experience, insufficient time, computer anxiety and lack of confidence, although all participants in her study had positive attitudes toward the use of technology and strong intrinsic motivation such as personal curiosity and interest. Shin and Son (2007) also found that Korean teachers of English had difficulties in using CALL in the classroom. The most common reasons for not using computers included limited class hours, inconvenience of using computer facilities and technical problems such as slow Internet connections. In addition, they had problems related to integrating authentic materials into their textbooks.

External factors such as time constraints (Lam, 2000; Smerdon et al., 2000), limited computer facilities (Shin & Son, 2007), lack of financial or technical support (Lam, 2000; Shin & Son, 2007; Smerdon et al., 2000; Toprakci, 2002), inadequate teacher training and inflexible curricula (Lam, 2000; Smerdon et al., 2000) may lead to failure to technology use. Other external barriers related to individual contexts or work environments are poor Internet access, limited capacities of school network and inadequacy of technical support. The limitations stemming from those external factors seem to focus on computers and work environments, not on teachers. Internal factors, on the other hand, stemming from teacher-related problems include teachers' lack of ICT knowledge and resources, lack of experience with ICT as a learner and no access to appropriate materials and models of teaching with ICT (Kim, 2002; Lam, 2000). Since teachers somehow tend to teach in the same manner they were taught in the past, teachers' own previous experiences with technology are critical factors determining CALL implementation (Egbert, Paulus & Nakamichi, 2002). The characteristics of internal factors are invisible and unnoticeable when compared to external factors which are easily recognizable. In addition, it is important to consider that there are other barriers related to teachers' perspectives, personal attitudes, beliefs, confidence, motivation and awareness of the advantages of technology. Atkins and Vasu (2000) regard teachers as one of the most important factors influencing technology use and argue that teachers' attitudes or concerns have a significant impact on the integration of the computer into the classroom. Kim (2002) also agrees that a teacher as an individual with complex internal variables is a key element affecting the use of the computer in the classroom. These studies suggest that teachers who have basic computer competencies are more confident in using computers and are more likely to integrate computers into their teaching than those who have not.

Apart from affecting TPD It is also reported that external factors such as lack of time, insufficient computer facilities, rigid school curricula and textbooks and lack of administrative support negatively influence the implementation of CALL in the classroom. Internal factors such as teachers' limited computer skills, knowledge about computers and beliefs and perceptions of CALL also seem to significantly affect teachers' decisions on the use of CALL. Teachers need more time and efforts to create or find teaching materials. For example: It takes much time for preparing teaching materials and activities. They need to surf the Web, find appropriate materials and modify them according to the levels of their students.

The integration of ICT in education in Kenya is more recent and on a smaller scale. This is due to resource and infrastructural constraints. In addition, unlike in previous generations, students today can easily adapt to new technological innovations and they come to schools, colleges and universities expecting to use technology just as they do in their personal lives. As already pointed out, it is unfortunate Kenyan Educators lack skills to cope with the youngsters who are always a step ahead. It is high time educators re-thought the chalk and blackboard, book and paper teaching methods being replaced by technology. Yet the level of IT literacy within the teaching fraternity is miserably low. Few teachers appreciate technology's special place in their profession.

5 PROSPECTS

Prospects for teacher development in Kenya can be mirrored and highlighted from the status of distance education. Distance education in Kenya has made great leaps which we believe can be made by ELT teacher education. We agree with Ndiege (D.N) who argues that there is need for our education system to adapt to the changes in technology, commerce,

politics and demographics. He argues that with traditional instructional methodologies fast being replaced by modern innovations, technology and education have never been intertwined. Social media, for example, can greatly enhance the learning experience outside the classroom. He adds that a greater percentage of learning takes place outside the classroom. Many students are connected to Facebook and Twitter, and these can be exploited to create a more interactive learning experience. Others like Evernote, Google Education, Dropbox and slideshare can help teachers stay connected, organized and make lessons more fun. Indeed teachers can connect with each other, their mentors and educators through these same platforms. Empowerment should start with educators as no meaningful education can be achieved without a technologically literate faculty.

TPD through ICT has great potential for growth in Kenya if what has been done in distance education can be roped in and improved. The African Virtual University programme for example would be one avenue through which TPD could be enhanced. This is perhaps the most recent and probably the fastest expanding programme in institutions for higher education. Kenya has tremendously embraced virtual initiatives in post secondary education institutions such as in her public Universities. The ODEL has greatly increased access to higher education in many parts of Africa in an affordable, cost-effective, flexible and sustainable manner by allowing universities to use e-learning portal to collaborate in content development and delivery practices and further promote group interaction, institutional interaction and self-learning (Muhirwa, 2009). AVU's architecture is designed to use mixed models of delivery such as video conferencing, use of the internet, CD-Rom and cassettes and print-based materials and mobile learning. ELT educators and other stakeholders may only need to technologically connect and have professional development go on on-line. They could focus on encouraging, applying, synchronizing and smoothing the progress of the use of information and communication technologies (ICTs) to enhance the development of ELT teachers.

In the policy **Framework for Education Aligning Education and Training to the Constitution of Kenya (2010) and Kenya Vision 2030 and beyond DRAFT APRIL, 2012, it was observed that** as the Kenyan population providing labour force increased in size, structure, diversity and complexity, its educational provision to improve skills, competences and proficiency demanded that knowledge delivery must extend beyond the habit of continuous contact with the instructor. (Khan, 2007).

WAY FORWARD

For TPD programmes to be successful it requires the stakeholders to ensure:

- 1) The development of a comprehensive induction programme of the educators, mentors, teachers, and administrators and all who are involved,
- 2) Effective and efficient ICT facilities and resources; and a well developed network system of ICTs accessible by teachers at their respective locations
- 3) The development of detailed, well updated and self-training modules for the teachers by the inducted educators, and
- 4) The development of a unique but a credible, efficient and effective monitoring and evaluation secretariat to ensure access, equity, quality, affordability and relevance of the programme. This therefore requires a heavy investment (in terms of human, monetary, e-learning and physical resources).
- 5) There is need for the government to develop a supportive and comprehensive national policy framework at the national level.
- 6) There is also the need to incorporate ICT in education to improve access to quality education and respond to the challenges of globalization.
- 7) There is need for Kenya to link with other countries who have developed ODL programmes.

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