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Are We Prepared to Teach English in a Digital Age?

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Abstract

People use digital tools to transmit, store, create, share or exchange information of various sorts. These tools provide a vast repository of knowledge and tend to be resorts of twenty-first century information seekers. Academics nowadays are likely to begin their work by searching electronic databases. English teachers use PowerPoint or interactive whiteboards in their classrooms. They now have to acknowledge that the digital skills that were once the province of computer science students are now crucial across the entire spectrum of education. The last few decades have witnessed an exponential growth in the use of technology for language learning and teaching purposes. Students use different digital tools in their daily lives outside the classrooms. Teachers use technologies in their classrooms in order to help their students learn. English teachers have to adopt different roles as they engage and interact with increasingly complex web of digital texts and communication that compose the twenty-first century economic and educational environment. The effective English language teaching needs to capture the key aspects of changes in work practices, digital practices in particular. This article focuses on the competence English teachers need to develop to teach English in the digital environment. The article also discusses the two major dimensions of digital world which English teachers need to know; namely principal roles the technologies play and digital competence 21st century English teachers need to possess.

Keywords: Digital tools, digital age, procedural competence, socio-digital competence, tutee, tutor

Introduction

Digital competence has become a part and parcel of modern digital society. It is the most recent concept describing technology related skills. During recent years, digital

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competence has become a central concept in the discussion of what kind of knowledge, skills and understanding English teachers should have in the knowledge society. All the changes in this spectrum have been driven by a huge variety of digital technology available in the last few years. It is more or less a political concept, reflecting beliefs and even wishes about future needs, and has its roots in the economical competition in which the new technologies are regarded as an opportunity and a solution (Punie qtd. in Ilomaki, et al. 1). English teachers, Nepalese English teachers in particular, are required to develop digital competence if they are to teach in this hyper digital world.

Digital tools are information and communication technology (ICT) related skills which are used to transmit, store, create, share or exchange information of various sorts. ICT tools include a diverse set of technological tools and resources such as radio, television, video, DVD, telephone, mobile phones, satellite systems, computer and network hardware and software as well as the equipment and services associated with these technologies. ICT helps teachers to be able to create interactive classes and make the lessons more enjoyable, which could improve student attendance and concentration.

Information and communication technology (ICT) as applied to education emerged from previous terms such as Information Technology (IT) that described new technologies for transmitting, sharing and manipulating information. Nowadays, ICT can be defined as those technologies that enable creating, accessing, gathering, managing, presenting and communicating information through electronic and digital means. Anderson and Baskin held the view that "The addition of 'communication' to previous terms such as information technology (IT) emphasizes the growing importance attributed to the communication aspects of new technologies" (126). Digital tools cover all internet service provisions, telecommunications equipment and services, information technology equipment and services, media and broadcasting, libraries and documentation centers, commercial information providers, network-based information services. The United Nations Educational, Scientific and Cultural Organization (UNESCO) uses 'ICT' to describe as the tools and the processes to access, retrieve, store, organize, manipulate, produce, present and exchange information by electronic and other automated means. According to Dexter and Anderson "It is the use of technology to create learning communities, a human intervention and not the technology itself that may reform education" (22). Proctor and Watson (69) contended that "Unless more sophisticated nations of describing ICT curriculum are developed, researchers run the risk of promulgating severely restricted ways of measuring it." According to Resnick (32), "While new digital technologies make a learning revolution possible, they certainly do not guarantee it."

Within last two decades, digital tools have tremendously changed the way people communicate and do business. They have produced significant transformations in

the field of education, business, engineering and other fields. They have the potential to transform the nature of education- where and how learning takes place and the roles of students and teachers in the learning process (UNESCO). If we are to get benefitted fully from the digital tools in learning, it is essential that teachers have basic ICT skills and competencies. We are in the age in which digital tools have changed the style of functioning of education. English teachers have to recognize their importance and need to know how new tools can be used to support and encourage the development of key future-ready leaning skills in students. To accomplish these goals, teacher education institutions need to develop strategies and plans to enhance the teaching-learning process within teacher education programmes and to ensure that all future teachers are well prepared to use the new tools for learning. Thus the major question, we have to address is: How can we prepare them to teach English in the new digital age?

Theoretical Framework

Information and Communication Technology (ICT) is a cover term used to express the convergence of telecommunications, information, broadcasting and communications. For Rodriguez and Wilson, ICT is seen as a set of activities which facilitate and enhance the processing, transmission and dissemination of information by electronic means. ICT related digital tools encompass hardware, software and telecommunications in the forms of personal computers, scanners, digital cameras, phones, faxes, modems, CD and DVD players and recorders, digitized video, radio, TV programmes, and multimedia programmes.

Development of ICT

ICT is evolving in a very fast pace. We live in a world of internet. Our grandparents grew up in a society where there was no telephone. They lived in a society in which the radio was the first and television was the last source of information. Now our children are in the wireless world with smart modern gadgets. Consequently, the world around us also has changed dramatically over the years. This dramatic shift in the field of ICT is a result of innovations in the field of science and technology. These changes have brought so many interesting innovations which have reduced the sizes of the technological tools and increased the speed in which they operate to process data and communicate information. We can identify five phases of ICT evolution namely, evolution in computer, PC, microprocessor, internet and wireless links.

The term New Technology includes communication techniques for language teaching in which the personal computer plays a central role (Davies and Hewer 2012, qtd. in Nomass, 2013). There are, however, other technological tools that can be utilized in language learning besides computers. Each technological tool has its specific benefits and application with one of the four language parts (speaking, listening, reading, and writing). However, in order to use these techniques successfully,

the ELL student should be familiar with using computers and internet, and capable of interacting with these techniques.

Technology and foreign language education have always been interrelated. Language teachers following the grammar-translation method depended on the blackboard for the one-way transmission of information that method implied (Hismanoglu 147). The blackboard was later supplemented by the overhead projector as well as by early computer software programmes that provided "drilland-practice" types of grammatical exercises (Warschauer and Meskill qtd. in Hismanoglu 147). Technology and English Language education are related to each other (Singhal 1), during second half of the twentieth century, English language learning laboratories were set up in various educational institutions. The traditional language laboratory consisted of a number of small cabinets, provided with a cassette deck, a microphone and a headphone for each one. Teachers used a central control panel to monitor their students' interactions. The main advantage of that type of technology was that verbal behaviour of students would help them to quickly learn the second language. The students' skills can be enhanced by encountering more practical drill problems. Although the language laboratory was a positive step in linking technology and language education, this technique was actually tedious and boring for learners (Singhal 2). Also there were minimal interactions between the teachers and their students.

Uses and Functions

Rosenberg (2001) argued that in the expansion of ICT there are five shifts in the learning process, namely: (1) from training to performance, (2) from the classroom to anywhere and at any time, (3) from paper to online or channel-based, (4) from physical facilities to network facilities, and (5) from classroom cycle time to real time. These shifts had some impacts on the change of patterns, methods, and presentations of learning strategies, as well as the approach used. For Riyana (2004), there are three functions of ICT in the learning process, namely (1) technology serves as tools, in this case ICT is used as a tool for users or students to assist learning; (2) technology serves as a science; and (3) technology functions as materials for learning (ICT literacy). Other advantages of digital tools in the classroom include: The motivational and experiential benefits of multimodal representation of the language; opportunities for listening to and observing proficient language users communicating; opportunities for revisiting language activities and experiences; opportunities for interaction at a distance.

Electronic dictionaries are designed especially for English language learners for improving the vocabulary. These dictionaries have several built-in functions and tools that are not provided in printed dictionaries. The internet is certainly a modern technological way for students which help to develop their English language skills. There are many internet sites prepared solely to enhance the reading abilities of English language learners. There is a plenty of resources available in the form of

newspapers, magazines, journals, electronic libraries, dictionaries, encyclopedias and newsletters. The use of computers in listening problems provides students with visual and voice inputs which can enhance their information and ideas, and develop their listening skills (Hoven 1999).

Computers can perform several tasks simultaneously and run programmes at a very high speed. Learning computer programmes can check exercises after they are performed by students, move students gradually from easy to more difficult problems according to their abilities. Computers can also be used to correct answers for the learners and to simulate tests in an easy to understand manner (AlKahtani 1999). Thus, modern ICT tools can be used in learning and teaching for many reasons. For example, ICT is a powerful tool in presenting or representing information in many different ways. It can be presented through different forms such as texts, pictures, tables, graphs and even multimedia which can make the class more interesting and lively. ICT can also play various instructional roles such as make the learners feel more relaxed to learn the various topics and tasks, and also make the learners active, because, they learn by applying the technology to a task.

ICT is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network, hardware and software, satellite systems and so on as well as the various services and applications associated with them, such as video conferencing and distance learning (Elisha 2). ICTs are often used of in a particular context such as ICTs in education, health card or libraries. ICT can be considered as tools used for collection, processing, storage, transmission, and dissemination of information. Hence, ICT is the electronic means of capturing, processing, storing, and disseminating information. Similarly The American Library Association (1983) defined information technology (IT) as the application of computers and other technologies to the acquisition, organization, storage, retrieval, and dissemination of information.

English Teachers in the Digital Age: What Do They Need to Possess?

Digital tools have always been integral in the discourses of English Teacher education. English teachers have to be able to interact and engage with digital environments. They need not only to be able to teach English effectively, but also to manage the technology appropriately. Simpson (2005) called it 'electronic communicative competence'. What does an English teacher need to know to become a professional in this digital age? How is this knowledge and practice acquired? This section explores the knowledge and skills that English language teachers need to possess in the digital era. The issue of language teachers' knowledge and skill base is fundamental to our understanding of effective teaching and to approaches to language teacher education. In this junction, I will focus on the roles of digital tools in teaching of English. English teachers need to know the roles they play if they are to exploit

those tools. My focus here is on the roles of digital tools and the competence English language teachers need to develop to teach English in the hypermedia environment.

Roles of Digital Tools: Tool, Tutor and Tutee

Digital technology has been used for various purposes in language teaching and learning. The digital technologies play three principal roles namely; computer as tutor, computer as tool, and computer as medium (Taylor 1980, qtd. in Walker and White 3).

The 'tutor' role implies that the computer is simulating a teacher in some way, such as when computers are used to present material (e.g. grammar, vocabulary, or cultural information, to provide language practice (such as exercises in pronunciation, writing, listening or reading), to analyze learners' language performance and provide feedback or to test learners' knowledge of language and culture (Chapelle and Douglas 2006, as qtd. in Kern 2011: 201). Thus, in the 'tutor' role, the computer teaches the learner. The principle is that the knowledge resides in the machine, from where it is passed on to the learner in small chunks with necessary reinforcement (Walker and White 3). This role is based on the learning theory of the behaviourist paradigm which originates in the work of psychologists such as Skinner.

The 'tool' role gives emphasis on "individual learner capabilities and cognitive goals and needs. In this role, computers function as a tool (via the Internet) to provide learners ready access to a wide variety of written, audio, and visual materials relevant to the language and culture being studied" (Kern 201). These materials include news media, film clips and videos (some with closed captions or subtitles), radio and television broadcasts, special interest Websites, blogs, advertisements, and realia. The Internet also provides reference and research tools such as search engines, online dictionaries, grammar and style checkers, and audio waveform analysis. Computer as 'tool' for Walker and White (4) applies to any context in which technology is the means by which a task is achieved. Examples of technology used in the role of 'tool' include using a word-processing programme to write an essay or editing-software to create a video. This role refers to the act of writing or editing that facilitates the learning. This role of computer leads on to 'social--constructivism', a theory of learning that has obvious parallels with and benefits for language teaching. This primarily originates from the work of Vygotsky (1978) who stated that learning happens first through social interaction and then on the individual plane. Vygotsky further stated that learning takes place within the 'zone of proximal development' (ZPD), i.e. the gap between what a learner already knows or can do and what the learner can achieve when working in collaboration with someone who is a little more capable (Walker and White 5). Vygotsky argued that collaboration that allows learning to take place within the ZPD provides a framework that supports the learner while the knowledge is being built.

In the tutee, the learner teaches the computer. According to Walker and White, "The principle is that the learner constructs knowledge, often through trial and error, by teaching the computer. This is based on the constructivist paradigm which stems from the work of Piaget, who argued that learners have to construct knowledge themselves through experience and through a process of accommodation and assimilation." (4) This theory was developed by Papert (1993) who stated that the learning experience is strongest when learners are involved in making (qtd. in Walker and White 4). Papert's view is that knowledge is constructed more effectively when learners are forced to articulate their knowledge.

Communicative and Digital Competence

Within the digital environments, learners need not only to be able to use language appropriately, but also to manage the technology. Simpson (2005) talked about 'electronic communicative competence' whilst Walker (2007), proposed a model of 'ICT competence' which now can be called 'digital competence'. Both the models of competence; electronic competence and the digital competence emerge from the model of communicative competence proposed by Canale and Swain (1980). According to them, the model consists of four elements; namely linguistic competence, sociolinguistic competence, discourse competence and strategic competence.

Grammatical competence incorporates knowledge of the linguistic code features such as lexicon, syntax, semantics, phonology (mastery of language codes). Sociolinguistic competence includes the knowledge of how language is used in a particular context. It is about knowing what words and phrases are appropriate in any particular setting to achieve a desired communicative purpose. Thus, it refers to the understanding of contextually appropriate language use. Discourse competence is related to achieving coherence and cohesion and cohesion in written and spoken communication. In other words it is the ability to create and use larger chunk of language beyond the sentence level. Strategic competence refers to a set of strategies devised for effective communication and put into use when communication breaks down. Thus, it is the ability to manage and navigate communication to repair communication breakdowns. The teachers in the digital age need to develop digital competence which consists of four elements which are as follows:

Procedural Competence

According to Walker and White (8), procedural competence refers to 'know how' of digital tools. It entails the ability to manipulate the technology in terms of both the hardware and applications. In other words, procedural competence is about knowing how to use the technology – how to switch it on, which buttons to click, and so on. This is considered as the 'basic skill' of digital competence and IT training courses give emphasis on this aspect of competence. This is based on the principle that communicative competence requires more than knowledge of the syntactic,

phonological, and lexical 'nuts and bolts'. English teachers need to understand the importance of digital competence in teaching. They also need to know 'what and how' of digital tools they are required to use in their classes.

Socio-digital Competence

This competence entails "the understanding what is appropriate to use in different social contexts and knowledge domains, in terms of both technology and language" (Walker and White 7). Deciding when and how to use social media such as facebook for business communication is an example of socio-digital competence. There is no one-size-fits-all answer to that question; it depends on the nature of the business, the relationships with the other parties in the communication event, and the purpose of the communication. An important aspect of socio-digital competence is the understanding of how technology influences language, including the possible creation of new genres, and what types of language are appropriate to use for different audiences in various digital contexts.

Digital Discourse Competence

It refers to the ability to manage an extended task, possibly using several applications and/or types of equipment. An example of digital discourse competence would be the ability to record, edit, and publish a video or to write a blog post with photographs (Walker and White 9). The task will require a range of skills and technical knowledge. Although digital discourse competence refers to the use of technology for extended tasks, these tasks will invariably require communicative discourse competence as well.

Strategic Competence

It is the ability to repair problems and work around the gaps in technological knowledge and skills. This does not mean possession of advanced ICT skills, but rather the ability to think of alternative routes and options. In order to complete tasks and to communicate effectively using technology, people need to be able to repair both communicative and digital problems. In the digital dimension, this would include being able to switch channels, contacting someone by email or social networking if he or she is not answering the phone, rescuing a deleted document, or knowing how to deal with disruptive online interactions such as 'flaming' (heated exchanges in online settings, such as email groups or social networks).

Competence and Performance of English Teachers in Digital Age

Understanding of digital competence is important for English teachers as it provides a mechanism for diagnosing, understanding, and repairing the digital needs of learners. Effective teaching in this digital age entails "what" and "how" of digital tools. Thus the knowledge of digital competence is essential for present day English teachers. While adopting a digital technology in the English classroom, be it a tape recorder, a VCR, a CD-ROM multimedia or other technologies, Jones and Sato

(1998) suggest that we consider the following questions: Does the digital tool facilitate the attainment of course goals? Is it effective? Do the benefits outweigh its cost? Are the teachers ready to work with new technology? Is any training required? Does it serve the needs of the teachers and students? Does it help teachers make more efficient use of class time?

English teachers today need to be digitally competent. They need to have literacy skills for the 21st century so that they can participate in the new communities emerging within a networked society. These skills consist of: play (the capacity to experiment with the surroundings as a form of problem-solving), performance (the ability to adopt alternative identities for the purpose of improvisation and discovery) simulation (the ability to interpret and construct dynamic models of real world processes), appropriation (the ability to meaningfully sample and remix media content), multitasking (the ability to scan one's environment and shift focus), judgment (the ability to evaluate the reliability and credibility of different information sources), transmedia navigation (the ability to follow the flow of stories and information across multiple modalities), networking (the ability to search for, synthetisize and disseminate information), negotiation (the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms).

Conclusions

The use of digital tools in English classrooms has recently gained groundswell of interest. The new tools have changed the face of English language teaching over the last few decades. Thus, the use of digital tools in English classrooms today is inevitable. The tools provide unlimited information about teaching and learning activities. Digital tools in English classrooms are used for accessing, gathering, manipulating, presenting or communicating information. The technologies include hardware (e.g. computers and other devices), software applications, and connectivity (e.g. access to the internet, local networking infrastructure, video conferencing). The pace of technological revolution and emergence of a knowledge society changed the traditional role of the teacher. Traditionally, the teacher is the only source of knowledge for the students. In the framework of this educational landscape the role of the teacher is that of acting as guide and coach to assure a comprehensive learning process via the modern age technologies and manage the students' learning process by the new instructional models set in newly created virtual environments. English teachers should develop skills related to the learning contexts. The teachers need to possess the knowledge and skills of ICT tools in order to engage the learners in learning effectively. So, the teachers should be trained to operate computer and use internet to update their knowledge. Digital tools have potential to innovate, accelerate, enrich and deepen skills to motivate and engage students. English teachers need to know the roles digital tools play such as tutor, tool and tutee so that digital teaching can be imagined. At the same time they need to develop both the competence: communicative and digital to cope with the paradigm shifts in English language teaching in the global scenario.

Works Cited

- Al Kahtani, Saad. "Teaching ESL Reading Using Computers." *The Internet TESL Journal*, vol. 5, no. 11, Nov. 1999, http://iteslj.org/Techniques/AlKahtani-Computer Reading. Accessed 2 Dec. 2020.
- American Library Association. *The ALA Glossary of Library and Information Science.* Chicago: ALA, 1983.
- Anderson, Neil, and Colin Baskin. "Can We Leave it to Chance? New Learning Technologies and the Problem of Professional Competence." *International Education Journal*, vol. 3, no. 3, Dec. 2002, pp. 126-137.
- Bruniges, M. *Developing Performance Indicators for ICT Use in Education: Australia's Experience*. 2003. http://www2.unescobkk.org/education/ict/v2/info.asp?id=13249. Accessed 25 Nov. 2020.
- Canale, Merrill, and Michael Swain. "Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing." *Applied Linguistics*, vol. 1, 1980, pp. 1-47.
- Dexter, Sara L, et al. "Teachers' Views of Computers as Catalysts for Change in Their Teaching Practice." *Journal of Research on Computing in Education*, vo. 31, no. 3, 1999, pp. 221-239.
- Elisha, M. J. "The Application of Information and Communication Technology (ICT) in Nigerian Academic Libraries Prospects and Problems." *The Information Manager*, vol. 6, no. 1 & 2, 2006, pp. 35-39.
- Finger, G. "Information and Communication Technologies (ICTs) in Education: The Emergence of Digital Content Initiatives and Systemic ICT Initiatives in Australia." ICASE 2003 Conference, Penang, Malaysia. Conference Presentation.
- Finger, Glenn, and Sue Trinidad. "ICTs for Learning: An Overview of Systemic Initiatives in the Australian States and Territories." *Australian Educational Computing*, vol. 17, no. 2, 2002, pp. 3-14.
- Hayes, D. "Whole School Change That Spreads and Lasts: A Technology of Resilience for Schools Working Within Adverse Conditions." AARE 2004 Conference, November-December, Melbourne. Conference Presentation.
- Hismanoglu, Murat. "The Internet in Foreign Language Education: Benefits, Challenges, and Guidelines for Language Teachers." *The CATESOL Journal*, vol. 20, no. 1, 2008, pp. 146-160.
- Kern, Richard. "Technology and Language Learning." *The Routledge Handbook of Applied Linguistics*, edited by James Simpson, London and New York: Routledge, 2011, pp. 200-214.

- Margaret, Lloyd. "Towards a Definition of the Integration of ICT in the Classroom." AARE 2005 Conference, November-December, Melbourne. Conference Presentation.
- Nomass, Bassma Basheer. "The Impact of Using Technology in Teaching English as a Second Language." *English Language and Literature Studies*, vol. 3, no.1, 2013, pp. 1-6
- Proctor, Romina M. J., et al. "Measuring Information and Communication Technology (ICT) Curriculum Integration." *Computers in Schools*, vol. 20, no. 4, 2003, pp. 67-87.
- Punie, Yves. "Learning Spaces: An ICT-Enabled Model of Future Learning in the Knowledge-Based Society." *European Journal of Education*, vol. 42, no. 2, June 2007, pp. 185–199.
- Resnick, Mitchel. (2002). *Rethinking Learning in the Digital Age*. http://www.cid.harvard.edu/cr/pdf/gitrr2002_ch03.pdf. Accessed 25 Nov. 2020.
- Riyana, C. (2004). *Peranan Teknologi Dalam Oembelajaran*. http://chepy.files.wordpress.com/2006/08/peran-teknologi.pdf. Accessed 22 Nov. 2020.
- Rodriguez, Francisco, and Ernest J. Wilson. "Are Poor Countries Losing the Information Revolution?" *Semantic Scholar*, May 2000. *Info Dev Working Paper.* Washington D. C. World Bank.
- Rosenberg, Marc. *E-Learning: Strategies for Delivering Knowledge in the Digital Age*. New York: McGraw Hill, 2001.
- Singhal, Meena. "The Internet and Foreign Language Education: Benefits and Challenges." *The Internet TESL Journal*, vol. 3, no. 6, 1997, http://iteslj.org/Articles/Singhal-Internet.html. Accessed 20 Nov. 2020.
- Taylor, Robert. Introduction. *The Computer in School: Tutor, Tool, Tutee*, edited by Robert Taylor, New York: Teachers College Press, 1980, pp.1-10.
- UNESCO. "Decade of Education for Sustainable Development (January 2005-December 2014)." *Framework for a Draft International Implementation Scheme*, UNESCO, 2003.
- UNESCO. *Information and Communication Technologies in Teacher Education: A Planning Guide.* Paris: UNESCO, 2003.
- Vigotsky, Lev S. *Mind in Society: The Development of Higher Psychological Processes.* Cambridge: Harvard UP, 1978.
- Walker, Aisha, and Goodith White. *Technology Enhanced Language Learning.* Oxford: Oxford UP, 2013.

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