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Computer Assisted English Language Teaching and The Development of Critical Thinking in The 21st Century: The Case of Multimedia Centres in Yaounde Secondary Schools

Dr. Mbeh Adolf Tanyi

Senior Lecturer, Didactic Faculty of Education University of Yaounde, Cameroon

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ABSTRACT

For more than two decades technology has transformed society and the world has become a 'global village'. As such, African in general and Cameroon in particular still leave much to be desired. This situation was exacerbated when Cameroon became a highly indebted country according World Bank rankings. Also, economic crisis plus devaluation of CFA came and worsened the already degrading and limping situation. The government could no longer afford on the purchase of both software and hardware, not to mention capacity building in the field of using technology equipment and its application in teaching and learning English language for special purposes. It is from this backdrop that this paper sets out to examine the degree of preparedness educational sector in the use and usage of technology in English language teaching in higher education. Educational technology is not restricted to individual computer use in this paper, it involves equipment and application such as videoconferencing, digital television (allowing students to interact and manipulate programmes at their own pace), electronic whiteboards, and digital cameras (Jackson, 2008; EDUCATION WEEK, 2007; McCambell,2002; Marshall, 2002). The study used System for Technology Accountability Rigor (STAR) survey data for 2019-2021. A sample of 200 English language teachers and students were randomly collected from the faculty of education in the University of Yaounde 1. The survey is administered on an annual basis by a team of lecturers in the faculty of education. The survey was designed to provide meaningful information about technology integration and capacity building in the faculty of education in the teaching of English language for special purposes. The results proved that both teachers and students are still lacking the appropriate competences in the use and usage of equipment and its rightful application hands-on. Recommendations have been made to the Dean and the Rector on what kind of equipment to invest on and its capacity building of both professors and students on its usage.

Introduction

The roles of teachers and learners must be redefined in light of the new teaching and learning systems centred around telematic networks, which offer fresh insights into conventional notions of time and space. Reconfiguring educational organization and management is one of the most significant challenges facing the educational field of the twenty-first century. There is a consensus among writers and organizations, such the European Language Network, ICC (2002), on the vast training and communication potential of ICT. They contend that educators must take use of new organizational and pedagogical paradigms in order to provide future citizens with a cooperative, collaborative, and lifelong learning experience.

New teaching and learning environments and methodologies are clearly created when ICT learning settings and tools are used in educational processes, resulting in significant changes to the roles of both teachers and students (Web-based Learning, Open, Distance Learning and eLearning) as well as new training modalities (Instructor-led Learning/Training, on-site training, Blended-Learning, on-line training, Classroom Training -C-training-...) Lastly, to support and foster cooperation and collaboration among the participants in teaching and learning processes, new virtual training environments will emerge to provide tools and resources to favor communication and interaction as well as disseminate instructional materials online.

The Internet and telematic networks, which are now essential to modern teaching and learning methods, provide access to communication channels that boost engagement, account for the flexibility of time and place constraints, and provide limitless access to knowledge and information. The Net provides an excellent environment that has undoubtedly changed the relationships between various stakeholders in the educational field and enabled the emergence of new modalities for teaching and learning. These modalities, in turn, necessitate radical pedagogical changes and the redefinition of traditional models for teaching and learning. Cabero (2001) states that "the increased engagement and reception of information is attributed to the flexibilization of time-space that is accounted for by the incorporation of IT into teaching and learning processes. These options point to modifications in the ways that teachers teach and learn as well as in their communication models, opening the door to novel situations that support both solo and group learning.

Authors like Gisbert (2003) caution us that while computers and telematic networks are key components of teaching and learning processes and are potent information carriers, their educational potential may be limited if they are used alone without additional pedagogical strategies. Blazquez (2003) highlights that in order to reap the benefits of these large-scale virtual learning and teaching processes, participants will need to cultivate a critical distance. To put it another way, "We are aware that the Internet is not and will not be the panacea, it will not even become - to our judgment- a suitable educational means in all situations, furthermore, a proper critical distancing will be required to educate with it."

Objectives

To Examine ICT-based resources and tools that could be responsible for a classroom's successful ICT integration of English as a foreign language.

To assess elements, what factors influence the efficiency of information and communication technology integration in the processes of teaching and learning?

Pedagogic implication

Gaining the skills and knowledge needed to adapt to change has been one of the biggest worries of educators when it comes to ICT. The development of critical and responsible attitudes toward ICT is greatly hampered by the fact that many teachers believe they lack training in the use of new media and information processing techniques, and that ideological and attitudinal contents have been neglected (San Martin, Peirats et Sales, 2004). Although there is evidence that the successful integration of ICT into teaching and learning processes has been achieved by educational institutions via significant effort, it may not have been done in a systematic manner. In spite of this, there has been a noticeable growth in the quantity of ICT-related educational experiences, training course participation from instructors, and equipment in our schools in recent years.

According to writers like Cabero, Duarte, and Barroso (1997), teachers' training and the additional equipment in educational facilities are insufficient for them to recognize significant modifications in the processes of teaching and learning: The paradox of modern times is the wide range of technology available, sometimes even inside cities, which was unheard of in the past. However, we discover that textbooks and teachers acting as the exclusive sources of information are still the two mainstays of educational methods. One of the issues might be the requirement for specialized training in the design and production of messages more suited to our educational needs, as well as the curriculum and didactic use of technological resources. According to Cabero (1999), the majority of training has been created using technical and instrumental criteria, leaving out elements like organization, didactic design, and references to their use. "Today, the quality of the educational product is to be found in the initial and life-long training and not in the unique acquisition and utilisation of the infrastructure," according to Cebrian de la Serna (2003).

According to Majo and Marques (2002), the following circumstances necessitate changes in the training and competencies of teachers:

- The teacher needs to cope with more complex scenarios in which students are more heterogeneous but more familiar with the different communication ways.

- The modifications to the curriculum and tools to be used, taking into account ICT; The expansion of the roles that educators must play; and The advancement of didactic approaches.

- The requirement for ongoing, lifetime learning and knowledge update.

A lot of literature has already been written about teacher training in ICT. Cabero et al. (1996), Cabero (1999), Martinez (1995), and Romero (2000) all agree that creating training activities is a basic requirement for successfully implementing ICT in schools. However, we also think that a fundamental element is crucial to success: combining technological knowledge with the didactic application of technology, which would include things like creating activities, integrating IT into the teaching and learning process, and assessing students' progress. According to Correa (1999), "the school won't be able to meet the challenge that Information Society is calling for without training in the field of ICT." The main goals of this program are to address the demands raised by new telematic tools and to foster a movement of pedagogical renewal that will make it possible to include the new multimedia resources into the curriculum.

The training plans created with a strong technical and artistic foundation, according to Cabero (1998), "have not been useful to help teachers to integrate the didactic instruments and media in the curriculum and reveal them as serious problems which prevent a successful

integration of ICT into teaching and learning processes." It's clear that a lot of writers have commented on the lack of specialized ICT training for instructors. Thus, authors like Fernandez Morante and Cebreiro (2002), Blazquez et al. (2002), and Cabero et al. (2003) concur with this statement and continue by stating that a serious obstacle to the integration of media in educational centers is a lack of didactic training, which also limits teachers' opportunities for participation and intervention. It is evident that most training is primarily focused on the acquisition of technical and instrumental skill and knowledge, leaving out crucial elements like the design and production of materials as well as the didactic usage.

In this way, Cabero (1999) distinguishes between two distinct approaches to training that should be kept in mind if we are to successfully integrate technology into teaching and learning practices. He also establishes a distinction regarding what teacher preparation in the media should be. As a result, the author first mentions "training for the media," which is intended to help people learn how to utilize the tools, i.e., how to comprehend and decode the various tools' systems. As a result, educators will be more equipped to gather data and decipher messages from various media (Cabero, 2003). However, the same author also discusses the idea of "training with the media," which presents a vision of a training that is much more focused on the use of the means as didactic instruments that support the development of cognitive abilities, stimulate the understanding of information, and create learning environments that are differentiated from one another.

One of the reasons teacher training in methods falls under the first classification—training for the media—is the lack of emphasis that has historically been placed on the teacher as the author of educational materials. Romero (2002) argues that media integration into teaching and learning processes is sufficient to leverage the media's inherent educational potential. This is one of the reasons why media training is not as common as it ought to be

.

Role of ICT in English language teaching.

The Directorate General of Education and Culture of the European Union commissioned the report "The Impact of Information and Communications Technologies on the Teaching of Foreign Languages and on the Role of Teachers of Foreign Languages," which states that the following ICT competencies will be necessary for foreign language teachers operating in media-rich environments:

- Recognize the individual learning problems of students.
- Make a careful and considered choice concerning the use of the media.
- Check the truth of information content offered.
- Develop efficient search techniques and be capable of conducting effective.
  research with the help of the computer.
- Be able to use standard software confidently and competently.
- Make wise and critical choices of information found

Methodology

After the study's relevant data had been updated, examined, and interpreted, the objectives had been made clear, and the sample had been carefully chosen, we began by planning and developing the questionnaire to be sent to English language teachers who were currently enrolled in or planned to enrol in training programs pertaining to the acquisition of ICT skills, which would enable them to successfully integrate technology into their lesson plans. The reliability for the result gave a Cronbach's Alpha 0.9070. The sample size for our study was 71 participants. Percentage and frequency was for data analyses.

Results

Mastery and competence in the usage of determined telematic functions

Regarding the level of proficiency that educators believe they possess when it comes to effectively utilizing ICT. This section is crucial because it attempts to assess the responses provided by educators regarding their proficiency and competence in using specific telematic functions. Specifically, educators are questioned about their ability to use telematic tools for personal communication, as well as for working, training, and developing personal and managerial tasks.

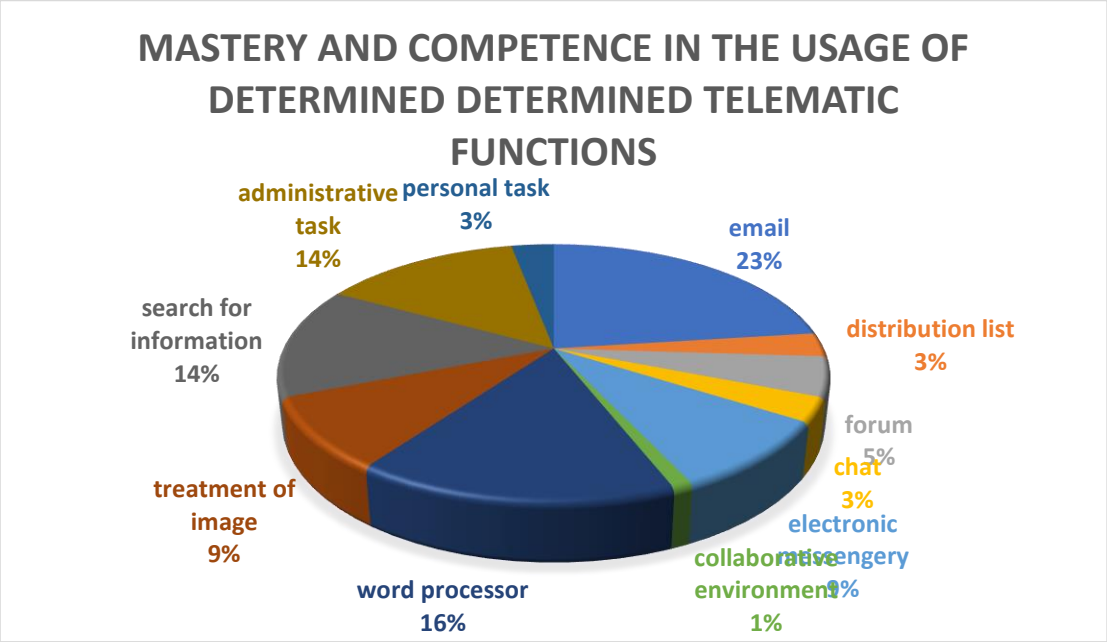
According to all of the data and graphics that were analyzed—information that is available in the corresponding annexes—and the previous graphics, 45% of teachers—the highest rate—believe that they have a good competency in using email. When we consider the other groups that rated their competency level at 4 or 5, the total number rises to 85%. Regarding distribution lists, teachers indicate that they are not proficient in using this communication tool in 45.1% of cases. Notably, a large percentage of teachers assess their proficiency with forums as extremely low, with 73% of them rating the tool as low proficiency (i.e., giving it a score between 1 and 3). Teachers might also demonstrate their lack of expertise and competency through chats; 62% of the teachers surveyed indicated they had either no knowledge of how to use this technology at all or very little.

Conversely, teachers appear to be somewhat competent with electronic messengery, with 33% demonstrating good proficiency with it. On the other hand, another focus indicates complete incompetence, albeit to a lesser extent than with earlier tools (40%). Regarding collaborative spaces, a significant portion of the entire group of instructors surveyed (73,2%) claim to be either non-competent or only slightly competent in using them in their teaching and learning methodologies. When it comes to word processing, educators demonstrate their proficiency with them; in fact, 78,9% of instructors assessed their proficiency as being between a 4 and a 6. There may not be much of a difference amongst teachers when it comes to how they handle photos, since every rating receives the same proportion.

Along with email use, one of the most prevalent competencies among instructors (69 percent ranked their skill level from 4 to 6) is using ICT to look for information.

One of the most crucial topics for our research may be competency in using ICT as a self-training tool. It's interesting to note that 49.3% of teachers report having limited competence in ICT-based self-training. instructors who rated 4 to 6 make up 41% of those who claim to be somewhat competent in this area. However, a larger percentage of instructors who rated 1 in this area indicate that they are completely uncompetent.

Considering all the data together, teachers demonstrate exceptional proficiency in the following areas: 45% in email use, 33,8% in word processing, 29,6% in information retrieval, 22,5% in administrative activities, 18,3% in using electronic messenger, and 18,3% in managing picture treatment. Teachers appear to be less proficient, however, when it comes to creating personal ICT assignments (5,6%), using chat rooms (7%) and forums (11,3%), and using ICT to conduct personal activities. Remarkably, participation in collaborative settings is once more assessed as a very low-level competency (1,4%). The fact that teachers admit they are not competent in self-training (11,3%) is also noteworthy.



Source: Fieldwork, 2023

CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES

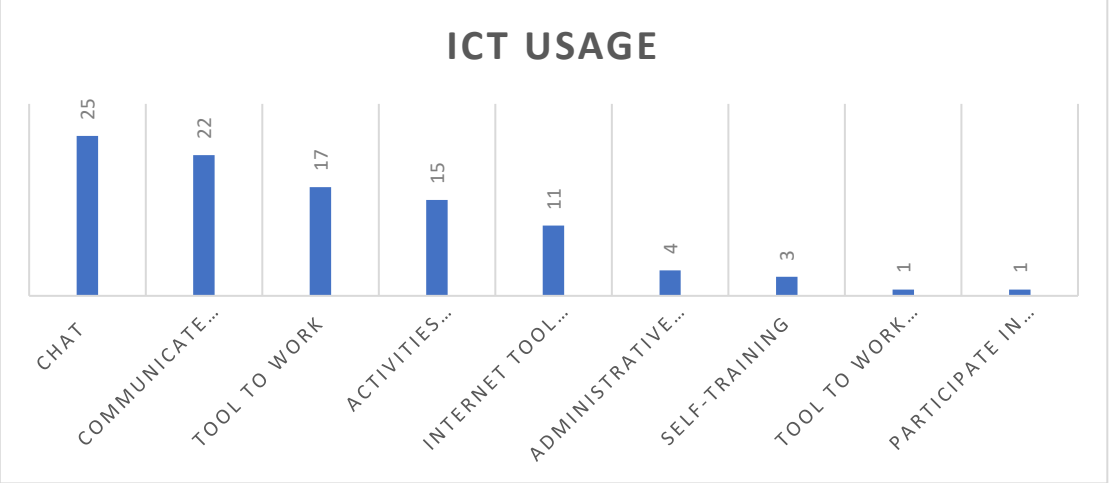
There are times when a teacher's lack of equipment at home or in the classroom prevents them from adequately completing specific course requirements. We included these items in the questionnaire since connectivity is yet another factor that hinders teachers from fully following online courses. They discuss the use of computers by teachers at home and at work, their access to the internet, whether they access it through a connection from home or at school, and other things.

CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES								
items	**SA**		**S**		**D**		**SD**	
Availability of computer at home	**40**	**56.3**	**20**	**28.1**	**10**	**14.0**	**1**	**1.4**
Availability of computer at work	**45**	**63.3**	**15**	**21.1**	**5**	**1.4**	**6**	**8.5**
Access to the internet from home	**10**	**14.0**	**05**	**1.4**	**36**	**50.7**	**20**	**28.1**
Access to the internet from school	**40**	**56.3**	**5**	**1.4**	**23**	**32.4**	**3**	**4.2**
Types of connection (Modem, ADSL)	**36**	**50.7**	**27**	**38.0**	**7**	**9.9**	**1**	**1.4**

Source: Fieldwork,2023

Usage of the computer:

Teachers use and define their competencies differently, as the figure makes clear. 25 percent of them use computers for chat, 22 percent for email communication, 17 percent for work, 15 percent for job-related tasks, 11 percent for Internet communication, 4 percent for administrative work, 3 percent for self-training, 1 percent for teamwork, and 1 percent for leisure activities.



Source: Fieldwork, 2023

Conclusion

To sum up, all we can say is that the foundation of future training processes will be the development of teacher networks to facilitate additional training and knowledge generation, and the consolidation of virtual learning communities as potent training agents. Teachers must be equipped and ready to take on such a task. might be used to create a different set of training modules that are solely based on educational innovation and research. These modules would be genuine cornerstones of recent training initiatives, developed with consideration for the most recent developments in educational technology research. Technological advancements frequently give place to what are known as emergent technologies, such as television, PDAs, iPods, mobile learning, portability, and the use of mobile phones and other gadgets. These technologies provide for new avenues of research in this subject. It is our responsibility as educators to consider all of these new technology and incorporate them into studies on education. Teachers must be equipped to handle all of these changes, thus educational authorities in charge of promoting high-quality training must make an effort to guarantee that it is included in their program. Students now, citizens of the twenty-first century, will most likely thank us for it.

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