

Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms



Yassine AIT HAMMOU

Ibn Zohr University, Morocco

ABSTRACT: The present study explored the most frequently used ICT tools for teaching language skills and components in Moroccan secondary school EFL classrooms. This study adopted a mixed-method approach of investigation wherein two instruments were used to collect data: a survey questionnaire and a semi-structured interview. A total number of 80 Moroccan secondary school EFL teachers participated in this study and were selected using convenience sampling. Eight teachers were selected for the interviews through reputational and purposive sampling. Collected data was analyzed quantitatively and qualitatively. Findings revealed that teaching speaking and listening skills received high use of ICT compared to teaching language components and reading and writing which integrated medium and low ICT use, respectively. Findings also showed that computers, laptops, and projectors are the most preferred ICT tools among EFL teachers. This study concluded that teachers' ICT tools preference seems to have an impact on their ICT use frequency. The latter is also influenced by other factors such the availability/unavailability of ICT equipment/facilities in the schools and training/lack of training on the use of ICT in instruction. A number of recommendations are presented regarding a successful integration of ICT in EFL language teaching in the Moroccan secondary school contexts.

KEYWORDS: EFL, English, ICT Integration, ICT Tools, Language Skills, Morocco.

I. INTRODUCTION

Research findings provide evidence for the positive impact of the use of ICT (Information Communication Technology) in education. It is assumed that when ICT is employed in education, it can create powerful learning environments. It can also transform the teaching and learning process in a way that helps students deal with knowledge and information in an active, self-directed, and constructive way (Volman & Van Eck, 2001; De Corte et al., 2003). As suggested by Hawkridge et al. (1990), the use of ICT in education can bring about positive change to education as a whole in the sense that it can improve performance, teaching, and learning. In this regard, researchers have found that learning technologies enhance teaching and learning by providing diversified opportunities to practice and analyze information and knowledge and offering better access to relevant teaching and learning materials. Since there is enough evidence on the positive impact of the use of ICT on students' learning (Mumtaz, 2000; Hattie, 2009), the International Society for Technology in Educational (ISTE) emphasizes that it is high time teachers of today are prepared to provide technology-based learning opportunities for their pupils (Hamidi et al., 2011).

II. REVIEW OF THE LITERATURE

A. *Benefits of ICT Integration in Instruction*

Learning technologies have great potential for knowledge dissemination, effective learning, and the development of more efficient education services. Empirical research proves that ICT(s) when used appropriately, expands access to education and strengthens the relevance of education to the increasingly digital settings. ICT is also believed to enhance educational quality (the teaching and learning process) in educational settings (Paul, 2002; Papert, 1987; Voogt & Pelgrum, 2005; Watson, 2001; Welle-Strand, 1991). For instance, it makes teaching and learning an engaging and active authentic (real-life) process. Significant findings from a study which was carried out by Cox et al. (1999) on the intake of ICT in the teaching and learning process revealed that ICT (1) makes the lessons more enjoyable, more accessible, more fun for teachers and their pupils, more diverse, more motivating for the pupils and more enjoyable, (2) improves the presentation of materials, and (3) allows greater access to computers for educational use.

Lafferiere (1999) states that ICT in schools and classrooms tends to attract school learners' interest and motivation. ICTs are also seen as effective tools for learner-centeredness education, which has been a new prototype of the ideal education that

Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms

caters to the learners' needs through diversified and personalized instruction (Watson and Watson 2011). For example, providing students' needs diagnosis, giving feedback and remedial work, assessing and testing learners, dealing with different learning styles and multi-intelligences, creating interactive content, recording and storing learners' works, to name but a few are some of the potentials given by ICTs for the sake of caring for and supporting learner-centered approach (Bush & Mott, 2009; Reigeluth et al., 2008).

For Drent and Meelissen (2008), ICTs can also support various educational objectives and skills. Searching and assessing information, cooperation, communication, and problem-solving, among many others, are some of the purposes and skills ICTs use try to attain, which are all of paramount importance in preparing learners for the knowledge society. Similarly, Plomp et al. (1996) and Voogt (2003) consider ICT as a powerful tool and a crucial medium for promoting new methods of instruction (teaching and learning). They support this idea by clarifying that ICT is to be used to develop and enhance students' skills for more significant educational objectives such as cooperation, communication, problem-solving, and, even more importantly, lifelong learning.

In the same vein of thought, Haddad and Jurich (2002) indicate that ICTs can enhance the quality of education in several ways, for instance, by increasing learner motivation and engagement and facilitating the acquisition of basic skills. Grabe & Grabe (2001) points out that since learning technologies can engage students' thinking, problem-solving, reasoning, and decision making, every teacher must employ ICT in their classrooms to enhance their students' learning in every subject. In fact, advanced and appropriate use of technology can provide student-centered learning environments with ease (Drent, 2005). According to Dodge, Colker, and Heroman (2003), such innovative use of ICT can also engage students in constructivist classrooms and improve their social interaction. Research has also shown evidence that ICT improves pupils' cognitive development (Nir-Gal & Klein, 2004), increases their creativity (O'Hara, 2008), and boosts their problem-solving skills (Sarama & Clements, 2001).

B. Teachers' Most Frequently Used ICT Tools in Instruction

Rahimi and Yadollahi's (2011) study, which was conducted in Iran, suggested that CD players, email services, search engines, educational websites, software, word processor, and printer were the applications and tools Iranian EFL teachers used for instructional purposes. Likewise, Becker, Ravitz, and Wong (1999) found that word processing software, CD-ROM software, and World Wide Web browsing software were the most commonly used applications and tools by teachers regardless of the subject they taught. However, findings from another study reported that Iranian teachers' use of the Internet is generally limited (Zamani, 2010). In fact, this conclusion is supported by Rahimi and Yadollahi's (2011) study. The latter also concluded that Iranian EFL teachers used ICT tools most frequently for teaching oral skills, i.e., listening and speaking. Following that, they used ICT tools in teaching vocabulary, grammar, reading, and writing. Similarly, Yang and Huang (2008) reported that English teachers in Taiwan used ICT most often in activities related to listening and speaking. With relevance to Rahimi and Yadollahi's (2011) study, the researchers reported that while CD player was the most frequently used tool for teaching oral skills, the Internet was used most frequently for teaching written skills (reading and writing). Among the Internet applications listed in the rating scale, email services and search engines were the most commonly used applications in teaching written skills. As for language components, the participants reported using the Internet applications and -very near to that- computers most frequently for teaching language components (grammar and vocabulary). Among the web applications, computer software, and hardware, search engines, word processors, and printers were most frequently used in teaching language components, respectively.

III. OBJECTIVE OF THE STUDY

This study set out to explore Moroccan EFL teachers' most frequently used ICT tools for teaching English language skills (speaking, listening, reading, and writing) and language components (grammar, vocabulary, and functions).

IV. RESEARCH QUESTION

The following research question guided the current study:

'What are the most frequently used ICT tools for teaching English language skills and components in Moroccan secondary school EFL classrooms?'

V. METHOD

The present study adopted a mixed-methods approach to collect and analyze data. "The use of the mixed methods provide[s] rich numerical and narrative data that allow[s] for a complete understanding of the problem under study" (p.4, Ait Hammou and Elfatih, 2019). This study used the sequential mixed-methods design to collect quantitative and qualitative data through two phases – a quantitative phase followed by a and qualitative one. Through convenience sampling, 80 Moroccan secondary school EFL teachers were selected to participate in this study 8 of which were selected for the interviews through reputational and purposive sampling. As for data collection instruments, two instruments were used in this study: a survey questionnaire and a semi-structured interview. Prior to data collection, both instruments were piloted to resolve issues concerning the layout, the

Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms

wording, readability, and clarity of the items (questions). The survey questionnaire consists of 4 sections: (1) Demographics survey, (2) Availability of ICT facilities in schools survey, (3) ICT knowledge and skills survey, and (4) ICT use in teaching survey. The interview protocol included open questions based on the research question. Probing questions were also used to expand further on themes that emerged during the interviews. The survey questionnaires were administered to EFL teachers in several public secondary schools in the area of Agadir as well as those who participated in an annual conference that took place during the period of data collection in the same city. Concerning semi-structured interviews, they were conducted face to face and were audio-recorded. The study used descriptive statistics to organize and analyze quantitative data (graphs) obtained from the questionnaires. Regarding the analysis of the qualitative data from the interviews, the interview responses were audio-taped, transcribed, coded, and analyzed using content analysis. The content analysis included individual-case and cross-case analyses (grouping responses, noting, classifying, and comparing developing themes).

VI. RESULTS

A. Findings of the Questionnaire Data Analysis

1) Availability of ICT Facilities and Tools for Teachers

The survey results demonstrated in Figure 1 clearly show that the schools where the teachers work lack adequate ICT facilities, hardware, and software that could be used for instructional purposes. For instance, the participants' schools do not have interactive boards according to 93% of the participants, computers according to 62%, TV sets according to 65%, multimedia facilities according to 65%, educational software according to 64%, printers according to 62.5%, and photocopiers according to 57%. Additionally, it seems that the Internet connection is also a serious issue and a common barrier to ICT integration among the teachers who participated in this study. As Figure 1 displays, 64% of the teachers have useless Internet-disconnected computers, 74% of the teachers suffer from a lack of high-speed Internet connection, and 84% of the teachers do not have personal access to the Internet in their schools (see Figure 1 for more details).

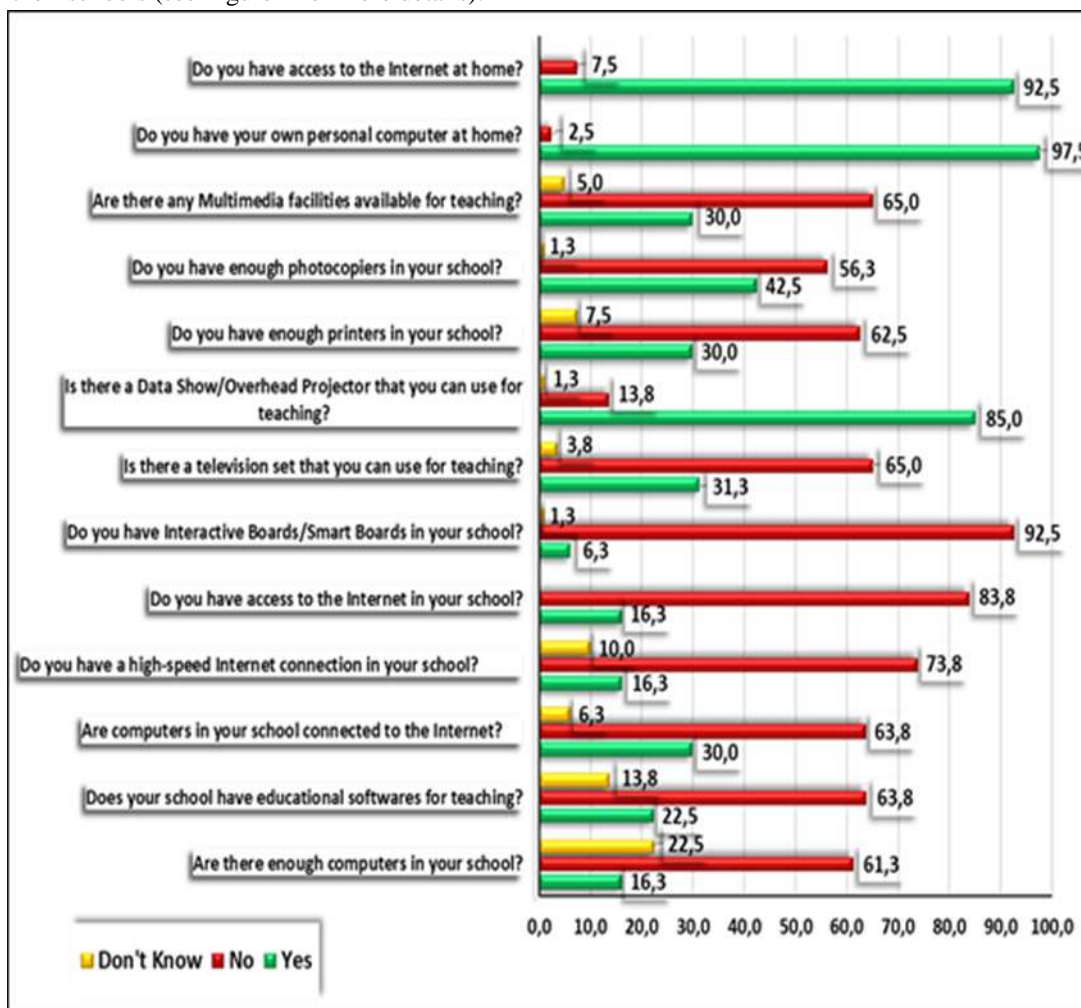


Figure 1. Availability of ICT Facilities and Tools for Teachers

Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms

2) ICT Knowledge and Training

According to Figure 2., 56% of the teachers did not have any ICT training during their pre-service training, 61% of the teachers did not benefit from the GENIE ICT training program, and 43% of the teachers never took any other training in ICT. These findings indicate that a considerable number of teachers who participated in this study lack training on the use of ICT in education.

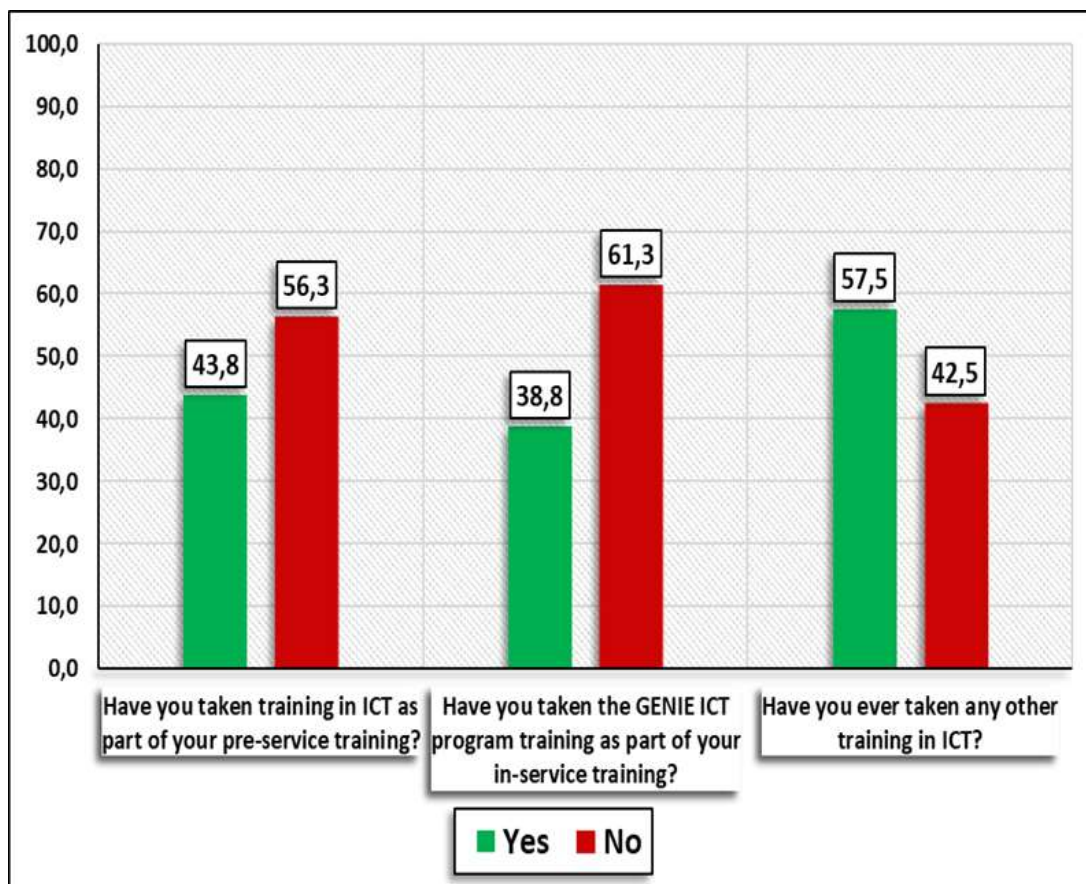


Figure 2. Teachers' ICT Training

3) Teachers' Frequently Used ICT Tools in Teaching English Language Skills and Components

The findings from the questionnaires showed that speaking and listening are the main skills that receive more ICT integration in the EFL classroom practices, followed by the language components. In contrast, reading and writing ranked at the bottom of the list with very modest ICT use in teaching these two skills. Figure 3. details the participants' most frequently used technological tools for teaching English language skills and components.

Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms

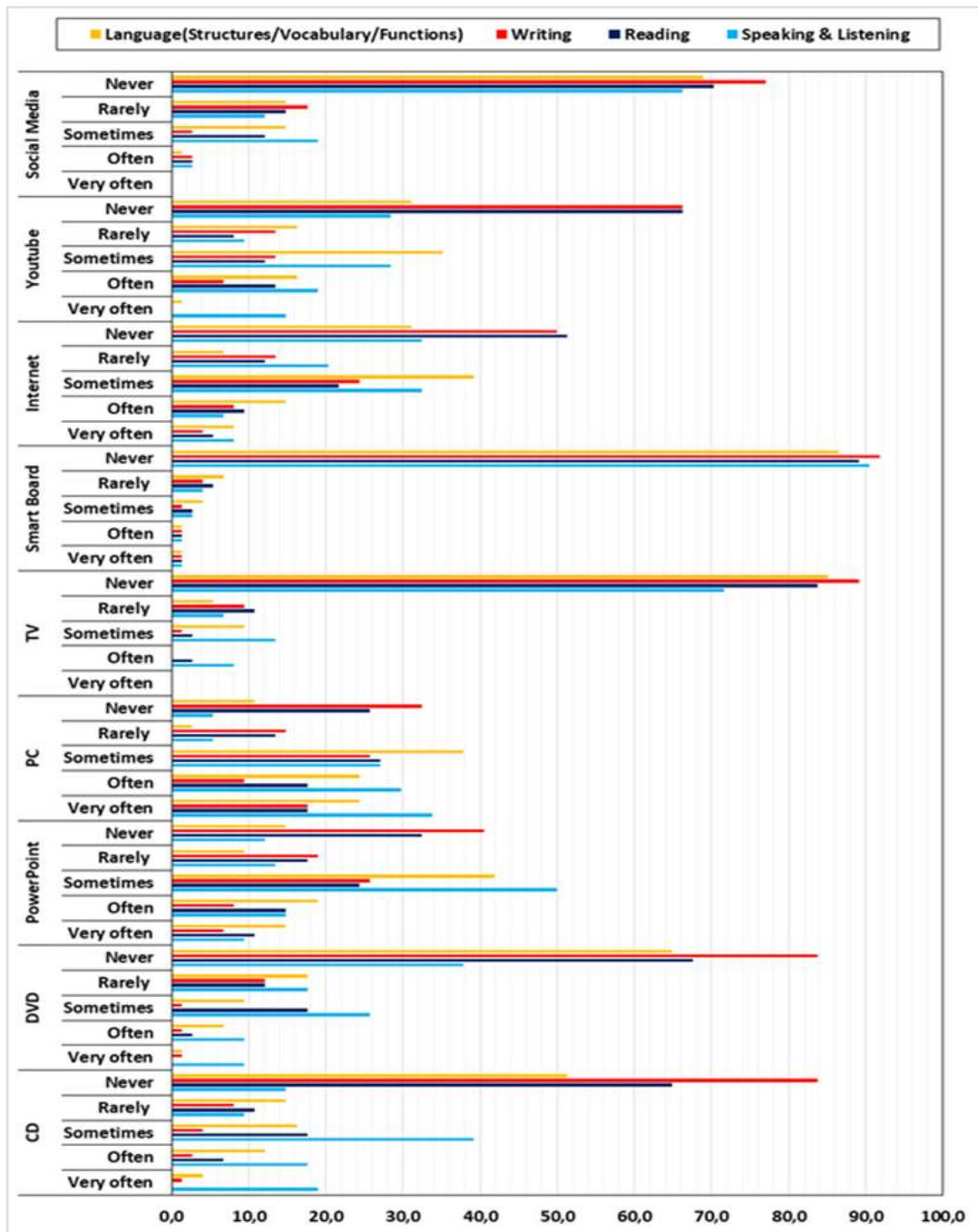


Figure 3. Teachers' Most Frequently Used ICT Tools for Teaching English Language Skills and Components

4) Teachers' ICT Tools Use Preference

As far as teachers' preferred ICT tools are concerned, the participants in this study were asked to rank the ICT tools they prefer to use while teaching English. According to the questionnaire findings, laptops, computers, and projectors are considered the most preferred ICT tools that are frequently used by the participants in the EFL classroom teaching practices. Figure 4. illustrates in detail the participants' used ICT tools for teaching from the most preferred to the least.

Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms

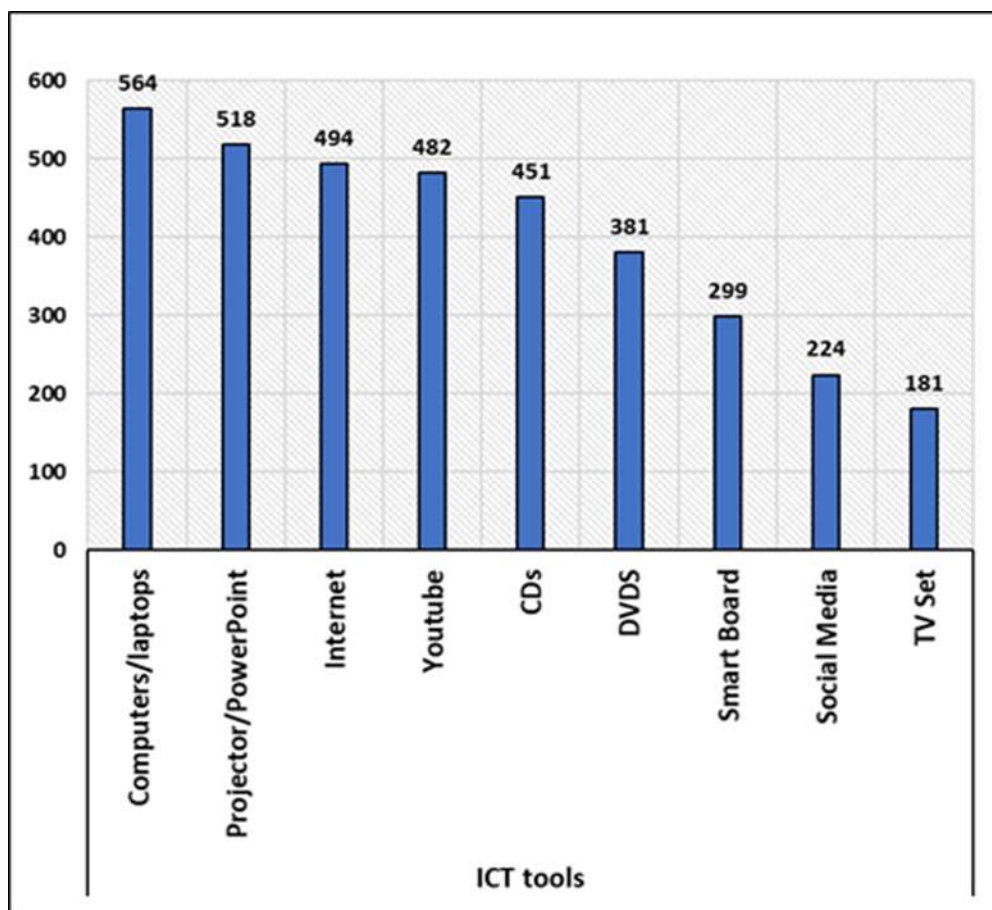


Figure 4. Teachers' Preferred ICT Tools

B. Findings of the Interview Data Analysis

Concerning the most frequently used ICT tools in teaching language skills and components and the ICT tools teachers prefer to use the most, the interview results are consistent with the results obtained from the survey questionnaire. The majority of the participants in the interviews reported similar experiences regarding the most frequently used ICT tools in teaching the English language skills and components and the most preferred ICT tools in their classrooms as the ones reported from the quantitative findings of the survey questionnaire. Speaking and listening were reported to be receiving more frequent integration of ICT, followed by language components such as functions. However, reading and writing were considered as skills that received lower use of ICT among the participants. As for the most preferred ICT tools in teaching, laptops, computers, and projectors were indicated as the ICT tools that the interviewees prefer to use in their classrooms. Additionally, and more importantly, the interview findings provided insights into understanding a number of factors that seem to influence teachers' ICT use frequency and ICT tools preference. For instance, the unavailability of or lack of adequate ICT equipment in schools, lack of continuous and effective technical and pedagogical training with regard to ICT use, technical issues, and lack of technical support are perceived as major obstacles that impede a successful integration of ICT in Moroccan EFL classrooms.

VII. DISCUSSION

This study showed that computers/laptops, projectors, and the Internet are the most frequently used ICT tools in teaching English in the Moroccan secondary school EFL classrooms. In this regard, the findings indicate that the frequency of ICT use for teaching seems to be influenced by the teachers' ICT tools use preference. In other words, the ICT tools which are preferred are the ones that have a high use frequency in instruction and vice versa. However, the findings also imply that the high use frequency of some ICT tools such as personal computers (or laptops) and projectors in this study is not only due to the fact that they are the teachers' most preferred ICT tools, but also to the fact that they are either the most available ICT equipment in the schools as is the case with overhead projectors, or owned by the majority of the teachers as is the case with personal computers (see Figure 1). This can be explained by the fact that specific ICT tools with low use frequency in this study is due to the unavailability of ICT facilities in the secondary schools such as Smart Boards and the Internet (see Figure 1). As for the Internet, it is worth mentioning that this study showed that the frequency counts of using the Internet, for instance, were considerably less than frequency counts of using computers and other digital devices in EFL language classes (see Figure 3) due to the lack of or the limited access to the Internet

Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms

in the Moroccan schools (see Figure 1). In fact, these findings are supported by other studies which reported similar results with regard to teachers' limited use of the Internet in schools (see, for instance, Rahimi and Yadollahi, 2011; Zamani, 2010).

Regarding Smart Boards, some teachers expressed their willingness and interest in using innovative ICT tools such as Interactive Boards during the interviews. Yet, only very few schools own this ICT tool, as the findings from this study showed. Also, lack of adequate technical training on the complex and sophisticated use of innovative ICT tools such as 'Smart Boards' could lead to low use frequency of innovative tools in the sense that some teachers admitted, during the interviews, that they lack technical training on how to operate Smart Boards although they find them interesting and efficient tools to use for educational purposes. In fact, the lack of continuous and practical training in ICT is one of the obstacles that hinder the successful integration of ICT in the classroom in this study. Despite the fact that 44% of the teachers participating in this study received pre-service training on ICT and 39% of them took the GENIE (ICT) training as part of the in-service training, the majority of the interviewees expressed their concern and dissatisfaction about both the low quality as well as the insufficient amount of time allotted to the ICT training they had taken. These findings support the conclusions of several previous studies (see, for instance, Ait Hammou and Elfatih, 2019; Alhamd, Alotaibi, Motwaly, & Zyadah, 2004; Balanskat et al., 2006; Becta, 2004; Beggs, 2000; Gomes, 2005; Özden, 2007; Pelgrum, 2001; Toprakci, 2006).

On this basis, this study suggests that it is high time that Moroccan schools had innovative ICT tools for instructional use provided that teachers are technically and pedagogically trained on how to use such sophisticated tools as the interview findings revealed that quality and length of the ICT training programs are of paramount significance to teachers' readiness and willingness to ICT integration in their teaching practices. The findings of this study revealed that EFL teachers use ICT mostly in teaching speaking and listening, followed by language components (vocabulary, structures, and functions), reading, and writing. Accordingly, this study recommends that Moroccan education planners, decision-makers, trainers, curriculum designers, supervisors, and teachers be aware of the importance of using ICT not only in teaching speaking, listening, and language components but also in teaching writing and reading. The latter should not be ignored in this regard. The use of ICT in teaching reading and writing will be of a benefice to the students. Pre-service and in-service training on the integration of ICT should focus on how to pedagogically use ICT in teaching all the aspects of the English language without exception.

VIII. CONCLUSION

The objective of this study was to explore Moroccan teachers' most frequently used ICT tools for teaching English language skills and components in the secondary school classrooms. The methodology of this study used a mixed-method design combining quantitative and qualitative methods of investigation. The study employed survey questionnaires and semi-structured interviews. Eighty secondary school EFL teachers participated in this study. Findings showed that speaking and listening are par excellence the skills that integrate more use of ICT integration in the classroom teaching practices, followed by language components, whereas reading and writing received very low ICT use. Findings also showed that computers, laptops, and projectors are the most preferred ICT tools that are frequently used by teachers in the EFL classroom practices. This study concluded that teachers' ICT use frequency appears to be influenced by their ICT tools preference as well as the availability of ICT equipment. The unavailability of ICT facilities and lack of or inadequate technical training on ICT lead to a low use of sophisticated ICT tools and, thus, hinder a successful ICT integration in general. This study suggests that providing sufficient and varied ICT tools in the Moroccan schools has become a necessity to have a considerable level of ICT use in instruction. EFL Teachers should also receive adequate and efficient technical and pedagogical ICT training to ensure the quality use of ICT in teaching all the aspects of the English language.

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Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms

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Teachers' Most Frequently Used ICT Tools for Teaching Language Skills and Components in Moroccan Secondary School EFL Classrooms

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