



An e-journal of Teacher Education  
and Applied Language Studies

## New Technologies, Multiple Literacies and Teaching English as a Foreign Language

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**Abstract** | This article presents and briefly discusses the results from a survey conducted with English teachers of the third cycle and secondary education in Portugal as part of a study on multiple literacies and Web 2.0 in English as a foreign language (EFL) classroom (Cardoso). Based on the answers provided, it can be assumed that among this group of teachers, new technologies tend to be part of their professional practice. However, it is unclear if digital tools have been used to actually promote more innovative ways of teaching or just as a different way to approach more traditional methods. Moreover, it seems that suitable guidance, training and further development of appropriate materials are required to facilitate and better integrate new technologies in the EFL classroom.

**Key words** | Technology and Web 2.0, multiliteracies, digital literacies, multimodal literacy, English language teaching

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**Citation:** Silene Cardoso, "New Technologies, Multiple Literacies and Teaching English as a Foreign Language." *e-TEALS: An e-journal of Teacher Education and Applied Language Studies* 8 (2017): 1-26. ISSN 1647-712X

## INTRODUCTION

This article is based on a study on multiple literacies and Web 2.0 in English as a foreign language (EFL) classroom (Cardoso). The study involved a survey conducted with English teachers of the third cycle and secondary education in Portugal through an online questionnaire which was made available from February 7<sup>th</sup> to March 31<sup>st</sup>, 2017. The aim of this article is to present the most relevant data collected along with a brief discussion on the results.

The article is organized into four main parts. In the first part, a brief theoretical background on multimodality, multiple literacies and the Web 2.0 and its implications for learning are presented. The second part is dedicated to describing the methodology of the study. In the third part, the most general data from the study are presented and discussed. The last part presents additional comments along with a brief presentation of some documents and initiatives concerning the use of technology for learning, and more specifically for language learning, in the European Union and Portugal as a way to further support the meaningful and effective use of digital tools in language learning.

## THEORETICAL BACKGROUND

### *Communication, Society, and Learning*

Discourse and social interactions have been greatly impacted by new technologies, especially the Web 2.0. Since the onset of the Internet and the increasing levels of globalization, language and meaning-making have also undergone significant changes. In the face of such transformations it is possible to identify two types of 'revolution' (Kress, "Gains and Losses" 6): one that is related to the modes of representation, in which it is possible to observe a change from the central role of writing to the increasing significance of the image; and a second one which concerns the media of dissemination, in which the medium of the screen has been gaining a central role in relation to the medium of the book. These two major changes, or

revolutions, have had a great impact not only on social interactions but also on the way knowledge is shaped. Therefore, one way of understanding the impact of new technologies on social interactions and on discourse is to analyze the relationship between these modes of representation and the media of dissemination (Jewitt, "Multimodality" 184).

Multimodality is related to how meaning is made across communication processes and how we choose to make it through different modes. It is an approach through which communication and representation are understood to involve something more than language, and in which those modes are always being shaped and reshaped by social practices. As explained by Kress, "[m]ode is a socially shaped and culturally given resource for making meaning. *Image, writing, layout, music, gesture, speech, moving image, soundtrack* are examples of mode used in representation and communication." ("What is Mode?" 54).

From this point of view, it is possible to state that communication is always multimodal (Kress, "Gains and Losses" 5). As language is not the only way people communicate, it is essential to look at and analyze beyond language to understand communication and interaction in contemporary societies. Moreover, as signs and modes are culturally and socially motivated, it is also important to bear in mind that different cultures create different semiotic representations for making meaning.

The shift in the dominance of the medium of the page to the medium of the screen has also intensified the transformations in the reading path<sup>1</sup> and in the role of the author. Additionally, as pointed out by Kress, the new media not only make the use of different modes easier, especially images and sounds but also promote interaction among their users (interactivity) and the relation of users with other texts (hypertextuality) (*Literacy* 4).

In other words, the medium has a profound impact on meaning-making and, in this case, the change from the page to the screen has intensified the spread of multimodal texts. Once new technologies facilitate the use of different modes, and each mode has its own potentials and constraints in meaning-making, it is crucial to learn how to use the available modes

by understanding their potentials for meaning. From this perspective, understanding how those modes work on the screen poses a central issue of discussion to learning (Jewitt, *Technology* 12).

The development of new technologies, and especially the advances in Web 2.0 technologies, has created not only new discourses or forms of interaction and other forms of integration, or opportunities, but also further divisions (Cope and Kalantzis, *New Learning* 18). Therefore, education and literacy have to be rethought in order to address the new forms of discourses and the wide range of multimodal texts that are mainly supported by new technologies. Furthermore, as pointed out by Cope and Kalantzis, “[education] is also expected to provide solutions for inequality, poverty, and prejudice, as well as to enable social justice, cohesive sociality, job skills, scientific discoveries, wealth creation, personal fulfillment and self-realisation” (19).

It is clear, however, that literacy cannot be understood as, nor limited to, learning how to read and write as it has been usually considered. Thus, concepts such as ‘visual literacy’, ‘new literacies’, ‘digital literacies’, and ‘multimodal literacies’, which have been used to describe and point the way towards new practices of discourse impacted by technology, need to be addressed in education.

Digital literacy, for example, refers to the ability to perform some competences in digital environments. In the past, the concept was related more to technical competences (e.g. computer literacy); however, as it cannot be restricted to technical use only, and since nowadays it involves different competences, it is also possible (and maybe more relevant) to talk about digital *literacies* (Buckingham 77). Besides learning how to understand and use different modes in the medium of the screen, it is also necessary to develop other skills, such as, but not limited to: Internet searching; hypertext navigation; knowledge assembly (that is, knowing how to gather and compare information from diverse sources); content evaluation; online safety; and online etiquette. Mastering the technical aspects of the new technologies, therefore, is not so essential – especially considering the increasing number of user-friendly technologies available – in comparison to other competences mentioned, which seem of primary importance.

As explained by Rojo, schools need to create practical opportunities for students to become effective meaning-makers by critically analyzing and reinterpreting the different discourses and meanings they receive or produce (29). In this sense, the concept of critical literacy seems more important than ever, since being a critical thinker is essential in our contemporary knowledge society. Critical literacy<sup>2</sup> (Freire, 1987; Luke, 2000; Luke & Dooley, 2011) basically refers to the competences through which cultural and social relations and political power can be transformed, by analyzing and using text (Luke & Dooley, 2011). This is not a new concept and has been applied in many educational contexts, including second language learning environments. The relevance of critical thinking (and problem-solving) has also been emphasized on the *Partnership for 21<sup>st</sup> Century Skills*, co-funded by the National Educational Association (USA) as one of the most important skills to be developed along with communication, collaboration, creativity and innovation, known as the 4 Cs (NEA 2). Therefore, the role of the school and education is to prepare the learners to engage in the communication, as critical producers and consumers, considering the increasing mediation of technology. Communication is at the core of the society and, as aforementioned, learning how to critically communicate using technology seems increasingly important.

In this scenario, the importance of the English language in the world is unquestionable. English has become more than ever the common language of the media, commerce, politics, the film industry, science, academia, and, undoubtedly, of the Internet, being used by different people around the globe. Crystal has estimated that there are currently in the world around five non-native speakers of English to one native speaker ("English" 37). In this sense, the role of the EFL teacher is to guide learners in the processes of communicating effectively using the different modes and media available to them. Additionally, since an increasing emergence of new Englishes has been seen (Cope and Kalantzis, "Introduction"; Crystal, *English as a Global Language*; Jenkins), linguistic and cultural issues are central in contemporary societies, which require the use of multiple languages and multiple Englishes for interactions in an increasingly technological world.

### ***Web 2.0 and Education***

Technological resources in English language classrooms have been used for some time; and some of them, such as audio and video materials, for a quite long time. However, what seems necessary to be analyzed and discussed is the way new technological resources, especially the ones supported by Web 2.0 have been used and how they can foster multiple literacies and help learners actually engage in contemporary communication.

More than technical tools and market-oriented principles, the second generation of the World Wide Web generates important social implications. Web technologies currently in use have the fundamental feature of facilitating interaction among people by making it easier to add, edit, and share information on different platforms. At the conception of the Internet (that is, the traditional web, called Web 1.0), the creation and editing of content were mainly restricted to professionals who mastered the tools and had the necessary equipment to create and provide information online. In comparison, Web 2.0 brought about the possibility for almost everyone to become an author and/or an editor in digital environments. Therefore, whereas the great majority of users of the first generation were consumers of information, many have now become creators and developers. Interaction, mobility, and collaboration are important features of Web 2.0 and, as its social aspect can be considered its core, it certainly has crucial implications for education, and especially for language learning and teaching.

In this sense, many researchers have been investigating the influence of Web 2.0 in learning and how important is to integrate and get the best of it to enhance learning processes. It is argued, for instance, that it is pertinent for educators to understand the types of Web 2.0 tools available, as well as the resources and possibilities it provides (Bower; Redecker et al.). Bower, for example, conducted a study in which more than two thousand links have been analyzed and reviewed from online archive sites, educational technology texts, online searches, and other papers on Web 2.0. The author identified a total of 212 Web 2.0 technologies for learning and teaching purposes and organized them in thirty-seven types, grouped into fourteen clusters.



Additionally, another possible way to classify Web 2.0 tools and applications which might be useful to teachers and educators is using the revised taxonomy of the framework for categorizing educational goals, published by the educational psychologist Benjamin Bloom and his collaborators, which became known as Bloom's Taxonomy<sup>3</sup>. The revised version of Bloom's taxonomy was published in 2001 by a group of researchers (Anderson et al.) whose aim was to convey the dynamic conception of the cognitive processes by which thinkers encounter and work with knowledge. Therefore, the authors chose to use verbs and gerunds to label the categories and subcategories. This revised taxonomy is more closely related to the use of technology to promote certain learning processes and to achieve learning objectives.

There are different tools that can be used to integrate the Bloom's revised taxonomy with technology. In 2007, Churches revised the taxonomy again to include other descriptors, in order to relate the taxonomy with new digital tools, which would account for "new behaviours, actions, and learning opportunities as technology advances and becomes more ubiquitous" (3).

Figure 1 below shows an infographic describing Bloom's Digital Taxonomy.

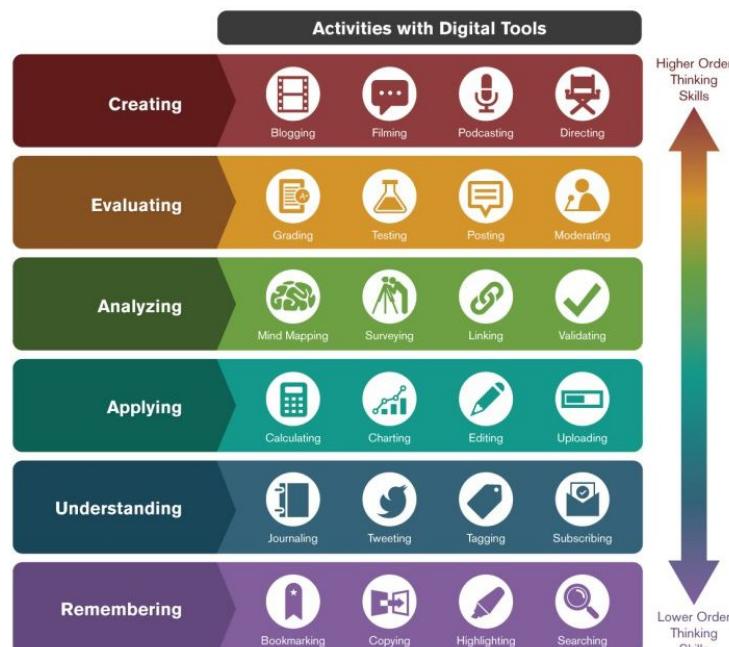


Figure 1 Bloom's Digital Taxonomy  
(Infographic Credit: Ron Carranza, as cited in Sneed)

Bustamante et al. further explain that the Web 2.0 offers students a great opportunity to become producers and not only consumers of information. In fact, the Internet promotes meaningful contexts which are essential for developing language skills, amongst many other abilities, by offering new ways of interaction and enhanced contact with authentic (and multimodal) texts. In this sense, it provides innovative ways to produce language and to make meaning (109).

Considering the role of the learner, it is relevant to mention that there is a general assumption that digital natives<sup>4</sup> (Prensky 1) are highly skilled in all new technologies. However, many studies on the subject have shown a predominant use, almost an addiction, to smartphones for social interactions. This means that learners have, in fact, rarely been using different digital platforms to promote and support their learning. Although many young students may come to the classroom already largely familiar with at least some new technologies, they are likely to lack the knowledge on how to not only make the most of online resources to improve their learning, but also on how to find reliable information on the Internet, how to fully and critically interpret the information they find, and how to successfully make meaning online.

Therefore, the digitally literate person, as explained by Dudeney and Hockly, should know:

[H]ow to accomplish goals, but also understands why these goals are important, and what relationship they have with the wider world around them. Knowing how to use Facebook is a skill; knowing how to use it to build a community of like-minded individuals and to use that community for professional and personal development is a literacy. (117)

It is possible to add, however, that building a community within social media that actually raises awareness of cultural and social aspects through the promotion of inclusion, democracy, and respect for diversity, is a type of literacy that is absolutely necessary nowadays and should be encouraged in schools.

It seems relevant to highlight that “understanding the role of culture within the language

being learned; and becoming part of a supportive learning community" (Healey 21) are also key factors. In this sense, it is likely that language teachers will need to be able to support the development of those elements (21). Therefore, educators should "assist in the transformation from practical, social use of technology to a more rigorous, pedagogical use" (Sansone qtd. in Dudeney and Hockly 116). Additionally, as explained by Bustamante et al. "[t]he role of the teacher is to find ways to capitalize on these skills and channel them into learning experiences that are real and engage the learners in problem-solving tasks that maximize critical thinking and creativity" (109).

New technologies in general, and the Web 2.0 in particular, offer a great opportunity to enhance foreign language competences. In this sense, in order to better integrate the use of technologies with foreign language learning objectives, some studies (e.g. Bustamante et al.; Riepel; Yang) suggest a way to integrate the *Standards for Foreign Language Learning*<sup>5</sup>, issued by the American Council on the Teaching of Foreign Languages (ACTFL), with Web 2.0 tools. The standards are based on five goal areas, commonly known as the 5 Cs: communication, cultures, connections, comparisons, communities.

The communicative goal as described in the document issued by the ACTFL emphasizes three standards that are translated into three modes<sup>6</sup> of communication and that students are required to master in a foreign language:

- Standard 1.1 – interpersonal mode (focus on interaction made via oral or written communication);
- Standard 1.2 – interpretative mode (focus on reading and listening);
- Standard 1.3 – presentational mode (focus on one-way speaking and writing) (National).

By its own nature and purpose, the Web 2.0 focuses on social interactions and seems to provide significant tools and insights for both teachers and students, so that they can successfully

achieve the interpersonal goal of communication. Text and voice messages, tweets, as well as instant messages are some examples of how to promote interactivity among students.

At the same time, there are undoubtedly many options on the Internet to develop and work on interpretative communication, from widely-known online newspapers, encyclopedias, and blogs, to videos and podcasts. The challenge faced by teachers in general, though, is in adapting and preparing tasks relevant to their classroom. In this respect, the Web 2.0 seems to offer tools that aim to facilitate the teacher's job. Some applications (e.g. Screenflow and Camtasia) make it possible to create and edit videos by cutting them and adding text, sounds, and images to make them suitable for classroom use. Other tools, such as Snagit, can be used to capture screenshots, of any size, and add content as necessary. Therefore, audio and video sharing tools, multimodal tools, and file sharing tools (Bower) seem to offer many possibilities for teachers and students to promote this standard in the foreign language classroom.

Regarding presentational communication, new technologies are widely recognized for providing many different ways of presenting information, using not only verbal language, but also images, graphs, songs, and sounds. Therefore, it is essential to know how to articulate all these semiotic modes in order to make meaning. Additionally, interactivity is another fundamental aspect that students should take into consideration when creating and presenting messages. Feedback occurs almost instantly when posting on social media or when writing a blog, for example. Therefore, the roles of author and reader have changed a great deal, and in an educational setting, the Web 2.0 may offer a variety of options, especially for teachers to provide more efficient feedback, and for students to work collaboratively with other students from a variety of grades, schools, or geographical regions. Wikispaces, for instance, is a platform that promotes collaborative writing and allows students to keep track of their work. Another example is Storyboard That, as described in Bower's typology (8), which allows for the creation of comic-like stories, providing scenes, characters, images, and text.

Summing up, based on the descriptions and discussions provided, it is possible to say that it is clear the Web 2.0 offers great opportunities and tools to enhance foreign language learning when wisely chosen and used.

#### METHODOLOGY

The aim of the study was to outline a general view of the use of new technologies in English classrooms of the third cycle and secondary education in Portugal, by taking into consideration a quantitative analysis with data gathered from an online questionnaire sent to a group of EFL teachers of the educational levels previously mentioned. Bearing in mind that the use of an online questionnaire may pose some limitations, after considering all the pros and cons, this method of data collection has been considered useful and optimal for the aim of this research. The platform used for the survey was [www.freeonlinesurveys.com](http://www.freeonlinesurveys.com), which provides for the inclusion of different types of questions, namely: checklists; multiple-choice responses; ranking questions; and Likert scales. The questionnaire was designed so all the questions required an answer; thus, it was not possible for any question to be skipped. A link to the survey was sent by email to schools, directly to English teachers, and posted on social media websites, such as Facebook and LinkedIn. The Portuguese Association of Teachers of English (*Associação Portuguesa de Professores de Inglês – APPI*) was also contacted, and they kindly sent the link to other associates, which was of great help in the data collection.

The questionnaire was organized into three main parts: a) ethnographic information about the participants and also about the schools and the facilities where they teach; b) materials and resources teachers usually use in their lessons and their approach, and c) teachers' impressions and experiences of using technology in their lessons. In the following section, a discussion and an analysis of the data gathered from the questionnaire are provided.

## RESULTS AND DISCUSSION

During the period the questionnaire was available, 132 valid responses<sup>7</sup> were received. The data collected were treated anonymously and through quantitative analysis, and any potentially identifying information was not associated with the responses. As expected, the vast majority of teachers responded that they use technology in their lessons. Only 2 out of the 132 respondents indicated that they do not use technology to teach English. The discussion of the main points of the data is provided below, according to each part of the questionnaire presented in the methodology section.

### a) Profile of the Respondents and Resources Available

The data collected reveal that the age group most represented in the survey consists of middle-aged teachers over forty years old, who account for more than 50% of the respondents. On the other hand, the least represented age group is of teachers younger than 30 years old, who account for only 3% of the respondents.

As per their teacher training, the majority of them (61%) concluded the *Ramo de Formação Educacional*<sup>8</sup>. These data seem to be consistent not only with the predominant age group in the survey but also with the laws governing the qualifications and training required for teaching: before 1988 teachers should complete the *Profissionalização em Serviço*; from 1988 to 2007 they were required to do *Ramo de Formação Educacional*, and from 2007 onwards, the requirement changed to *Mestrado em Ensino*, with the first course being offered in the 2007-2008 academic school year. These results may indicate, for example, that not only might it be necessary to develop pre-service training on technologies for education, but also that continuing in-service training is relevant in order to effectively include technology in the classroom.

Although it has been possible to collect responses from different parts of the country, respondents from Lisboa and Setúbal represent the main population of the study (27%), followed by teachers who work between the Douro and Minho regions (20%), Beira Litoral

(14%), and the Islands (13%). In contrast, the Trás-os-Montes and Alto Douro region has the least number of representatives – only four respondents teach in this area, accounting for 3% of the total population in the study. Other regions have 10 or fewer respondents, corresponding to the following percentages: Alentejo (8%), Estremadura e Ribatejo (7%), Beira interior (5%), Algarve (5%).

Aiming to investigate which resources are available at the schools where those teachers work, a list of the most relevant items was provided, and the respondents were asked to choose the ones that applied. Additionally, they could include other elements, if necessary. The results indicate that the overwhelming majority of schools (80-93%) have projectors (93% – the most common tool of all), Internet connection (89%), and computers in their classrooms (80%). Similarly, 72% of the respondents say their schools have a computer room. Interactive boards, although available in 57% of the schools, do not seem to be as accessible as computers. On the other hand, tablets are by far the least available items in schools, mentioned by only 16% of the teachers.

Therefore, as expected, in the great majority of schools where the respondents teach there are some digital resources available (namely, Internet connection, computers in the classrooms and/or computer room) which make it possible the use of technology in the EFL lessons.

#### ***b) Materials, Resources, and Approaches***

Teachers were asked to indicate, from a list provided, which materials and resources they use in their lessons, as well as the frequency these items are used. In addition to more traditional materials – such as textbooks, audio, and video – other digital items – namely the internet for different purposes, digital textbooks and their resources, and electronic games – were also included. Additionally, teachers were able to add other items they would find relevant.

As expected, more traditional materials as textbooks, audio, and videos are the most frequently used resources by those teachers. Almost fifty percent of the respondents also indicate that they usually use the Internet for different purposes (e.g. to check dictionaries,

encyclopedias, newspapers, magazines etc.). Digital textbooks and their resources seem to be gaining ground and slightly over fifty percent of the teachers point out that they always or usually use them. On the other hand, electronic games are at the bottom of the list as the item least frequently used in classrooms; 50% of the respondents claim to never use them. Traditional games and role-play seem to be the favorite play-like activities in comparison to electronic games; 20% of the respondents point out that those activities are usually included in their lessons, while 56% of them indicated that these activities are sometimes used.

The use of electronic games could be effectively included during or after the lessons to stimulate learning in a more meaningful and playful way for learners. In addition to motivation, some studies (e.g. Dourda et al.; Ya-Hui, Yi-Chun, and Huei-Tse; Wu and Huang) have demonstrated that digital game-based learning can improve linguistic competences. In order to further investigate how these resources have been used, teachers were asked whether they believe they adopt a multimodal and critical approach to texts. In this sense, they were asked to indicate which semiotic modes they usually tend to explore with their students besides verbal language. As expected, in addition to verbal language, the semiotic mode most explored by teachers is *images* (92%), followed by *gestures* (64%), and *sounds* (58%). Less than half of the teachers indicate that they also explore *layout and fonts* (44%), and *colors* (45%). Based on the answers provided, it is possible to say that these teachers seem to be concerned with developing different perspectives about language and communication and that they acknowledge that a multimodal approach is fundamental in language learning.

In respect to critically approach texts, as expected, these teachers believe that it is of great importance to explore critical thinking in EFL classes. However, it is also possible to highlight two major obstacles indicated by the majority of them: students' confidence in expressing themselves in English and time constraints. Teachers' confidence in dealing with certain themes with their students was also pointed out by 20% of the respondents and should be taken into consideration as well.

The data about critical and multimodal literacies demonstrate teachers do acknowledge the importance of these aspects, which are essential when dealing with digital texts in language learning.

### c) Use of Technology

In this part of the questionnaire, the aim was to verify the use of technology in the classroom in relation to different aspects: communicative objectives, development of linguistic skills, and development of digital competences.

In order to verify the communicative objective teachers usually have in mind when using technology with their students, they were asked to rank, in order of importance to them, the statements numbered below. Those statements are related to the communication standards set by ACTFL, indicated in parentheses.

1. To make students engage in conversations, exchange opinions, and express feelings (interpersonal mode) (57%);
2. To make students understand and interpret written and spoken language on a variety of topics (interpretative mode) (47%);
3. To make students present information, concepts, and ideas on a variety of topics (presentational mode) (68%).

The majority of the respondents choose the order presented above. These results reinforce the emphasis placed on the development of oral communication and interaction, as expected. Unsurprisingly, the least important objective pointed out by those teachers (presentational communication) seems to be related to a more effective use of technology, where students would be required to know how to manipulate certain digital tools in order to successfully present their information in written or oral forms.

Additionally, in relation to the technological tools these teachers tend to use in their lessons, the results show that YouTube is the most popular tool, having been indicated as such by 88% of the respondents, followed by emails (78%); Google Docs (54%); Prezi (46%); Google Drive (43%); Blogs (42%); and text messages (39%). It is relevant to mention that YouTube would be more closely associated with the development of the interpretative mode of communication, whereas the other most popular tools indicated by the respondents would be more useful to develop writing skills, a presentational mode of communication, which is pointed out as the least objective those teachers have in mind when using technology.

Considering that teachers' responses indicate that technology is primarily used with the aim of making students engage in conversations, it would be possible to assume that YouTube would be used in the first place to perform a listening activity, that is, to develop the interpretative mode of communication and, on a second moment, to make learners engage in face-to-face conversations about the topic of the video. Therefore, although the primary objective these teachers have in mind is to develop speaking skills, technological tools might not be used as means to make students actually interact and talk. This first assumption can be further supported by the fact that Skype and WhatsApp, for example, which are tools that would more likely be used to further promote interpersonal communication, are indicated only by 12% and 10% of the teachers, respectively.

Additionally, the respondents were asked to indicate which ones of these skills: *reading*, *listening*, *writing*, *speaking*, and *critical thinking and cultural awareness* – they believe to be the most developed ones through the use of technology. Most of them point out *listening* as the most developed skill when using new technologies, followed by *speaking*. These figures seem to be in line with YouTube being identified as the most popular technological tool among those teachers. The indication of listening as the most developed skill may also support the assumption that YouTube videos are used for listening activities first, then, to make students engage in speaking activities.

Furthermore, and also in accordance with the results related to the learning objectives for using technology, *writing* is pointed out as the skill teachers believe to be the least improved when using new technologies. This fact is particularly interesting, especially because, although online communication often occurs via written texts, the different writing possibilities that emerge with the Internet do not seem to be emphasized in these particular educational settings.

Aiming to further verify teachers' views concerning other specific elements related to language learning, they were asked to indicate, from among five statements, which ones best reflect their opinion. The purpose of each statement was to specifically verify the relationship between technology and vocabulary expansion, technology and grammar consolidation and learning, technology and interdisciplinarity, technology and character education, and technology and cultural aspects. The answers provided indicate that 40% of the respondents believe that technology may have a positive impact on all the areas mentioned. Vocabulary expansion and cultural aspects are the areas that most teachers (65% and 64%, respectively) believe to be better developed with the use of new technologies. Interdisciplinarity is indicated by 48% of the teachers as being positively impacted by digital tools, and only 32% of the respondents believe that grammar is better learned through technology. The area which respondents believe is less improved by technology is character education. This fact may suggest that an effective development of digital literacy could possibly also help develop some aspects of character education in the EFL classroom, as some issues related to Internet etiquette (also named 'netiquette'), online safety, and copyright are related to character education as well.

In order to verify if some general aspects of digital literacies tend to be addressed in the EFL classrooms analyzed, the respondents were asked to indicate how often they focus on the following aspects with their students: *Internet etiquette*; *Internet safety*; *cultural and ideological issues*; and *characteristics of different digital texts*. According to the results, *Internet safety* issues seem to be the most important item for this group of teachers; 45% of them indicate that they always explore safety aspects with their students. Unsurprisingly, *cultural and ideological*

*items* are also a relevant element; they are indicated as usually explored by 51% of participants, while 32% indicate *Internet etiquette* as usually explored, and 35% indicate that *characteristics of digital texts* are sometimes explored. Therefore, exploring the characteristics of different digital texts seems to be the item least explored, with only 16% of teachers pointing out that they always explore such features, and 33% as usually doing so.

Finally, in relation to a general view of technology these teachers have, the data collected demonstrate that in addition to increasing students' motivation, the respondents believe that technology may help their pedagogical work and help improve students' language skills. Furthermore, although they recognize that digital tools require extra work and time, the benefits of integrating technology into the EFL classroom seem to compensate for the effort.

### Final Comments

Various initiatives and standardization documents in the European Union and in Portugal have been emphasizing the need for developing digital competences in education. In this sense, including an effective use of technology in English language classrooms seems of great and immediate importance.

However, as above mentioned, this integration should be done in a consistent and meaningful way in order to achieve learning and communicative objectives, promote inclusion and critical thinking and develop linguistic skills. A multimodal approach, for example, is crucial for the development of multiple literacies, especially concerning critical and digital literacies. In this sense, it is not surprising that the adoption of the concept of a multiliteracies approach is listed as an action to be taken so as to meet the objectives of INCoDe.2030 – an initiative launched in March 2017 by the Portuguese government that describes the digital competence goals to be achieved in Portugal between 2017 and 2030 (INCoDe.2030 11).

Furthermore, the importance of developing digital literacies is also highlighted in the reports entitled *Digital Competence Framework for Citizens* (DigComp) and the *Digitally Competent*

*Educational Organizations Framework* (DigComp Org) issued by the European Commission with the aim to provide some clarification and guidance on digital competences that European citizens should develop.

The use of technologies specifically for language learning, and an emphasis on critical thinking are also essential aspects and they are closely related to the promotion of multiple and digital literacies, as it is outlined in the document entitled *Improving the Effectiveness of Language Learning: CLIL and Computer Assisted Language Learning* (Scott and Beadle), issued by the European Commission; as well as in the INCoDe.2030.

Additionally, it is worth mentioning that the European Commission issued a provisional update of the *Common European Framework of Reference for Languages* (CEFR), in September 2017, in which online interaction has been emphasized. Among other justifications, the framework states that some properties in online interaction cannot be captured in the traditional competence scales, as it is pointed out "[f]or instance, there is an availability of resources shared in real time. On the other hand, there may be misunderstandings which are not spotted (and corrected) immediately, as is often easier with face-to-face communication." (CEFR 93). It also states that "*[o]nline conversation and discussion* focuses on conversation and discussion online as a multi-modal phenomenon, with an emphasis on how interlocutors communicate online to handle both serious issues and social exchanges in an open-ended way" (93). Therefore, the effective and meaningful inclusion of technology in EFL classroom is essential. In this regard, since the English syllabi for the third cycle and secondary education in Portugal do not include any specific guidance on the use of technology, an update to provide teachers with clarification seems extremely urgent.

Although it has been possible to verify, based on the data collected, that teachers who participated in this survey seem to use the Web 2.0 and new technologies in their lessons, further research is necessary to establish a more detailed picture in order to verify if technology has been actually used in more innovative ways or just as a different way to apply a more

traditional pedagogy. For instance, further studies are required to understand how technology has actually been used to make students engage in conversation. In order to confirm or not the assumptions made herein, it would be relevant to verify if digital tools have been employed as input to stimulate conversations, or if they have also been employed to actually communicate. This would mean using tools like Skype or Hangouts to chat, instead of just presenting an online video or a website article with a topic of discussion to encourage students to engage in face-to-face interactions. Additionally, it seems that local studies, especially in the areas with least representatives, would be necessary to establish more accurate data about the resources available in schools in different parts of the country.

Furthermore, it is relevant to mention that as a descriptive study, the data collected and the comments discussed herein do not intend to represent the total English teacher population working in the third cycle and secondary education. However, it is expected that the results and conclusions drawn from this survey may indicate some tendencies towards the use of technology in EFL classrooms in Portugal and may contribute to developing further studies in the future. It is expected, however, that the study conducted (Cardoso) may be viewed as a stepping-stone for future research on technology use and how a multiple literacies approach could be applied in the EFL classroom.

Summing up, as technology is a part of contemporary society and an indispensable resource for communication, it is impossible to ignore its function in educational settings in general, and in language and EFL classrooms, in particular. In this regard, it seems of crucial relevance to provide teachers with suitable guidance, training, and materials, so that they can benefit from digital resources and be able to better integrate them into their pedagogical practice, focusing on easily achieving the learning objectives.

## CONCLUSION

This article was based on a study on multiple literacies and Web 2.0 in English as a foreign language (EFL) classroom (Cardoso). The research involved a survey conducted with English teachers of the third cycle and secondary education in Portugal through an online questionnaire. The aim of this article, therefore, was to present the most relevant data collected from the survey along with a brief discussion on the results.

The article has been organized into four main parts: a brief theoretical background on multimodality, multiple literacies and the Web 2.0 and its implications for learning; a description on the methodology of the study; a discussion of the data gathered from the survey; and finally, additional comments along with a brief presentation of some documents and initiatives supporting the use of technology for learning in European Union and Portugal.

It has been concluded that although it is evident that the group of teachers who participated in the survey tends to use at least some Web 2.0 tools and, even though most of them stated that they usually adopt a multimodal and multiliteracies approach to texts, it is not clear how they actually do that.

## Notes

<sup>1</sup> Reading path refers to the order that is necessary to follow in a text when we read it (Kress, *Literacy* 3). The reading path of a written text is usually rigid, and the reader does not have much freedom against this order. As pointed out by the author, it is also possible to create a reading path in images; however, it is more open than the one set by writing, and it is possible to adopt different "paths" when reading an image.

<sup>2</sup> Critical literacy and critical thinking are closely related terms but are not exactly the same. Considering critical thinking, it is more related to the attempt to read a text considering different views and without being biased and prejudiced. Critical literacy, on other hand, is based on the fact that all texts convey knowledge and power-related ideas, therefore, questions related to the author, the audience, the purpose and the 'hidden' messages should be approached when reading a text (McInulty 2013). In this study, however, these terms have been used interchangeably, since in the questionnaire sent to the English teachers the term 'critical thinking' has been used for simplicity reasons and because no further theoretical information was provided.

<sup>3</sup> The original framework (Bloom) consisted of six major categories: Knowledge; Comprehension; Application; Analysis; Synthesis; and Evaluation, and has been widely used by educators in their approaches to teaching-learning.

<sup>4</sup> A term used to refer to people who were born into a society full of new technologies and connectivity, as opposed to digital immigrants, a term used to describe those who were born before the spread of new technologies.

<sup>5</sup> The Standards were first published in 1996, and a revised version was recently issued entitled *World-Readiness Standards for Learning Languages* (The National Standards Collaborative Board) and it is based on teachers' practices over the years. The goal areas and standards have been kept, however, this revised version provides further clarification on how to guide the implementation of the Standards.

<sup>6</sup> It is important to clarify that the term 'mode' here does not refer to the concept of semiotic mode as developed by Kress ("What is Mode?"). Instead, it describes how communication occurs among individuals, and what to encourage and expect from language learners.

<sup>7</sup> The total number of the responses was 143, but 11 were incomplete and were not considered in the results.

<sup>8</sup> *Profissionalização em serviço* refers to an in-service professional training granted to teachers with at least six consecutive years of practice and who have completed their licensed teaching course and the in-service professional training course; *Ramo de Formação Educacional* is a pre-service professional training course following an initial undergraduate degree; and *Mestrado em Ensino* is a pre-service professional training course corresponding to a master's degree.

## Works Cited

- Anderson, Lorin W., et al. *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Longman, 2001.
- Bezemer, Jeff, and Gunther Kress. *Multimodality, Learning and Communication*. Routledge, 2016.
- Bloom, Benjamin. *Taxonomy of Educational Objectives: The Classification of Educational Goals – Handbook 1 Cognitive Domain*. Longman, 1956.
- Bower, Matt. "Deriving a Typology of Web 2.0 Learning Technologies." *British Journal of Educational Technology*, vol. 47, no. 4, 2016, pp. 763-77.
- Buckingham, David. "Defining Digital Literacy: What Do Young People Need to Know about Digital Media?" *Digital Literacies: Concepts, Policies and Practices*, edited by Colin Lankshear and Michele Knobel, Peter Lang, 2008, pp. 73-90.
- Bustamante, Carolina, et al. "Web 2.0 and Language Learners: Moving from Consumers to Creators." *Touch the World: Selected Papers from the 2012 Central States Conference on the Teaching of Foreign Languages*, edited by Tatiana Sildus, Robert M. Terry, 2012, pp. 109-31.
- Cardoso, Silene. *Multiple Literacies and Web 2.0 in the English as a Foreign Language Classroom*. Masters Dissertation of University of Lisbon, 2017.
- Carretero, Stephanie, et al. *DigComp 2.1: The Digital Competence Framework for Citizens with Eight Proficiency Levels and Examples of Use*. EU Science Hub, 2017, EUR 28558 EN, DOI:10.2760/38842.
- Churches, A. *Bloom's Digital Taxonomy*, 2009, [www.goo.gl/BSpbyP](http://www.goo.gl/BSpbyP). Accessed 18 Nov. 2017.
- Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR) – Companion Volume with New Descriptors*. Provisional Edition. Sept. 2017, [www.goo.gl/tqaqjw](http://www.goo.gl/tqaqjw). Accessed 30 Nov. 2017.
- Crystal, David. *English as a Global Language*. 2nd ed., Cambridge UP, 2003.

---. "English: Is it Still one Language?" Interviewed by *Spotlight Magazine*, vol. 8, 2016, pp. 36-38, [www.goo.gl/KzQFvR](http://www.goo.gl/KzQFvR). Accessed 18 Nov. 2017.

Cope, Bill, and Mary Kalantzis. "Introduction: Multiliteracies, the Beginning of an Idea." *Multiliteracies: Literacy and the Design of Social Futures*, edited by Bill Cope and Mary Kalantzis, Routledge, 2000, pp. 3-8.

---. *New Learning: Elements of a Science of Education*. Cambridge UP, 2008.

Dourda, Kyriaki, et al. "Combining Game-Based Learning with Content and Language Integrated Learning Approaches: A Case Study Utilizing QR Codes and Google Earth in a Geography-Based Game." Paper presented at the 7<sup>th</sup> European Conference on Games-Based Learning, Porto, Portugal, 2013.

Dudeney, Gavin, and Nick Hockly. "Literacies, Technology and Language Teaching". *The Routledge Handbook of Language Learning and Technology*, edited by Fiona Farr and Liam Murray, Routledge, 2016, pp. 115-26.

Ferrari, Anusca. *DigComp: A Framework for Developing and Understanding Digital Competence in Europe*. (DigComp 1.0), 2013, EUR 26035, DOI:10.2788/52966.

Freire, Paulo. *Pedagogia do Oprimido*. 17th ed., Paz e Terra, 1987.

Government of Portugal. *National Digital Competence Initiative e.2030* (Portugal INCoDe.2030: Iniciativa Nacional Competências Digitais e.2030), 2017, [www.incode2030.gov.pt/](http://www.incode2030.gov.pt/). Accessed 28 Nov. 2017.

Healey, Deborah. "Language, Learning and Technology". *The Routledge Handbook of Language Learning and Technology*, edited by Fiona Farr and Liam Murray, Routledge, 2016, pp. 9-22.

Jenkins, Jennifer. *World Englishes: A Resource Book for Students*. 2nd ed., Routledge, 2009.

Jewitt, Carey. "Multimodality and New Communication Technologies." *Discourse and Technology: Multimodal Discourse Analysis*, edited by Philip LeVine and Ron Scollon, Georgetown UP, 2004, pp. 184-95.

- . *Technology, Literacy, Learning: A Multimodal Approach*. Routledge, 2006.
- . *Learning and Communication in Digital Multimodal Landscapes: An Inaugural Professorial Lecture by Carey Jewitt*. Institute of Education Press, 2013.
- Jordão, Clarissa M., and Francisco C. Fogaça. "Critical Literacy in the English Language Classroom." *DELTA: Documentação de Estudos em Linguística Teórica e Aplicada*, vol. 28, no. 1, 2012, pp. 69-84.
- Kress, Gunter. *Literacy in the New Media Age*. Routledge, 2003.
- . "Gains and Losses: New Forms of Texts, Knowledge, and Learning." *Computers and Composition*, vol. 22, no. 1, 2005, pp. 5-22.
- . "What is Mode?." *The Routledge Handbook of Multimodal Analysis*, edited by Carey Jewitt, Routledge, 2011, pp. 54-67.
- Kuo, Jun-Min. "Critical Literacy in the EFL Classroom: Evolving Multiple Perspectives through Learning Tasks." *The Journal of Asia TEFL*, vol. 11, no. 4, 2014, pp. 109-138.
- Luke, Allan, and Karen Dooley. "Critical Literacy and Second Language Learning". *Handbook of Research in Second Language Teaching and Learning*, edited by Eli Hinkel, Routledge, 2011, pp. 856-67.
- Luke, Carmen. "Cyber-Schooling and Technological Change: Multiliteracies for New Times". *Multiliteracies: Literacy and the Design of Social Futures*, edited by Bill Cope and Mary Kalantzis, Routledge, 2000, pp. 67-88.
- Ministry of Education. *English Syllabus, Third Cycle* [Programa de Inglês 3º Ciclo], 1995.
- . *English Syllabus, Secondary Education* [Programa de inglês Nível de Continuação, Formação Específica], 2003.
- National Standards in Foreign Language Education Project. *Standards for Foreign Language Learning: Preparing for the 21st Century* (Executive Summary), 1996, [www.goo.gl/CijYX1](http://www.goo.gl/CijYX1). Accessed 30 Nov. 2017.

Prensky, Mark. "Digital Natives, Digital Immigrants." *On the Horizon*, vol. 9, no. 5, 2001, pp. 1-6.

Redecker, Christine, et al. "Learning 2.0: The Impact of Web 2.0 Innovations on Education and Training in Europe". Final Report. European Commission-Joint Research Center Institute for Prospective Technological Studies, Seville, 2009.

Riepel, J. *The Web 2.0 Revolution: Using Technology to Shape Standard-Based Instruction*. Master Thesis. West Virginia University, 2011.

Rojo, Roxane. "Pedagogia dos Multiletramentos". *Multiletramentos na Escola*, organized by Roxane Rojo and Eduardo Moura, Parábola, 2012, pp. 11-31.

Scott, David, and Shane Beadle. *Improving the Effectiveness of Language Learning: CLIL and Computer Assisted Language Learning*, 2014, [www.goo.gl/ZCnM4R](http://www.goo.gl/ZCnM4R). Accessed 30 Nov. 2017.

Sneed, Obiageli. "Integrating Technology with Bloom's Taxonomy." *TeachOnline: Resources for Teaching Online*, [www.goo.gl/sxHpVZ](http://www.goo.gl/sxHpVZ). Accessed 30 Nov. 2017.

Vuorikari, Riina, et al. *DigComp 2.0: The Digital Competence Framework for Citizens* (DigComp 2.0), 2016, EUR 27948 EN, DOI: 10.2791/11517.

Wu, Ting-Ting, and Yueh-Min Huang. "A Mobile Game-Based English Vocabulary Practice System Based on Portfolio Analysis". *Educational Technology & Society*, vol. 20, no. 2, 2017, pp. 265-277.

Ya-Hui, Hsieh, et al. "Exploring the Role of Flow Experience, Learning Performance and Potential Behavior Clusters in Elementary Students' Game-Based Learning". *Interactive Learning Environments*, vol. 24, no. 1, 2013, pp. 178-93.

Yang, Shu-Ching. "Integrating Computer-Mediated Tools into the Language Curriculum". *Journal of Computer Assisted Learning*, vol. 17, no. 1, 2001, pp. 85-93.