DIGITAL LITERACIES AND INTERACTIVE MULTIMEDIA-ENHANCED TOOLS FOR LANGUAGE TEACHING AND LEARNING

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Abstract

The primary aim of the paper is to introduce digital literacies and the utilization of interactive and multimedia-enhanced tools for language learning purposes in and out of institutional settings. The topics covered in this paper include what digital literacy means in language education contexts and utilization of social media, online gaming, tagging, picture, voice, and video editing tools, mixing tools, interactive HTML5 contents, translation tools, search engines and (visual) thesauruses to evaluate, contribute, and create the information rather than being a mere consumer. Bearing in mind the nature of interaction and collaboration of the digital tools, suggested ways to integrate these tools to teaching and learning of languages are also presented. The paper also identifies common concerns and challenges in regard to motivation to use digital tools, judging the validity of a source, prohibitions due to country policies, plagiarism, filtering in search engines, and insensitivity with online language, which hinders the effective use of digital tools.

Keywords: digital inclusion, digital literacy, digital tools, e-skills, new literacies

1. Introduction

There is a rapid pace of change in terms of information technology. Digital tools, thus, become more and more widespread globally in many areas of our lives. In the case of language teaching, teachers now have to take changing needs of learners of this new digital era and related capabilities into consideration. As Godwin (2015) states, capability in a full range of digital literacies is a key for this process and vital today in education, personal life, and work environments. Most importantly since the medium language is English, to take full advantage of the new possibilities and opportunities that information technology offers, English language learners have to adapt the latest literacy to their education (in-class learning) and personal life (out-of-class learning).

Competences regarding digital literacy can be taught in a formal class environment; however, the ultimate success requires active participation in web platforms and practice to be a natural part of digital environments. Learners can be trained to hybridize technology-mediated input and competences of utilizing digital tools to reach an answer or conclusion, participate in generating discussions or ideas in social platforms and collaborative team work, and contribute to the ultimate output, and circulation of knowledge. Therefore, teachers highlight that the process includes both formal and informal way of learning, and learners need to explore more to be a better participator and contributor. Godwin (2015) advocates the point stating that teachers help students become lifelong learners and integrating language learning into everyday online practices is essential. As learners manage to take place in interactive environments, they develop autonomy by taking the responsibility of their own language learning. The major role of teachers in this regard is to encourage learners to acquire skills of choosing and processing the knowledge. Therefore, digital technology not only offers "more options for teachers and learners, but it directly affects the roles of both

teachers and learners" (Stockwell, 2015, p. 362). As teachers adapt more learner-oriented/centered approach, this can motivate learners to develop learning strategies and promote autonomous language learning.

In SLL or FLL contexts, the traditional view is that the use of techie tools helps learners improve language skills (Tour, 2012). However, today digital technology necessitates the engagement between the tools and learners in a different way. It is beyond a bilateral relationship and includes interaction with other users of the same tools/platforms. The learners who recognize the interactive nature of digital language tools involve in the participatory culture of digital/online platforms by being a creator rather than a mere consumer of passive media materials. Accordingly, they become an integrated part of a globalized context bringing new social construct with respect to networking, collaboration, interaction and motivation that can be truly managed with digital competence.

In the recent past, to promote communicative language learning in class, bringing technology into classroom meant passive media materials such as movies, videos, prints of newspapers or magazines etc. to language teachers. Calling them passive is not unfair by all means since they did not aim at developing "strategic competencies of digital literacy encapsulating multimedia, collaborative communication, agentive participation, and multitasking competencies" (Lotherington & Ronda, 2014). These passive in-class materials, though they are authentic and real-world materials, taught *teachers* how to make use of the materials offered online, *not learners*. Learners who are not active participants in deciding the needs of new language classes may have little interest in in-class experiences of language learning and as a matter of course they fail to relate out-of-class experiences to their formal language environment. Such an observation enlightens a possible disconnect between the in-class experiences of language learners and their out-of-class experiences, particularly in such online spaces (Hafner, Chik, & Jones, 2015). Borrowing the term from Lotherington and Ronda (2014) communicative competence 2.0 demands, along with other competencies, the agentive participation which simply means learning by doing in class and out of class; accessing, joining, creating, sharing, remixing purposeful content. To accomplish these actions, learners need to gain information management strategies: finding online texts, assessing their worth, figuring out how to use them, and creating without stealing.

2. Defining Digital Literacy

The definition of literacy has gradually shifted from pen-paper to use of digital tools due to developing technology and ease of digital tool ownership. Martin (2005) suggests a comprehensive definition of digital literacies as "the awareness, attitude, and ability of individuals to appropriately **use** digital tools and facilities to **identify, access**, **manage, integrate**, **evaluate, analyze** and **synthesize** digital resources, **construct** new knowledge, **create** media expressions, and **communicate** with others, in the context of specific life situations, in order to enable constructive social action; and to **reflect** upon this process" (p. 135). Martin's definition reminds us of the procedure of critical thinking that consists of similar steps: identifying knowledge, comprehending, applying, analyzing, synthesizing, and evaluating information. In other words, being digitally literate mandates critical thinking for the purpose of making active and skillful use of new interactive platforms.

New Literacy Studies explain what digital literacy encompasses, because it is a broad term and point out the prominent aspects that educational contexts benefit from such as interactive environment, social networks and collaboration, learner-centeredness, creative reproduction of the digital materials etc. (Eshet-Alkalai, 2004; Hafner et al., 2015; Hoobs &

Tuzel, 2015; Mills, 2010, Tour, 2015). In language education, digital literacy receives attention as it is essential in and outside of institutional settings. Dooly and O'Dowd (2012) state that competent use of both FL skills and "e-skills" or "new literacies" helps learners be more able to work collaboratively in new online learning environments (p. 15). The new learning contexts offer a great amount of options with online affordances, and L2 learners have "various motives and goals in accessing L2 materials and in interacting with L2 communities" (Godwin-Jones, 2018, p. 8). For language teachers and learners, it is not new to utilize multimedia in language classes to include authentic and socio-culturally rich materials, but what is newer here is that online services often support online team collaboration to create, organize, and share information. L2 learners participate in multicultural and multilingual contexts where they are expected to collaborate with monolinguals, bilinguals, polyglots whose motive is to learn a foreign language. This interactive workspace is very rich in language and also carries risks of getting confused or lost for learners lacking the new digital literacies.

3. Digital Literacy Model and Popular and Prospective Tools for Teaching/Learning

Jones and Hafner (2012) provide a model for digital literacies that shows how the affordances of digital tools facilitate not only ways of meaning, but also ways of doing, relating, thinking, and being. *Doing* is using Instagram, Flicker, Pinterest etc. simply to share information, which shows how effectively we can manage pictures, texts, and videos in online spaces. *Meaning* is the form of representation, which teaches us to communicate effectively via web pages, social network sites, and related applications. *Relating* presents patterns of interaction, which users write on blogs, comment on Facebook, share thoughts in Twitter, contribute to Wiki with an online article written collaboratively to attract unknown audience etc. *Thinking* is more productive use of digital tools since it requires experiencing reality: participating oral or written communications. Ultimately, *being* comes to a level of acquiring a social identity that one presents oneself in a social network site to a certain community. This last dimension is more personal and sensitive and should be carefully considered when putting into practice in classroom spaces (Hafner et al., 2015, p. 2).

A new tool with different features arrives every day, thus, the border of digital literacy extends each day. This is a challenge for both teachers and learners to keep up with the new platforms. Currently, the popular online spaces are YouTube and Facebook. YouTube has been providing videos which teachers of English utilize-by adapting or simply playing- in language classes. However, going beyond being a consumer, now learners are asked to be producers in several ways. One can use iMovie or Windows Movie Maker to put some pictures, texts, and music together and upload it to this free online platform. One can also shoot a short video regarding, for example, attractions, events, news, instructions etc. and upload it to the created profile on YouTube. Moreover, making comments on available videos makes learners contributors as well. Facebook is relatively more used than any other free online platforms in terms of social aspects. Teachers have been asking how and more importantly why we use Facebook in their classes. How to use it varies depending on purpose and level of learners' digital literacy. However, the answers of why to use it may relate to the convenience of the medium as opposed to other media such as sharing documents or forming groups for class communication, but it might also be about how much teachers are willing to contemplate in the adaptation of social media to a traditional classroom setting. Since Facebook presents hyperlinks to many other platforms such as TedTalks, YouTube videos, Pinterest, Flicker, Wikipedia, BBC news, online shopping sites etc. which could be utilized to seek out potential sources for the use of language learning.

The emerging technology provides many platforms not only to consume information, but also evaluate, contribute, and create. Most of these platforms could be adapted to language teaching and learning. The major issue is 'how' to achieve bridging. For example, younger learners of language are into gaming and taking a significant part in social gaming communities. I have met a 20-year-old boy who speaks native-like English and told me he has never set foot in an English-speaking country in his entire life, but only played games and had written (discussion forums and blogs) and more frequently spoken conversations via League of Legends, Diablo and World of Warcraft. It is hard not to notice the source of such motivation and that gaming demands real communicative language. Moreover, the games are learners' own choices, personal engagement, and not forced by the school. Therefore, it would be practical to encourage gaming for learners to carry out further English studies out of class.

The new digital tools can take high-quality photos and videos instantly. This resulted in frequent use of applications like Snapchat or Instagram, which allow personalized sharing. Learners get proficient at the personal reflection, interpreting visuals, criticizing, remixing, and tagging. Nowadays, tagging is the most beneficial and practical way of finding *related* information among a vast amount of information available online now. Most tags are English-medium oriented. This could be taken as a great opportunity to prepare original activities for classrooms by using image-mapping to visualize and contextualize vocabulary teaching and help memory recall the words more easily.

Learners' motivation for digital inclusion shows how eager they are to explore and experiment, and how much further they are willing to go with digital literacy. They mostly learn to use tools for editing images, sound, and video. The editing tools became easy to access since they are now available in smartphones, tablets, and personal computers apart from desktops. They do not demand high-quality hardware or give a hard time using available storage as they used to do on desktops. For video editing VideoPad, iMovie or Windows Movie Maker, Adobe After Affects etc. are convenient software, which are user-friendly. For teachers, it is convenient to crop and edit the authentic materials for the level of learners or the length of the class/task. Furthermore, Screencast-o-matic allows to create a video of the actions of a computer screen. It can be used when teachers aim to give feedback on the writings of students on the interactive sheets as the video recording of the screen allows voice and camera recording and ultimately sharing of these videos.

Picture editing became dramatically easy via Instagram, Aviary, Typic etc., which are extremely easy to use unlike Photoshop, and cloud-based services that slow down the tool. Using realia in in-class tasks, assignments, portfolios, presentations etc. needs more than finding pictures through search engines. It entails appropriate placement of the pictures in the teaching/learning materials.

Voice Thread, Audacity, and GarageBand are only some examples of sound editing. Finally, some remixing tools such as TourBuilder, Popcorn Maker, and Aurasma can combine different sorts of sources (image, text, sound, and video) and produce rich materials (Godwin, 2015). HP5, a website to create interactive HTML5 content, allows to create, share, and reuse the materials. It can be used to create, for example, take-home speaking assignments where the teacher adds a picture and voice recording component with the instructions on an HP5 sheet and shares the link with the students. The voice recording component allows learners to play, download, listen to, and share their voices. The input, a picture etc., can enrich the materials/assignments and their output value. Moreover, PBWorks and Google Docs can also be used for educational purposes. Both provide an interactive

workspace for online team collaboration where teachers can invite the students to create a sheet collaboratively by using multimodal.

A controversial digital tool commonly used by language learners is the machine translation. Google, Microsoft, Yandex, Bing, and Babylon and similar web tools offer translations based on statistical equivalences between the language of text and target language. When learners use translation tools in writing a paper, an assignment etc., they should know that this kind of translation is less reliable and the percentage of accuracy regarding grammar and vocabulary is based on language pairs, the size of the dual language corpora, and even the use of punctuation. Therefore, teaching learners how to utilize machine translation is significant. They can use translation as a framework and make the necessary corrections of errors to have a faster translation. The machine translations are not very sensitive in terms of certain rules that are particular to one language. The errors in translations display the nature of a certain language as well as pointing to specific contrasts between learners' L1 and the target L2 (Godwin, 2015).

As Internet sources become massive, it might be the case that finding what we are looking for is getting harder due to the noise. When learners understand how to search on the Internet effectively, they discover that keywords, tags, hyperlinks, forums, discussions etc. allow them to locate the right online sources in seconds. There are different kinds of search engines to make the search more related. For example, visual search engines for words such as http://www.visualthesaurus.com/ and http://www.visuwords.com/ help language learners use dictionaries of a better kind. Also, image search engines such as http://taggalaxy.de/ could give learners a chance to look for visuals regarding a certain topic combined from several other search engines. A possible use can be that learners of a class can create their own visual dictionary based on the content of a group of lessons. Furthermore, it is quite easy to access free online dictionaries by Oxford, Cambridge, Longman, Macmillan, Langenscheidt and many other publishing companies or their applications for smartphones and tablets.

4. Online Platforms for Learners and Teachers

The availability and ease of access to digitals tools can make educators think that accessing is just the beginning. The important step is the readiness of individuals to use technology, communication networks, and information efficiently, effectively, and productively (Lemke, 2003). Douglas Rushkoff (1999) states in his book *Playing the Future,*

"Our kids are younger and less experienced than us, but they are also less in danger of becoming obsolete. They are the latest model of human being. Looking at the world of children is not looking backward at our own past-it's looking ahead. They are our evolutionary future (p. 4)."

Obviously digital natives, which is a term first coined by Prensky (2001) to describe learners born into technology, are fully engaged in everyday practices of technology. Many of them already know how to manage social media tools, online gaming, avatars, mixing videos, producing music, editing via digital tools, information hunting etc. These powerful sources can appeal to them in classroom in social, cognitive, and personal level as well. In that case, language classrooms ought to welcome multiple digital platforms to make environments authentic for learners such as Twitter as a platform to keep a micro-journal, Facebook as a class social networking tool, and YouTube as a video logging opportunity— virtually any digital platform can fit into the language classroom (Lotherington & Ronda, 2014). While all digital platforms are so ready to take place in classrooms, how is the situation with the language curriculum? Are curriculum, instruction, and assessment truly preparing students for the realities of today's communicative landscape (Guikema &

Williams, 2014)? On the one hand, most curriculums have to include the suggested Learning Management Systems such as Google Classrooms, Blackboard Learn, Moodle, or Edmodo which still help learners gain skills required for managing information; however, Godwin (2012) discusses that the spoon-fed content and closed environment LMS offers a more predictable and uniformed learning environment. On the other hand, most curriculums seem to deprive learners of collective working of multiple users around the universe, brainstorming, creating a solution for a mass problem etc. since it barely involves interactional dynamics among the learner groups in LMSs. To promote collective learning, curriculum, at least, could be flexible enough to permit teachers to establish a learning environment with digital content (by adapting or replacing the activities) which learners get to study on meaningful and real digital content. Also, the content may aim at writing for a global community (unknown audience) as in the case of Wikipedia, Flicker, blogs etc., joining game-related communities to improve both writing and reading, and employ a virtual identity which may keep learners away from any possible negative feelings that may occur in face-to-face situations or in the classroom.

A highly networked platform that supports a learner-centered pedagogy and non-traditional forms of teaching approaches is connectivist Massive Open Online Courses (cMOOCs) offered via popular platforms (Coursera, EdX, FUN, Futurelearn, MiriadaX etc.) (Yuan & Powell, 2013). It encourages inclusion since the ultimate success heavily depends on interaction via provided tools (hyperlinks, Google Hangouts on Air, Facebook clinics etc.). Digital literacy is important for learners' inclusion in these open courses when "consuming content, taking quizzes and exams, taking part in activities such as writing assignments and peer grading, and actively participate in discussions via discussion forums, blogs, twitter, Google+, or other forms of social media" (Hill, 2013). There is an increasing number of language MOOCs, and learners can benefit from these language courses provided by prestigious universities and institutions worldwide. Maintaining an active user profile in MOOCs demands developing digital competences and brings personalized learning environments. Various MOOCs can be made a part of the syllabus of such departmental courses as Information and Communication Technology (ICT) to achieve a blended learning.

Inclusion in such vast platforms as abovementioned brings about an issue of intercultural sensitivity. A useful tool to develop intercultural competence can be the Autobiography of Intercultural Encounters (AIE), which is a free source and part of the European Language Portfolio (ELP) (http://www.coe.int/t/dg4/autobiography/default_en.asp). As a diary designed to discover personal experiences, it can help reflecting both learners' intercultural encounters in person and in online platforms. For the encounters through visual media, the version available is An Autobiography of Intercultural Encounters through Visual Media (AIEVM) on the same website. As intercultural education is a sensitive area, which could easily emerge in global platforms with multiple users across the globe, it requires awareness of how societies and cultures differ and the fact that correctness, errors, attitudes, morality, values, beliefs, and so forth change from one to another.

5. Related Concerns

Different education cultures entail critical differences in motivation to use digital technologies. Teachers and learners may show resistance to digital in their own context. When the teachers are not provided with the knowledge and skills to integrate technology into their teaching through trainings, the motivation profiles will be affected negatively (Pouzevara, Dincer, Kipp & Sarnsik, 2014). Furthermore, the motivation might be age-related. The digital immigrants do not have as many experiences with digital tools as the digital natives. The teachers who are digital immigrants have their attitudes and beliefs

challenged when teaching in digitally-equipped (virtual) classes. However, lifelong learning centers, (virtual) workshops, and MOOCs about technology use could be an effective solution for those teachers to break the habit of their mind about digital tools.

Seeking information to write a paper is a meticulous activity, which schools usually fail or ignore to teach. It used to be encyclopedias and printed books that students based their assignments on while now the ease of finding information leads them to spend time on surfing between windows and be exposed to all sorts of information on websites. The first step is finding related information through right keywords, and then evaluating available information online to decide whether it is valid, related, and worthy. At this point of research, the main concern is judging the validity of the information presented on the website. Digital literacy requires learners to distinguish the validity of a source by evaluating where the source comes from: Is it a research paper, book, or journal with author and publisher information? Or is it simply Wikipedia, blogs, personalized papers etc. regarding the topic that may contain untrue or misleading information? In their research, Foster and Gibbons (2007) have found that students rely on a website by evaluating its popularity. This attitude will most likely lead to the use of incorrect and insignificant resources. Next step is note taking, which students usually copy and paste the information to make it coherent by either paraphrasing or using quotations. Paraphrasing an idea and integrating it to a paper within a cohesive text involve critical judgment. Since technology brings us varied sources, it is an opportunity to review the sources and generate new ideas out of them. Peters and Frankoff (2014) defines the process as constructive, creative, and productive since the text is constantly being amended by visiting and adding new information.

Socio-economic reasons interfere with the technology-enhanced learning/teaching as well. Easy access and availability of digital tools are not always an option for economically-challenged educational systems. On the other hand, political issues may restrict the access to once available open sources such as the Turkey case with Wikipedia where Turkey prohibited the use of Wikipedia to political concerns. Such cases often occur in Turkey with several social media tools as well as websites prohibited by Association of Access Providers in Turkey with public/private connections. In this case, it is important to be sensible about offline storage of the materials and information one has already worked on in order to avoid the loss of sources.

The significant issue at the point is *plagiarism*. Cheating on a work takes place in different forms: one can steal sentences, ideas, or a whole work to make it one's own. Owunwanne, Rustagi, and Dada (2010) have found out that plagiarism is acceptable and often carried out by students. The ease of accessing information may trigger the will to copy and paste instead of creating or producing when the mindset is not constructed. McGowan and Lightbody (2008) states that it is not surprising to discover that copyright issues are seldomly taught in high school or college, seeing how learners tend to plagiarize either intentionally or unintentionally. It is teachers' duty to educate learners about how to use sources, reference the author(s), and avoid cheating while paraphrasing or quoting. There are websites providing proper information of how to manage a certain style such as APA, MLA etc., which teachers can orient learners to. Moreover, Microsoft Word and Mendeley offers the citation use and automatic bibliography for the convenience of academics, learners, or simply anyone writing papers in a formal manner.

An important issue to deal with when teaching digital literacy is filter bubble. The algorithms used by Google and other search engines tend to navigate users to the sources related to their previous searches, products purchased, geographical location, and personal information gleaned, such as age, profession, or marital status (Godwin, 2015). This simply

means that no two people's results of a search will be the same, even with the same keywords or tags. One the one hand, it may sound practical since it seems to eliminate information we may not be interested at all. On the other hand, these filters step in our searches and decide what to see and not to see on behalf of us. As Kern (2014) states the concern that the World Wide Web may be becoming less and less of a window onto the world and more and more of a window onto ourselves. Each single click by us determines our future clicks and sentences us to more restricted and personalized windows.

A possible factor that may cause teachers to reconsider including digital contents is that learners may encounter various kinds of language in informal online spaces, and this may lead the heavy use of code switching, hybridized forms, slang, specialized vocabulary, and formulaic speech (Godwin, 2015). On the other hand, there would be no drastic harm in introducing informal language, different registers and styles, and idiomatic expressions unless the content consists of unethical, racist, and interculturally insensitive language use.

5. Conclusion

The promise of digital tools to enhance language teaching and learning has been deemed. Therefore, the matter of effective and skillful use of various digital tools has gained significance. New literacy studies emerged after the arrival of interactive tools and platforms provided free-of-charge. The common idea in these studies is to improve digital literacy besides new skills. The use of multimedia, which requires more strategic skills such as interaction, collaborative communication, and agentive participation, has become more important than using passive materials (materials that are to consume). Thus, being digitally literate extended to a broader definition where it entails identifying, accessing, analyzing, managing, integrating, evaluating, and synthesizing digital tools for a particular purpose.

Learner-oriented teaching has also been promoted with digital literacy. The notion of mere consumption of the given materials has been abandoned, and a notion that promotes creativity with the inclusion of learners for accomplishment of learners has been adopted. This led to redefining the roles of teachers and learners.

The availability of tools like desktops, personal computers, tablets etc. today provides a mobile learning experience. It has become convenient to create knowledge and circulate it. In language education, the richness of multimedia can contribute to the learning through the use of popular social media tools, online gaming chat rooms, tagging tools, picture, voice, and video editing tools, mixing tools, interactive HTML5 contents, machine translation tools, search engines and (visual) thesauruses. This is a straightforward step in improving the effectiveness of learning materials such as tasks, assignments, portfolios, projects, feedback giving, presentations etc. Furthermore, platforms such as LMSs and MOOCs that function on multimedia necessitate good level of digital literacy. Similarly, as the platforms employ a learner-centered pedagogy, gaining digital competence is even more essential.

Lack of digital literacy brings controversial issues in educational contexts. The common concerns including resistance to use of digital tools, evaluating the validity of a source, bans of websites due to country policies, filtering problem, and insensitive language in interactive platforms. It hinders autonomous use of technology for educational purposes. In this case, lifelong learning centers, MOOCs, and (online) workshops can encourage teachers and learners to grasp a better understanding of digital competence to enhance their own language teaching and learning.

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