

Digital Natives' Use of Web 2.0 Tools in Learning Foreign Language: A Case Study

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Abstract

In the information age, depending on the ubiquitousness of information and digitalization, learners' learning methods and approaches have changed rapidly and profoundly. Web 2.0 tools and recent technologies have facilitated people's lives as well as their teaching and learning environments. The generation called "digital natives" live addictively to Web 2.0 and digital media tools. This generation with a perfect command of Web 2.0 tools can reach boundless information and interact with people around the world. In this context, learning a foreign language has become vital for communication and a common language (lingua franca) has become indispensable in this globalized world. Widespread use of Web 2.0 tools in foreign language learning enables both learners and teachers to interact and access information in a short time in and out of class. Accordingly, this study aims to determine digital natives' levels of using Web 2.0 tools in learning foreign languages under the Connectivism Theory and Cognitive Theory of Multimedia. It's anticipated that the findings of the research will enable both face to face and distance education-based institutions to learn more about digital natives and their learning styles. In this case study, data collection was completed through semi-structured oral interviews, observations, and document analysis. Parallel with the information in the literature review; the results of this study show that digital natives use Web 2.0 tools quite often and they are ambitious and practical in generating content and sharing their contents via connections.

Keywords: Web 2.0 tools; digital natives; foreign language learning; the Connectivism Theory, the Cognitive Theory of Multimedia

Introduction

The rapid development of communication and information technologies in the globalizing world makes it easier to access information, share, and interact with one another. In this context, all these conveniences and developments have made communication a necessity and to communicate; learning a common language has become a requirement (lingua franca). According to Ergül (2014,123-126), "In our rapidly developing and changing world, keeping up with the digital century and globalization can be realized by speaking a common language". Serengil (2007) acclaims that English, which is a common language of cultural interactions such as the internet, economy, popular culture, diplomacy, air traffic control, has become compulsory to learn. Trimnell (2005, 198-201) emphasizes the importance of learning a foreign language as "Knowing a foreign language is also necessary to better understand education and communication as well as the developing digital world". For these reasons, it is possible to say that learning a foreign language can be regarded among the requirements of this digital age.

Web 2.0 technologies, used addictively in the first quarter of the 21st century, are almost everywhere in our lives. As Bat (2010) points out, the number of people using weblogs, wikis, social networks, and multiplayer games is increasing day by day. These people in networks can interact, share, and collaborate through these networks and they are enthralled by rapid individual publications, sharing, and dynamic interface of being online (Warschauer & Grimes, 2007). As Siemens (2004) stated, being able to access accurate and up-to-date information, filter out secondary or unnecessary information, and distinguish important and insignificant information are among the important skills that learners must possess in the information age. In this era, Web 2.0 tools have also contributed to the enhancement of learning and teaching environments. In this context, technology has led to the creation of new paradigms and new pedagogical approaches and the grounds for the formation of the Connectivism and Cognitive Theory of Multimedia Learning. (Kop & Hill, 2008).

Connectivism, which is the theory of the digital age, expounds on how learning takes place in networks (Downes, 2012; Siemens, 2004). Contrary to traditional learning theories, it is argued that information in the digital age is shared with the network connections and learners are cyclic by switching between these networks (Downes, 2012). According to connectivism, learning occurs through the interaction of individuals on the network. Much more than simply transferring knowledge, learning takes place through active interactions of learners with learning resources and networks.

The Cognitive Theory of Multimedia Learning is formed on interactive and well-designed multimedia environments that address multiple sensory organs, such as image, text, and animation. These environments not only actively engage learners in the learning process, but they also help to create inert learning (Mayer, 2003).

As Kürkçü (2016) stated, digitalization has started to create a new culture. Those who were born in this digital age are called “digital natives” and those who are struggling to keep up with this culture are called “digital immigrants”. Prensky (2001) states that almost all of the digital natives’ lives are surrounded by computers, mobile phones, digital music players, video games, and all other tools and toys of the digital age. Digital immigrants, born in the early 1980s, is a generation unfamiliar with digital media, but trying to adapt to this digital environment. Digital natives do all their activities such as information access, study, entertainment, communication using digital media tools. They enjoy doing practical researches but most of the time they are disoriented. They are usually analytical, critical thinkers, and likely to question authority (Tapscott, 2008).

In the first quarter of the 21st century, the rapid development of information and communication technologies (ICT) also affected foreign language education (Warner, 2004). The use of technology in teaching and learning environments is gaining popularity. The widespread use of these technologies has led to significant changes in both language learners and teachers in foreign language learning and teaching. Digital learners can access hundreds of daily podcasts, wikis, videos, exercises and other content to practice a foreign language through these Web 2.0 tools. Consequently, they can make foreign language learning processes much more practical and meaningful via such links and tools.

Web 2.0 tools help learners develop their existing skills and support individual learning. The benefits of these tools, which provide learners with innovative prospects are various. Some of these are content creation, content modification, socialization, interaction, and product development that help learners develop their self-confidence. In addition, information can be achieved in the most up-to-

date and functional form. Hence, Web 2.0 tools might also increase the academic success of this generation (Elmas & Geban, 2012).

As Gasser and Palfrey (2013) put it, digital natives have extraordinary knowledge of how to access knowledge. At the same time, this generation, which can go to the main sources of information that they learn with web linkage logic, can do comprehensive research, synthesize and share with their friends about the concepts they want.

Connectivism is based on interaction and communication (Siemens & Conole, 2011). Similarly, these two elements are vital in foreign language learning. Foreign language is now increasingly facilitated by the use of interactive Web 2.0 tools and technology with plans tailored to the autonomous endeavors of learners and their needs (Hsu, 2013). The learning of foreign languages by digital natives can be correlated to the processes of language discovery and meaningful connections in the process of learning their mother tongue. As mentioned earlier, the generation with all these digital skills is in communication with digital cultures, and learning a foreign language becomes essential in these settings.

The basis of the multimedia environment depends on the following principle: "it is more effective for people to learn by using pictures and texts together than learning from writing" (Mayer, 2008, 760). What is meant here is not simply adding text to pictures, but the use of teaching tools in the light of the human brain. Mayer's cognitive theory of multimedia is based on the use of environments according to the functioning and perceptions of the human brain.

Multimedia environments increase student motivation and success. In addition, they structure the information learned. The selection of visual, auditory, colorful, and effective materials suitable for learning outcomes supports the student in terms of cognitive, affective, emotional, behavioral, and social aspects (Dellal & Yücel, 2015). Katırcı (2010) also revealed that information frequently used in animation and simulation causes less cognitive load compared to information mostly used in the text.

In this context, Web 2.0 tools, which frequently use multimedia technologies such as animation, graphics, sound, and image, can support the success of the learners since these technologies provide flexible learning environments and help to achieve permanent learning (Akkoyunlu & Yılmaz, 2005).

Literature Review

In this part of the research, definition, and assets of digital natives, learning a foreign language in the 21st century, use of Web 2.0 tools in language learning, connectivism, and cognitive theory of multimedia are covered within the scope of the study.

Digital natives

The digital natives are made up of those born in the 1980s and afterward; also, acknowledged by many different names such as "millennial students, internet generation, game generation, cyber children, new generation, and locust mind". The labels used to describe the generation of these young people and their relationship with technology are numerous. According to Sorrentino (2018), this metaphor has had a continuing influence on how the educational system perceives students and technology. In the shortest definition of Prensky (2001), digital natives are native speakers of the digital language of the internet, computer, and computer games. Rapid access to information, evaluating the data simultaneously, and multi-tasking at the same time are among the basic features

of digital natives. In addition, they are always connected and choose games instead of serious studies. Digital natives do all their activities such as information access, studying, entertainment, communication in their lives by using digital media tools.

According to Rapetti and Cantoni (2010), the main difference between this generation and the previous generation is the frequency of using the internet and the ability to use the technology enormously even in different learning environments. Bilgiç et al. (2011) define the digital natives as 21st-century children and young people who are living with internet technologies and hosting online environments and modern technologies at the center of their lives. Taş (2014) suggests that technology plays a key role in the lives of digital natives. It is a rule to have a 24/7 internet connection for digital natives and they live addictively to their mobile devices.

In the age of information, in which we have made rapid progress in digitalization, it is necessary to determine the learning needs of digital learners (McLoughlin & Lee, 2010). In this context, it would be right to discuss how educators can meet these needs and examine the use of digital technologies according to the needs of learners.

Learning a foreign language in the 21st century

In the 21st century, when information and communication technologies are of great importance, the need for learning a foreign language has also increased, and learning one or more foreign languages became one of the indispensable necessities for every society. Rapid development in information and communication technologies (ICT) have affected education platforms and foreign language learning (Warner, 2004). The use of technology in teaching and learning environments is increasing (Karaman et al. 2008). Aydın (2011) emphasizes that technology is indispensable in foreign language education.

Çelebi (2006) states that developments in technology and technology-based changes in our lives are ahead of cultural change and learning a new language in the 21st century is indisputable. Thanks to the rapid development of information and communication technologies in the globalizing world, information has become easier to reach and share, and network connections have increased interaction among people (Karabulut, 2015). All these developments have brought about the necessity of learning a common language (lingua franca) for communication. As Ergül (2014) stated, it can be realized by knowing a common language to keep pace with globalization and pace in our rapidly developing and changing world. According to Trimnell (2005), learning a foreign language is also necessary to better understand education, communication, and the emerging digital world. Foreign language learning, which can change our point of view from time to time, also opens new opportunities for people in social, academic, and business life. In sum, it is possible to say that when professional, social, and individual reasons are blended, foreign language knowledge is among the requirements of the information age.

Use of Web 2.0 tools in language learning









According to Morgan (2012), Web 2.0 tools help language learners develop four basic skills: speaking, writing, listening, and reading. It also allows them to improve their grammar and vocabulary. This generation of digital learners has access to blogs, podcasts, wikis, videos, exercises, RSS feeds and contents and they can do numerous language exercises thanks to Web 2.0 tools. Baçal and Aytan (2014) stated that Web 2.0 tools used in teaching and learning foreign languages also increased learner-learner interaction. In addition, in this process, unlike the boring main course books,

workbooks and supplementary books, they expressed that these tools are a source of dynamism and motivation for the learners.

Consistent with Lam (2004), online conversations and correspondence of foreign language learners contribute to their ability to express themselves and to acquire a language. Shin (2006) stated that synchronous or asynchronous communication is very effective in learning languages. The research findings of Freiermuth and Huang (2012) in the intercultural context in Asia show that using foreign language learners in the target language in online conversations enhances their motivations and levels of entertainment.

Based on all this information, it can be said that the Web 2.0 tools that increase learners' motivation during the foreign language learning process can also enhance the academic achievement of the learners due to their interactive working environments, multimedia options, and dynamism added to learning. Based on 2016 statistics, the most preferred foreign language learning tools and their teaching approaches are shown in Table 1.

Table 1. The most preferred language tools in the last five years (www.fluentu.com, 2016)

| Visual of the Tool | Tool | Approach | Link |
|---|---------------|--|---|
|  | Rosetta Stone | Visual exercises and fun content | http://www.rosettastone.eu/ |
|  | FluentU | Music videos, ads, news, and inspiring talk videos | www.fluentuenglish.com |
|  | MindSnacks | Nine mini-games and fun vocabulary activities | https://www.mindsnacks.com |
|  | Memrise | Creative and fun activities | https://www.memrise.com |
|  | Livemocha | Learning cards | http://www.livemocha.com/ |
|  | Duolingo | Artificial intelligence and interaction practice | https://tr.duolingo.com |
|  | Voscreen | Short videos and translation | https://www.voscreen.com |
|  | Busuu | Chat rooms and visuals | http://www.busuu.com/ |

Thanks to Web 2.0 technologies, learning foreign languages is now becoming easier. These tools, which we can use anytime and everywhere consistent with our learning needs, also offer interactive and collaborative working environments. Some of these tools support the target work environment with games, visuals, and videos. For example, while "Rosetta stone" offers visually weighted practice opportunities, "Duolingo" offers artificial intelligence-based activities and communication environments based on the pace of learning. The tools in Table 1 are among the most frequently used tools in the last five years and various tools similar to these are available.

Connectivism

Connectivism has emerged as a new learning theory in the digital age with the increasing use of Web 2.0 tools and elucidates how learning takes place in networks (Downes, 2012; Siemens, 2004). Contrary to traditional theories, according to the connection that arises in the digital age, "knowledge is distributed through network connections, so learning is realized by the ability to configure and connect from one end to the other" (Downes, 2012). Based on connectivism, it is emphasized that learning takes place through the interactions of individuals on the network. Siemens and Downes (2008) pointed out that connectivity is not sufficient to explain how learning occurs over networking in the age of information, and therefore connectivity, has emerged as a need.

Connectivism theory describes the process by which learners reach information sources through networks in digital environments. In this context, it is emphasized that in the context of communication, the knowledge is derived from the communication and interaction of learners with learning resources rather than teaching by teachers (Clinton et al., 2011). Another person who supports the use of technology and the theory of connectivity in education is education counselor and writer Marc Prensky. Prensky, who brought digital native and immigrant concepts to the foreground, pointed out that since learning in digital age ensues through social networks and Web 2.0 tools, digital natives have problems in traditional learning environments (Prensky, 2005). Learners at the digital age can successfully use networking, multimedia, and Web 2.0 tools and filter secondary information where information is increasing exponentially. (Kop & Hill, 2008). In this context, it is possible to say that these properties overlap with the learning characteristics of the connection theory. In Figure 1, the connections of individuals learning with networks are outlined (Drexler, 2008).

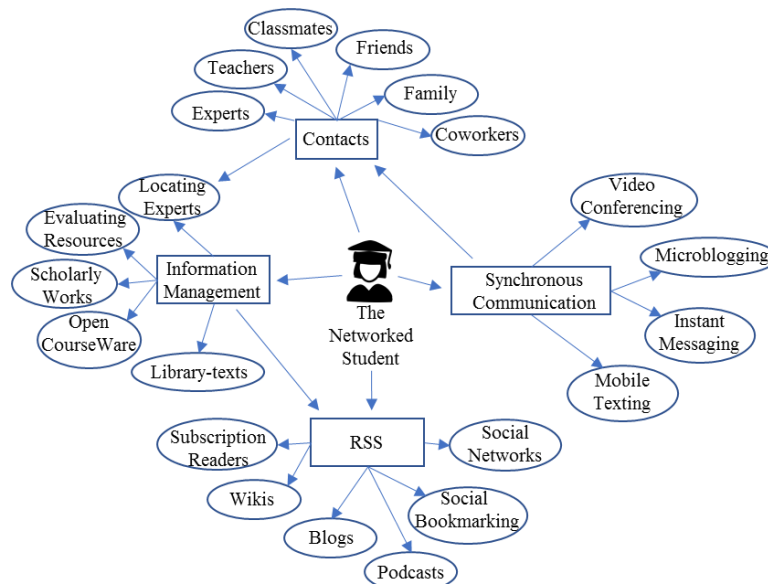


Figure 1. Connections of network learners (<https://blog4itech.wordpress.com/2013/11/>), (Drexler, 2008)

Cognitive Theory of Multimedia

The development of technology is also rapidly developing educational technologies (Boche & Shoffner, 2017). The introduction of technology into educational environments has brought diversity

to learning environments, which has resulted in positive outcomes for learners who show individual differences in learning processes (Kuzu, 2007). According to Yilmaz and Özkan (2014), the appeal of technology to the senses can easily be achieved by bringing together audio-visual multimedia. To exemplify, YouTube, Flickr, Slideshare, and some cloud computing technologies such as Dropbox and Google Drive allow users to create, edit, and share simultaneously. Atwell (2007) stated that thanks to the ecology of open source through the development of technology, learners can use Web 2.0 tools and multimedia consistent with their learning methods and needs. In this context, as Knight (2011) points out, "a combination of technology and education" can lead to more productive results in the training process.

Multimedia used in educational environments can increase the efficiency and productivity of the teaching and enable learners to access information more easily and permanently (Leutner, 2014). At the same time, the use of multimedia in learning and teaching environments that address multiple sensory organs provides active learning, autonomous learning, and collaborative learning (Oktay & Cakir, 2013). Figure 2 shows a multimedia simulation.



Figure 2: Multimedia simulation (<http://www.dife.info/index.php/art-design-and-technology/multimedia-production>)

Methodology

In this research, digital natives' levels of using Web 2.0 tools in learning foreign languages have been identified and evaluated within the context of cognitive multimedia theory and connectivism theory in a holistic approach. This research has been constructed as a case study which is one of the qualitative research approaches. Qualitative research is defined as a study in which qualitative data collection techniques such as observation, interview, and document analysis are used and a process is followed to reveal perceptions and events naturally and realistically (Yıldırım & Şimşek, 2008). Creswell and Poth (2016) describe the case study that constitutes the design of this study, as follows: "The case study is an in-depth analysis based on any event, individual or process data". Moreover, in this research; techniques such as observation, semi-structured interviews, and document analysis have been used. Unstructured or semi-structured negotiations are more flexible than structured negotiations and can be shaped by the flow of opinion (Çokluk et al., 2011). To analyze the reliability of the collected data by semi-structured interviews, the researchers have consulted three experts for triangulation. Cresswell (2005) and Patton (1999) describe the data triangulation as a method used to remove any bias that may be caused by different data sources collected by the researcher and to increase the reliability of the data.

Design of the Research

This study is conducted at Anadolu University, School of Foreign Languages, Turkey. At this language school, there are 220 lecturers and approximately 3000 students. The research focuses on determining Digital Natives' Levels of Using Web 2.0 Tools in learning foreign languages for three main reasons:

1. The lack of studies on the level of use of Web 2.0 tools by foreign language learners.
2. To identify the digital natives' learning processes via digital media, the way they choose the tools, and their interactions in this process.
3. To elucidate teaching platforms, specifically distance education institutions about digital natives' learning styles since they commonly use technological opportunities in course deliveries.

To determine the participants in the survey, the purposive sampling method has been used. Purposive sampling is one of the convenient sampling methods in qualitative research (Creswell & Poth, 2016). Participants in purposive sampling are selected by the researcher for an in-depth examination of the situation with the most appropriate participants contributing to the research (McMillan, 2004, Patton, 2002). When creating the sample for the purpose, the researcher took into consideration the classifications of the digital natives, their observations, and the views of two field experts. In terms of attitudes and capacities of digital natives, their classification is divided into five categories (Kurubacak, 2016).

- **Avoiding natives:** Even if they were born in the digital age, they do not feel familiar with digital technology. Unlike their peers, they hardly ever use mobile technologies. Facebook and Twitter accounts are not available. Even some of them do not even have internet access at home. This group is the smallest group of digital natives.
- **Minimalists:** They know that technology is part of everyday life, but they only focus on things that are interesting to them. They follow their news from the daily newspaper. They use communication technologies, but they are not enthusiastic.
- **Enthusiastic participants:** This group is the largest group of digital natives. They are on Facebook and Twitter all day. They use the internet when they want to learn something. They enjoy using technology. They change their phones frequently.
- **Innovators:** These groups are not only enthusiastic, but they also develop communication technologies. Game developers, programmers, engineers, tech-writers, hackers, etc. are members of this group.
- **Dependents:** This group is extremely addicted to technology and is generally game addicts. When they are separated from the Internet, they become angry, upset, and frustrated. Members of this group have general problems at school, work, or home life.

Participants

In the creation of the sample, the classification given above is adapted to three groups, minimalist, enthusiast, and innovates. The reason for this is that some features in groupings are similar to each other and haven't been observed in the process. The researcher observed twenty students' attitudes towards technology use and capacities in laboratory courses where foreign language courses were supported by technology for three months. From these observations, a total of six students were selected for each group. In addition to the observation, the ideas of two field experts taken in the sampling process. In qualitative research, there is no specific rule for calculating sample size. Sampling is decided according to the purpose of the research and possibilities (Büyüköztürk, 2012). Therefore, after receiving the opinions of the experts, six students were selected.

The demographic information of the digital natives participating in the research is given in Table 2 below. The actual names of the participants were kept confidential within the framework of the ethics guidelines and each participant was given a separate nickname.

Table 2. *List of participants*

| Digital natives (Nicknames) | Level of Technology Use |
|-----------------------------|--------------------------|
| Eftelya | Minimalist |
| Ali | Minimalist |
| İpek | Enthusiastic participant |
| Metehan | Enthusiastic participant |
| Demet | Innovator |
| Erkin | Innovator |

Data Collection Tool

In this study, semi-structured interview forms, observations, and document analyzes were used as data collection tools. Semi-structured interview forms consist of three components. The first component of the interview forms was informing. The information page contains information on the subject, subject, purpose, scope. The second component of the interview form is the written permission form. The written permission form includes information on how to conduct the interview, how to record audio, and how the data will be stored and used. The final component of the semi-structured interview form consists of interview questions.

Questions

In the purpose part of the study, four questions were asked based on the problem and the following was finalized depending on the theoretical sequence composed of connectivism and cognitive multimedia theories and the examination made by three different qualitative research specialists.

Table 3. Theoretical framework

| Digital natives learning a foreign language | | Connectivism |
|---|-----------------------------|--|
| | | Use of Web 2.0 tools |
| Multimedia Learning | The skill of technology use | Ability to use Web 2.0 tools through technology literacy |

The final questions posed for this research are as follows:

1. How do you use Web 2.0 tools in general?

When learning a foreign language:

2. How do you use Web 2.0 tools?

The semi-structured interview form used in the research was presented to three academicians who were experts in qualitative research in terms of appearance and scope validity. Through interviews

and feedback from academicians, interview questions were revised and finalized. Then the data collection process started.

Data analysis

The interviews were recorded and each of the interviews lasted approximately 15 minutes, including the examination and signing of the preliminary forms. After the interviews were completed, the analysis of the collected data started. The data was coded and analyzed by the researchers. The data from the audio record was exported to NVIVO11 and the analysis was done by this package program used in most qualitative researches.

In this research, descriptive and inductive content analyses were used in data analysis. The coding of the data, the finding of the themes, the organization and definition of the data according to the codes and themes, the interpretation phases of the findings were followed (Yıldırım and Şimşek 2005: 228-238).

Strengths and limitations of research

The methodology consisting of triangulation, purposive sampling, observations, semi-structured interviews, the analysis, and theoretical base make the research an appropriate case study.

Findings of the research are important to face-to-face and distance learning organizations to discover and understand digital natives' learning processes and preferences in the digital environment. In this context, it can be said that this research is scholarly for the distance education institutions which frequently use technological facilities in course deliveries. These points form the strengths of the research.

Findings and Discussion

In this section, the findings regarding the level of use of Web 2.0 tools by foreign digital learners were analyzed and discussed. The findings were obtained as a result of the analysis of the semi-structured interview data with the NVivo11 program under the research purpose and research questions directly supported by the citations. Findings from the study were given under appropriate titles according to the relevant research questions.

The common use of Web 2.0 tools

Participants were asked to answer the question "How do you use Web 2.0 tools?" to determine how they use Web 2.0 tools in general. As a result of the analysis, five sub-themes were determined under the main theme of "Usage of Web 2.0 tools". Different opinions were obtained from the sub-themes, which are connected. The use of "Web 2.0 tools" is the use of Web 2.0 for information, the use of multimedia, the use of Web 2.0 for news retrieval and sharing, the use of mobile applications, and the use of social media. Two more details such as "Facebook" and "Twitter" have been identified under the sub-theme "Social media use". The themes are shown in Figure 3.

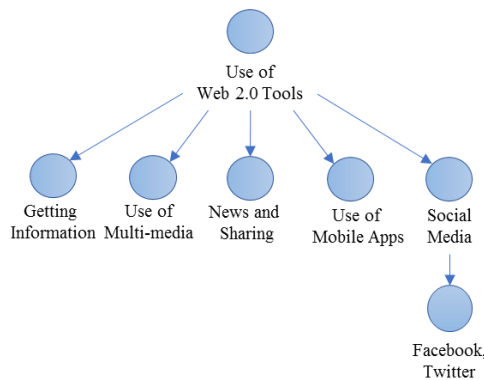


Figure 3. Sub-themes of using Web 2.0t based on the main theme

Figure 3. shows the main themes and sub-themes that have been identified in the direction of how digital natives use Web 2.0 tools in general. Findings related to the determined sub-theme are as follows:

Direct citations for the sub-theme "for gathering information" are given below.

"... we use the internet most to reach the information; because the information on the internet is the place where the brain functions in the world, that is, all the stuff is gathered and used here, but achieving the right information requires great rigor; because one idea is pre-empted differently at different sites and we can convey wrong information while using the source we know to be true. We should take care that the site we use to avoid is not the only quality. So we can come up with wisdom not from a single place, but a lot of sources and a common conclusion." Demet

"... Most social media value entertainment. There are many pages on social media for information." Eftelya

"... I research my homework, I get information from necessary internet sites". İpek

As can be seen from the direct citations, it can be said that digital natives use the Web 2.0 tools very often for information. They say that they use the internet mostly to get information and believe that accurate information should be meticulously searched. Participants also use social media for information. Social media tools, which are most commonly used among young people, can be considered as the most practical ways to get information. Some learners who are at the center of their learning process have indicated that they are researching familiar internet sites to reach the information.

The other sub-theme, linked to the main theme of the use of Web 2.0 tools, is "Multimedia Usage". Direct citations on the subcontracting of "use of multimedia" are given below.

"I follow YouTube channels. I look around the activities they do in the areas I'm interested in " Metehan

"I even have a YouTube channel. I follow some people and publish music " Metehan

"I do not use it very often. I usually use video sharing sites. For example, I follow Youtube and similar things, but I'm not active " Ali

"Youtube, izlesene, Dailymotion are great but I spend more time on Youtube, I like listening to music and watching videos". Eftelya

Based on the opinions regarding the use of multimedia, participants have chosen "Youtube" as the preferred tool. "Youtube", which allows people to download and upload movies, music, pictures, graphics, and animations is among the most preferred multimedia media.

The other sub-theme, linked to the main theme of the use of Web 2.0 tools, was "getting news and sharing". Direct citations to this sub-theme are given below.

"... I use it to get news from my friends, to share something, and once I go somewhere I share my location ". Erkin

"... I play in the school team and I make announcements about matches in social media and I follow the match scores. There are useful groups for people. For example, an instructor shares lecture notes with students and so on, and we use it to learn a language. " Erkin

"... I loved some of the tools. We can see far away from people via media tools. I have access to various news sources" Ali

Use of Web 2.0 Tools in foreign language learning

The second research question was "How do you use Web 2.0 tools while learning a foreign language?" The responses were analyzed to determine how participants use Web 2.0 tools while learning a foreign language and the result was a total of nine sub-theme determined. This theme, "Web 2.0 tools contribution to foreign language learning", was supported by three basic views, and the second theme, "Achieving the necessary and correct information through Web 2.0 tools" was supported by five different views. The sub-themes are shown in Figure 4.

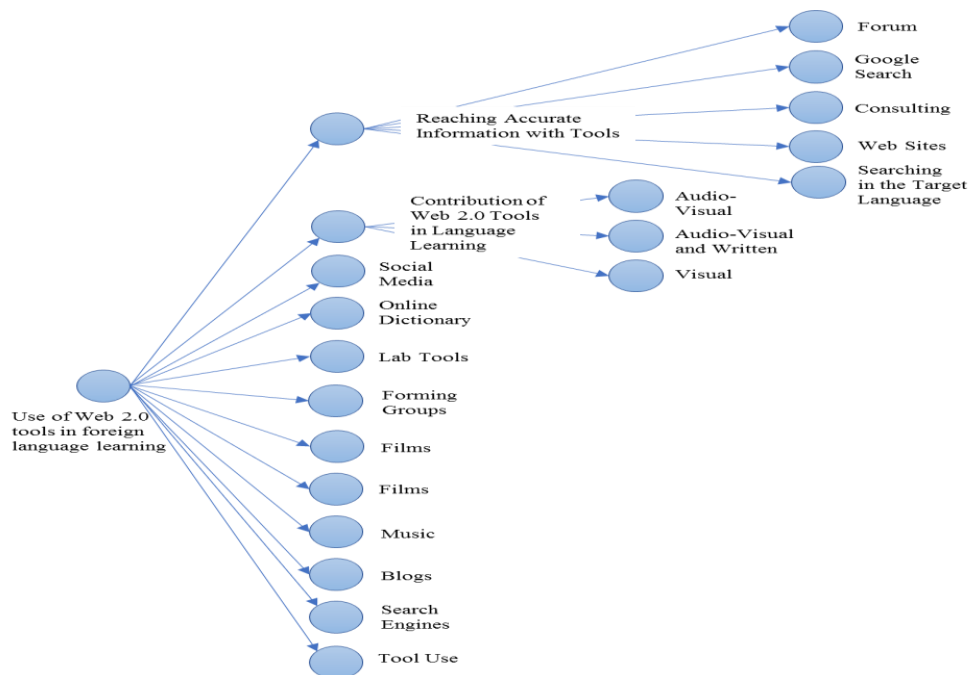


Figure 4. Sub-themes of using Web 2.0 tools in learning a foreign language

Figure 4 shows the main themes and sub-themes that have been identified in the direction of how digital natives use Web 2.0 tools while learning a foreign language. Findings related to the sub-themes are as follows:

Direct citations for the most referential sub-theme "Tool use" are given below.

"... I use Duolingo. In my free time, on the bus, anywhere. Duolingo is very enjoyable. Instead of carrying the books and notebooks, I can download the application and use it. Enjoyable".
Demet

"... sometimes I use" Duolingo "; because it makes me better than the others. It shows us our improvement and success. In writing, words are pronounced and they become familiar to us. There are also some applications such as "Canva" and "MyEnglishLab" and we use them in Lab tasks, but "Duolingo" is my favorite. Metehan

"... I use tools like live mocha and voscreen. I used "Cambly" but it was a demo and I had to pay. I also use "lyrics training" for fun and vocabulary practice." İpek

Findings

In the course of findings, digital natives regularly use Web 2.0 tools in their social and academic lives. In their foreign language learning process, they prefer various tools because they are both entertaining and they provide them dynamic environments. In this context, as noted in the literature, multitasking, one of the key features of digital natives, and being tied up in monotonous routines leads them to more entertaining platforms. Besides, the participants use Web 2.0 tools since they both have visual and auditory characteristics and delivering a fun presentation.

As a result of the analyses, two main themes were obtained in total. The first one is the "use of Web 2.0 Tools". This theme shows how digital natives use Web 2.0 tools in general. "social media usage" and "mobile usage" is the main reference themes among the sub-themes. Other sub-themes are "information", "news and sharing" and "use of multimedia". In this context, references show that when digital natives use Web 2.0 tools in general, they mostly prefer social media and mobile applications.

The second main theme, " use of Web 2.0 tools while learning a foreign language" is explicated by nine sub-themes. Among these sub-themes, "web tool usage" and "dictionary usage" were the most frequently used references. The views of digital natives show Web 2.0 tools are used frequently in digital learning environments. The next sub-theme " contribution of Web 2.0 tools in foreign language learning" was supported by three basic views "visual", "audio-visual", "visual, auditory, and written". Third sub-theme "access to accurate information" was supported by five different views: " forum space", "Google search", "consulting ", "web sites" and " searching in the target language".

The answers of the participants were examined by considering the classification of digital natives and as a result of the findings, their level of technology use became clearer.

Table 4. Classification of participants according to findings

| Nicknames | Level of Technology Use | Level of technology use based on findings |
|-----------|-------------------------|---|
| Eftelya | Minimalist | Minimalist-Enthusiastic |
| Ali | Minimalist | Minimalist-Enthusiastic |
| İpek | Enthusiastic | Innovator |
| Metehan | Enthusiastic | Innovator |
| Demet | Innovator | Innovator |
| Erkin | Innovator | Innovator |

Findings show that Eftelya and Ali have both minimalist and enthusiastic participant characteristics. İpek and Metehan were determined to be enthusiastic digital natives; however, their answers show that they are more likely to be innovators. Demet and Erkin possess the innovator characteristics as determined before.

Discussion and Conclusions

It is possible to say that the rapid development in the information age, the spread of the technology, the inclusion of Web 2.0 tools into the learning environments changed the pedagogical role of the learners and the teachers. The findings of Lomicka and Lord's (2009) research highlight the need for Web 2.0 tools in foreign language learning. As such, the creation of new parameters instigates teachers' re-examining of learning and teaching processes. Similarly, findings in this study are capable of shedding light on the possible changes in foreign language learning environments.

Along with changing roles, learners, who are called digital natives, have rapid access to information, multitasking capabilities, networked lives are mostly impatient. As mentioned in the related literature, they are experiencing problems in traditional learning environments (Prensky, 2005). Digital natives, who have begun to experience life with Internet technologies, are defined by the expression of "21st-century learner". In addition, they are learners who use online media, social media, and various Web 2.0 tools at the center of their social lives as well as their academic lives.

As Tonta (2009) notes, digital natives use Web 2.0 technologies professionally, manage their data, integrate rich information they have found from other sources with their knowledge and begin to share that information with others. In this context, it can be said that the findings obtained in the research overlap with the features mentioned in the literature of digital natives.

As can be seen, digital natives are proactive Web 2.0 users directing the sources. In addition, participants' responses to the use of "Myenglishlab" used in laboratory lessons were quite positive. Most of them find the LMS fruitful and consider that it empowers them to practice on-line speaking, writing, listening, and reading. They also use several web tools, social networks, blogs, and applications covered in their syllabus. Besides, they can do their research via various sources and tend to create, edit, and share simultaneously.

Digital natives who use the above-mentioned technologies are becoming more and more capable in their minds and this enables them to complete multitasking. Therefore, Mayer's view (2014, 171-173) "digital natives' mental processes in emerging new technology environments must be well defined and their social and educational environments should be organized accordingly" highlights the importance of making arrangements in education platforms according to the digital natives'

needs Accordingly, it may be useful to use materials that are enriched with visual and auditory features, interactive structures and entertainment elements.

Findings also show that participants who are very practical in gathering and sharing information in digital environments during their foreign language learning process, generally share the information they gather on Facebook and WhatsApp groups. Similarly, both face to face and distance learning organizations can form groups through social media options via synchronous or asynchronous options. At this point, İstifçi Lomidazde and Demiray's (2011,122) statement "the use of Web 2.0 tools in the foreign language teaching provides the opportunity for teachers and students to access information in a short period, as well as opportunities to engage in both classroom and non-classroom interaction "supports this view.

Digital natives' learner-learner, learner-teacher, learner-e-source interaction is increasing rapidly in their network-connected lives. In this context, as Anderson (2003) points out, the completion of these interactions is regarded as the ideal process in e-learning environments. In this process, the features of digital natives' connectivist approaches strengthen their interactions with network connections.

Another study on social media use, interaction, and e-group use in foreign language teaching was also conducted by Al-shehri (2012). Findings related to the use of social media and practice in learning foreign languages obtained in the study overlap with this study in terms of the interaction and sharing processes of the participants. The results of the study show how digital natives learn foreign languages using Web 2.0 tools.

Their level of technology use and Web 2.0 tools in the foreign language learning process were analyzed in depth. Digital natives, who are innovative, system-critical, and highly anticipated, are expecting innovations in their learning processes. They don't accept the four-wall learning and likely to drop out in such circumstances. Siemens (2005) states, "Digital natives, who are increasingly interacting with individuals and resources on the digital network frequently use multimedia technologies and expect new technologies to be used in educational environments". For this reason, it will be appropriate for teachers to use digital materials that are rich in the visual domain. Correspondingly, teachers should be aware of new generation learners' needs and address their expectations in terms of content and materials using recent technologies.

To sum up, the results of the research may provide traditional and distance education institutions the opportunity to familiarize themselves with digital natives and their digital learning processes. In this context, it can be said that the findings of this present study might shed light on distance education institutions that frequently use technological facilities in course presentations, content formation, resource preparation. Besides, Web 2.0 tools used by participants in this study, their content creation, sharing processes, and their interactions can be a guide to other digital natives learning foreign languages.

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