

## Traditional to Digital Literacy: The Case of Turkey

AYSE ASLI SEZGIN

Osmaniye Korkut Ata University, Turkey

New arguments found ground after the revolution of Gutenberg and importance of reading being elevated in comparison to addressing, delivering original hand writings to masses by copying (Warschauer, 2007) and after centuries, reaching the point of electronic literacy with many innovations. These arguments reached a point suggesting that electronic literacy has also reached its "end". Can the question "is history backtracking in the new millennium" as suggested by Eco (2012) can help us while seeking the answer for the question "what comes after electronic literacy?" In this study, societies that are yet to experience electronic literacy shall be evaluated with a critical perspective under the scope of the example of Turkey, along with new variations that may come about after electronic literacy.

Keywords: Literacy, digital literacy, electronic literacy, digital learning, e-learning

While the formation of written culture after oral culture with the invention of the printing press is preparing a very different way of life for communities, reading in the digital environment has offered to people a different experience that is unusual yet. In community life that literacy rate determines the development, reading and writing in digital environment has started to be discussed now.

The rush of learning digital-electronics before reaching traditional and its trying to be experienced by people of all ages in almost every part of society should not cause to forget the fact that there may have societies with different level of development in the world despite all the developments in new communication technologies. Today people belonging to different social groups in different parts of the world are trying to develop themselves through reading and writing in the traditional sense without using tablet computers, smart phones, and laptops. To remain familiar with the constantly developing communication technologies can also be considered as the first step in adapting to developed societies in social and individual meaning.

In this study, societies that have not yet experienced literacy in the traditional sense, dimensions of the electronic-digital learning, the new view as a result of electronic literacy were evaluated in the axis of Turkey example with a critical perspective as well as discuss the current situation of electronic literacy in the world. Electronic book readers do the shopping for e-books in online environment in many developed societies in the world today whereas in Turkey, discussion continues on whether the level of print book sales is as desired. It is again noteworthy in the 21st century where electronic literacy is discussed that e-book sales in Turkey is rather low compared with other countries.

---

Correspondence to: A. Asli Sezgin, Assistant Professor, Political Science and Public Administration Department, Faculty of Economics and Administrative Sciences, Osmaniye Korkut Ata University, 80000, Osmaniye, Turkey. E-mail: aaslisezgin@gmail.com

In the scope of study on digital learning topics, information was provided on the overall situation by giving place to the initiative on the use of new technologies applied in primary education in Turkey and distance education topics that can be regarded as a new application in the field of higher education. Likewise, attempts on e-learning in the private sector in Turkey and the current situation were included in the scope of the study.

## Review of Literature

### Traditional Literacy and Literacy in Turkey

As it has not only an excellent definition in the literature, a general description of literacy concept that includes its basic features needs to be made. By establishing World Literacy Program (1966), The United Nations Educational, Scientific and Cultural Organization (UNESCO) noted literacy under the basic human rights. Within the scope of this right, the point of supporting to individuals for meeting the educational needs was emphasized. Literacy is not a privilege, on the contrary it should be considered as a right (Keefe and Copeland, 2011).

Definitions of literacy made by the United Nations or other international organizations should be considered, the concept should be evaluated globally, not in local or national meaning. According to definition of UNESCO in 1957, literate was defined as "The person performing reading and writing by understanding in his daily life". As different from the first definition, in another definition made in 1966, "performing the literacy process in the society functionally" was emphasized. The presence of sociocultural, ideological and political influences also began to be mentioned over the time in the definitions made on literacy. It is possible to reach to the consequences from the definitions made on literacy that all people have the ability to read and write, reading and writing is a right that every human being should have, literacy is an important factor in building links with other people, it requires communication and interaction (Keefe and Copeland, 2011).

Literacy defined by Organisation for Economic Co-Operation and Development (OECD) as "to reflect of individual this knowledge and potential on written texts to reach his goals, to improve his knowledge and potential and to ensure participation in society" could also be interpreted as to be able to understand, interpret, create, use in communication process printed and written material in different contexts. In the definitions of literacy concept, cognitive, emotional, socio-cultural, cultural, historical, creative and aesthetic aspects of this concept should also be addressed (Kennedy, et al. 2012).

Today, it is possible that changes in our understanding of the literacy concept may occur. Multiple literacy or literacy as a social practice could be regarded as the sense makings emerged as a result of these different perspectives. Sense making ways that developed in addition to spoken language (art, music, etc.) allowed literacy to realize in different dimensions. Now the texts enriched with visuals are more attractive for young people. The point that should be emphasized in multiple literacy approach is that the fact of different cultures could make different sense makings should always be noted. (Harste, 2003).

Literacy has the feature that it is a connection point among the social, economic and environmental dimensions of sustainable development as well as it contributes to the establishment of peace culture in social order. 15 per cent of the world's population still doesn't know how to read and write. 63 per cent of this 15 per cent rate consists of women. It is also estimated that 250 million children of primary school age worldwide are deprived of basic reading, writing and arithmetic (UNESCO, 2015).

While contributions of different types of literacy beyond the traditional sense of the literacy to individual and community life is being discussed in societies where there are no barriers to literacy, as it can be seen, it can also be said that there are societies that have not met with the literacy yet in world's population. Other than this, parts that do not have the necessary equipment and skills for new types of literacy could also be found even in societies with dense population of literate.

While explaining the concept of conventional literacy, an activity that covers our daily life practices such as reading, writing and listening, and that has a significant role in helping us communicate by revealing and making sense of symbols is encountered. Inconventional literacy, sociocultural contents are detailed and expanded via communication tools (Gates, Jacobson, Degener, 2004). After accessing information in the electronic environment, new opportunities were introduced for individual learning with "digital learning" methods. Contrary to heteronomous learning habits, it is now possible to access information individually (Peters, 2000).

In Turkey, the total population rate aged 25 and above and illiterates was 5.6 per cent in 2014 and this rate is 1.8 per cent for men and 9.2 per cent for women (TULK, 2016). Again, according to education statistics of 2015 received from Turkey Statistical Institute (TULK), the rate aged 6 and above and illiterates is 3.78 per cent, the rate of illiteracy for men is 1.29 per cent and it was calculated as 6.28 per cent for women (TULK, 2015).

Turkey's perspective on literacy and lifelong learning was included in National Education System due to compulsory basic education. Social cultural and educational changes that started in the year 1923 in Turkey form the basis of transition from traditional literacy experiences to e-learning applications today. As in other parts of the world, also in Turkey, related with literacy concept it should be focused on not only to be able to read and write just as simple but also to learn the use of information by benefiting from the social experiences of individuals in a comprehensive and detailed way and to configure a new kind of literacy on information obtained (Onal, 2010). The concept of literacy should include the acquisition of functional information pertinent to everyday life as well as the development of basic reading-writing and basic skills and knowledge related to numeracy. Such an understanding of literacy would be an indispensable way of personal development. In order to ensure the personal and social development in Turkey, starting from the illiterate groups, all society should be brought to a multifunctional literacy level gradually (Güneş, 1994).

In Large Turkish Dictionary prepared by Turkish Language Institution, The literacy concept is defined as "a person, who can read and write, trained" (TDK, 2016). Today, however, beyond of this restricted definition, literate concept, which is added as a subordinative to the end of especially different words, can be used in various senses. Such literacy concepts as computer, environment, economics, graphic, legal, digital, politics, web, critical, media, consumer literacy have started to come up frequently in everyday life and means to have the basic knowledge and skills in the relevant field (Kurbanoglu, 2010).

### Digital Electronic Literacy

In a different form than conventional literacy, literacy concept in 21st century is considered as to ensure a networked society to participate in new communities in this network and its ability to use it efficiently. To participate in different communities, to move easily in these communities, to benefit from these tools as a source of information, to perform the information exchange and social sharing are used to describe the new literacy concept. Literacy and literacy applications are changing rapidly as not previously experienced, by

the development of new technologies, it has become difficult to observe the effects of these changes in digital technologies. The use of digital technology at homes and in the workplaces as a part of everyday life can be considered as a new social revolution actually. Many routine of daily life was changed with easy access to the Internet, access to information accelerated, having fun through social media was presented to us with different options. This change is also observed in the text prepared for learning (NSW Department of Education and Training, 2010).

As a result of electronic literacy entered into everyday life in this way, in a classification made by considering especially young people's cognitive development and social interaction, types of using digital media and characteristics of these usages are grouped under four headings, which can also be considered as kinds of digital literacy (Green and Hannon, 2007):

- (i) Digital users using blogs when there is limited time to create content in Web environment,
- (ii) The creators who design web pages, publish photos and videos along with content creation,
- (iii) daily users who use short messaging services, blogs, e-mails as an indispensable activity of daily life,
- (iv) Information collectors who use such information sources as Google, wikipedia.

Increasing media convergence started to make the boundaries between media and information sources blurry day by day. Computers and internet environment on that particularly young people spend more and more time within the leisure time experiences have brought a new dimension to learning by getting information, expressing themselves through their creativity, playing, developing personal relationships. Internet, computer games, video in digital media, mobile phones and other modern technologies presented us new communication medias that allow to see the world from different perspectives. To be able to understand the new culture all transferred from these environments is called as digital literacy (Buckingham, 2010).

Digital literacy transition process is explained by experiencing three different stages, the first stage is the start of computer use in public in the 1980s, the second stage is that internet entered into our everyday lives in the 1990s and the last stage is the emergence of a networked knowledge economy (Dobson and Willinsky, 2009).

Television that replaced cinema and newspapers in the 1950s left its place to web technologies in the new century. Our future is also determined as a result of adaptation to this new technology we provide. It is possible to say that differences are experienced in our ability to think too with the help of this new technology offers an interactive environment instead of passive traditional media tools. Web media that presents information and entertainment to us in a variety of ways also encourages us to be dynamic thinkers. Impatient person created by modernism can decide quickly in what he can do in his own time with the help of these new technologies (Gilster, 1997). While digital literacy is presenting us the opportunity to reach to the more resources in a short time with the help of these new web technologies, unlike traditional literacy, it also appeals to the imagination with its rich content and brings a different dimension to literacy.

Gilster (1997) perceived digital literacy in very general perspective and explained it. Digital literacy concept that Gilster defined as the ability to use various information in digital environment by taking them from their resources was concerned in the same

framework again in the 1990s and was defined as ability to understand and read texts in multimedia environments (Bawden, 2008). It should not be failed to notice that digital literacy concept is far beyond to be able to use electronic medias physically. To be able to evaluate the information presented in digital media with a critical approach and to create new information from these environments can be considered among the features needed for digital literacy as well as different types of literacy (such as visual, productive, creative) (Jones and Flannigan, 2006).

Prensky (2009) who explains deep differences between the previous generations and today's young people with digital natives, digital immigrants concepts argued that it can be reached to digital wisdom by adopting the concept of this new generation's understanding system in 21st century. Digital wisdom is defined as a concept that is arising out of the use of digital technology and developing the cognitive power and is used to improve our abilities beyond the capacity we have at born. Technology that has a quite complicated and complex structure will not be enough alone to solve the problems. At this point, individuals who have reached the digital wisdom and have the capacity for good judgment with the possibilities offered by technology can be mentioned. After the interaction of the digital technologies with the human mind, these new technologies can be used more effectively in everyday life, differences between young people and previous generations are decreasing (Prensky, 2009).

## Digital Learning

Behavioural, cognitive and constructivist approach are three different theories of learning used in the creation of learning environments. However, these theories developed in the periods that the technology did not affect the learning environments yet. In the last twenty years, technology has influenced each area from our communication medias to our daily living areas. With especially the impact of technology today, the key trends about learning can be listed as the following (Siemens, 2013):

- During the learning it is possible to have knowledge about many different areas.
- Informal learning is an important aspect of the learning experience. Personal networks, virtual communities have started to play an important role in the informal learning process today.
- Learning is an ongoing process lifelong.
- Technological tools have been redefined by changing the way of learning.
- There is a need for an approach that will determine the details of the information management between individual and organizational learning.
- Learning theories should be supported with technology.
- A new perspective of where we can get information should be added to the perspective of what and how we will learn (Siemens, 2013).

New digital learning process in that technology and communication is together is noteworthy in the digital age. Connectivism brings a new dimension to learning activity in this new learning environment (Siemens, 2013). Contrary to superficial learning, it can be defenced that digital learning encourages depth learning by developing personal skills, by providing the use of higher quality tools in the learning environment and by providing access in a broad range. A variety of tools can be used in digital learning that enables learning activity to achieve a more robust structure with the use of technology in an efficient and conscious way. These tools also improve the quality of learning activities.

Technological applications used in classroom, online courses, professional communities and platforms, software providing high-level accesses are examples of these tools. Digital learning contributes to learning activity with such new strategies as online learning, competency-based learning (VanderArk and Schneider, 2012).

It is actually a fact that we are familiar with digital literacy through tools such as television, computers, we make readings from digital media on different occasions every day. As a part of everyday life, we realize digital media reading from online newspapers, social media networks, our smartphone applications (Gasouka, et, al., 2014). These everyday experiences related to digital literacy and digital learning vary depending on development level in societies of different cultures. Beyond the societies showing the rapid development of new technologies, societies following these developments later but an equal development level cannot be seen in every part of society as well as the societies that have not used these developments yet can be mentioned.

## Electronic Literacy and Electronic (Digital) Learning in Turkey

Information acquisition processes that were carried out passively in the past have become an active participation structure today. Printed learning materials and traditional information channels have become a rich structure with the help of Internet entered into our lives. New applications Internet offers us (e-mail, social networks, electronic books etc.) have become new learning channels. Digital learning has become more important with the impact that knowledge and technology has in the transition to an information society and as a result of the increase in distance learning requirements. Digital learning is defined as learning that can provide to receive information as much as requested at any time and place beyond formal education. (Yamamoto, et.al., 2010).

In a study conducted in 39 countries that are from the Balkans to the Caucasus from Scandinavia to the Arabian Peninsula and covers North Africa area it was investigated that how much e-learning technologies are used in these countries and to which extent this technology is utilized. According to the results of this research it was observed that e-learning technology is used quite efficiently in many countries, including Turkey. But lately in formal and distance education applications this e-learning concept is thought to start to discharge rapidly (Yamamoto, et.al., 2010).

Fatih Project is considered as one of the major projects carried out in digital learning in Turkey. Increase Opportunities Technology Improvement Movement in Turkey (Fatih) has aim to integrate information communication technologies into the education systems. A transformation aimed at education and training with the project initiated in 2012. In project scope interactive boards were placed in the designated pilot schools, tablet computers were distributed to teachers and students. It has purposes, such as to provide hardware and software infrastructure of project, the preparation and management of educational electronic content. A number of problems have been identified according to results of study conducted in pilot schools under the project. Among these issues prominent ones are that prepared technological environment is not used by teachers and students at conscious and the desired level, especially teachers should be given the necessary information about technical support, electronic content is inadequate (Pamuk et al, 2013).

Fatih Project has been also the subject of various debates since it was brought to the agenda. Opinions regarding the education given with technological tools would be harmful or helpful are put forward. Also, the positive outlook is also seen as it is emphasizing that it is an important point that the project uses technology, which is one of the main tools for removing social inequality (TED).

Another study on e-learning subject is the development of open course proposal. Open educational resources are all kinds of course resources that enable you to access and use courses as open and free in the Internet environment. This application started in the late 1990s in the World whereas it started first in 2006 in Turkey. The decision of establishing Open Access National Policy was taken in order to carry out the open access movement in a unity in Turkey in December 2005. In 2006 Open Access Declaration was created and a committee was formed named Open Access Advisory Committee. After all these developments, it was determined that universities in Turkey experienced a number of problems about open education. It has come to the fore in these issues that the problem of course resources' copyrights, textual-based studies are often preferred but not to take enough advantage of multimedia, not to introduce education with open access enough. (Baysal et al, 2015).

In Turkey Informatics Council Report (2002) the causes of the problems in open and distance learning in Turkey are grouped under three headings: According to this, it was defenced that Turkey has been unable to keep up with open and distance learning due to the lack of quality and standardization, inability to institutionalize-become brand and becoming wide spreading. Also, web content for teaching was ascertained not to be enough. In the same report, also the main problems with having failed expansion of distance education are expressed within the framework of such main problems as lack of structure in internet, failure of the legislation, failure to establish public (Gokdas and Kayri, 2005).

In a study about the subject that 313 off-campus students formed the working group in Turkey, impact of satisfaction status regarding e-learning process on the academic success has been tried to be examined. According to research results a number of recommendations on e-learning have been developed. The recommendations of more emphasis on the interaction process in e-learning, organizing events promoting the students' motivation, enriching the training content, increasing the interface usability are possible to be evaluated in terms of e-learning applications in distance education process in Turkey (Korkmaz, et al, 2015).

Distance education subject is considered in the framework of applications of e-learning in education and especially further in higher education. In the 1990s e-learning subject that was brought to the agenda as a result of the inclusion of computers in the learning process accelerated the inclusion of e-learning methods in educational process of the organizations that became widespread with the mass production of standard training software. E-learning methods are used in the provision and increase of such management skills as management, leadership, communication, customer service, and quality management in organizations (Sarac and Ciftcioglu, 2010).

In this study that aimed to analyze the issue of digital learning in Turkey under different headings, research on e-learning applications in organizational sense was done after the education sector. It is possible to say that the most effective use of e-learning in Turkey is in the companies. E-learning it is widely used in behaviour trainings, in the trainings of promoting products and services, in vocational and technical education. According to industry figures on use of e-learning in Turkey by the end of 2010, 200 companies, 30 universities, and 15 public institutions are using e-learning. The sectors that use e-learning most intensive among companies are identified as banking and finance, telecommunications and pharmaceutical sector. (Hancer, 2010).

While studies carried out on e-learning in Turkey are being examined, the status for the use of electronic books preferred on e-learning and e-teaching applications should also be investigated. Electronic books which has been started to be used since the 1990s as a sub-branch of electronic publishing is a technology that has been used widespread

personally in daily life in America and Europe as well as a learning and teaching tool started to be focused on its use in classroom and extracurricular time. Electronic books called e-book in short have become preferable because they are digital, portable and, they have a structure appropriate for searching and scaling. Criticism of any new technology was also made for e-books technology. Straining eyes, being difficult to read and dependence on computer screen are among these critics. However, in addition to the previously mentioned positive features, such factors as that they can easily be updated, they are environmentally friendly, they are easy for authors to introduce their works, they don't have printing costs and have less publication duration, they provide interactive environments, they can be customized for disabled people have an important share for e-books that are increasingly being preferred by more people (Ongo, 2011).

Although e-books and similar documents are shared on the internet in pdf format without being bound to any standard and technology, the commercial emergence of the e-book is considered to be November 2007. After this date that Amazon.com brought Kindle to market as a device for books, newspapers and blogs reading, sales of e-books in the US increased 115 per cent compared to 2010 according to the report of American Publishers Association in 2011. According to data released by Turkish Publishers Association in the same year, Turkey is not at the desired level in terms of e-book sales (Soydan, 2012).

In the Final Declaration of 7<sup>th</sup> Turkish Broadcasting Conference by Turkish Publishers Association it was emphasized that some issues in digital broadcasting are needed to be paid attention, it was stated that care should be given for digital publications to be appropriate for the target audience, well-designed, visually appealing and user-friendly (TYB, 2016).

Although there are serious studies in America and Europe related with the issue which properties e-books and e-course books used as a learning and teaching tool should have, (e.g. The International Digital Publishing Forum, Electronic Book exchange, Open Reader Consortium) it is observed that there is no standardization on this aspect in Turkey. While considering researches on this subject in Turkey it is noteworthy that the number of studies based on theoretical and application in this direction is also not sufficient. Such institutions as universities, the Ministry of Education should be active in e-book technology in Turkey, studies on the introduction of this technology should be made (Ongo, 2011).

In this part of the study, the projects carried out in digital learning under the Ministry of Education in Turkey, the applications of open class system in Turkey that is an important application of the digital learning and experienced problems, the situation in Turkey's e-learning in the private sector and finally the situation of e-book technology in Turkey that has an important role under the headings of e-learning, e-teaching were given place. After the traditional literacy, e-learning activities that was put into practice as a result of electronic literacy that is increasingly spreading to more areas today has been wanted to be evaluated with a critical perspective on Turkey general.

Finally in this section, information shared by UNESCO due to International World Literacy Day on September 8 is needed to be placed. According to this, 758 million people worldwide and 7 million people in Turkey are illiterate. The majority of illiterate people are women and girls (UNESCO, 2016). When official data of TUÝK on the subject is also examined, it is seen that illiterate women population who is at the age 25 years and above is 9,2 per cent (TULK, 2016). This information should be taken into account in the studies that should be carried out on electronic literacy; existing problems on traditional literacy should be removed as a priority.



## Conclusion

Moving from the assumption that the habit of reading shows differences between societies and is an action that cannot be separated from cultures, are we aware of the existence of societies that are yet to experience this technological improvement, since “electronic literacy” has not experienced “the beginning” and thus is not near “the end” When we examine this subject from another point of view, are we aware that “reading” can differ with respect to personal traits as an individual habit, without separating the source as electronic or published?

Following the notions of literacy in its conventional manner and the new electronic literacy, we can talk about two arguments, namely; inability to achieve success in the modern world and inability to be oriented to the conditions of this modernity (Gee, 2012). Electronic environments, which are commonly referred to and which became an indispensable part of our daily lives presented the opportunity to change the notion of literacy and to carry out this activity on the digital platform. Another opinion regarding digital literacy and conventional literacy studies construct a bridge between the two, especially the opportunity to utilize different sources gaining literacy a versatile and strategic effort (Wood, 2011). Following the introduction of electronic literacy that presented concepts such as mobile learning or digital learning, it has become possible to access information from anywhere and anytime (Hutchison, Beschorner and Schmidt-Crawford, 2012).

Instead of the classical learning theories in the world’s different regions, digital technologies that encourage in-depth learning are used. In these new environments that forefront personal skills and do not have access restrictions, visual materials, online platforms that use high technology, simulations, mobile applications, publishing environments that allow users to create content draw attention. A lot of information from mathematics to history is taught in more detailed and memorable way through these opportunities offered by digital technologies. Digital-electronic literacy that envisions the perception of digital environment in a conscious way is located on the basis of this teaching and learning activity.

E-learning technology and electronic literacy that is one of the most important reflections of developing new technologies to our everyday life has become one of the essential elements of society life. When examined the studies conducted particularly in Europe and America about this technology, the fact that much more research on the subject should be done and projects should be generated in Turkey must be mentioned. While these research and projects are implemented, the level of acceptance of these technologies in the sociological sense and adapting to these technologies should also be analysed properly.

## References

- Bawden, David. (2008). Origins and concepts of digital literacy. *Digital Literacies: Concepts, Policies And Practices*, 30, 17-32.
- Baysal, Aydan Ben, Çakır, Hüseyin, Toplu, Mehmet. (2015). Açık eğitim kaynaklarının gelişimi ve Türkiye’de uygulama alanları. *Türk Kütüphaneciliği*, 29 (3), 461-498.
- Buckingham, David. (2010). Defining digital literacy. In *Medienbildung in neuen Kulturräumen. VS Verlag für Sozialwissenschaften*, 59-71.

- Dobson, Teresa, Willinsky, John. (2009). Digital literacy. *The Cambridge Handbook of Literacy*, David Olson, Nancy Torrance (ed.), Cambridge: Cambridge University Press.
- Eco, Umberto. (2012). *Yengeç adýmlaryyla, sýcak savaþlar ve medyatik poplizm*. Ýstanbul: Doþan Kitap.
- Gasouka, M., Kapaniaris, A., Arvanitidou, Z., Foulidi, X., & Raptou, E.(2014). Folk culture and dýgytalenryched books: the case study of thedýgytalenrychedtool “e-anagnosýs”. Serdar Arslan (ev.), *ankýry Karatekin niversitesi Karatekin Edebiyat Fakltesi Dergisi*, 4(1), 87-102.
- Gates, V., Jacobson, E., Degener, S. (2004). *Print literacy development*. USA: President and Fellows of Harvard College.
- Gee, J.Paul. (2012). The old and the new in the digital literacies”. *The Educational Forum*, 76: 418-420.
- Gilster, Paul. (1997). *Digital literacy*. New York: John Wiley & SonsInc
- Gkdaþ, Ýbrahim, Kayri, Murat. (2005). E-ðrenme ve Trkiye aısından sorunlar, zm nerileri. *Yznc Yl niversitesi Eitim Fakltesi Dergisi*, 2 (2).
- Green, Hannah, Honnon, Celia, (2007). *Theirspace, educationfor a digitalgeneration*. London: Demos.
- Gneþ, Firdevs. (1994). Okur-yazarlýk kavramý ve dzeyleri. *Ankara niversitesi Eitim Bilimleri Fakltesi Dergisi*, DOI: 10.1501/Egifak\_000000036827(2), 499-507.
- Haner, Ahmet. (2010). Trkiye’de e-ðrenmenin bugn ve geleceði. *Trkiye’de E-ðrenme Geliþmeler ve Uygulamalar*. Gonca Telli Yamamoto, Uur Demiray, Mehmet Kesim (Ed.),ISBN: 978-605-88891-2-5 Ankara: Cem Ofset
- Harste, Jerome C. (2003). What do we mean by literacy now? *Voices from the Middle*, 10 (3), 8-12.
- Hutchison, A., Beschorner, B., Schmidt-Crawford, D. (2012). The use of the ipad for literacy learning. *The Reading Teacher*, DOI: 10.1002/TRTR.01090, 66 (1), 15-23. Retrieved from: <http://onlinelibrary.wiley.com/doi/10.1002/TRTR.01090/epdf>
- Jones, Barbara, Flannigan, Suzanne. (2006). Connecting the digital dots: Literacy of the 21st century. *Educause Quarterly*, 29(2), 8-10.
- Keefe, Elizabeth B., Copeland, Susan. (2011). What is literacy? Thepower of a definition.*Research and Practice for Persons with Severe Disabilities*, 36 (3-4), 92-99.
- Korkmaz, zgen, akýr, Recep, Tan, Serkan. (2015). ðrencilerin e-ðrenmeye hazýr bulunupluk ve memnuniyet dzeylerinin akademik baþaryya etkisi. *Ahi Evran niversitesi Krþehir Eitim Fakltesi Dergisi*, 16 (3), 219-24.
- Kurbanođlu, Serap. (2010). Bilgi okuryazarlýđý: Kavramsal bir analiz. *Trk Ktphaneciliđi*, 24 (4), 723-747.
- NSW Department of Education and Training, (2010). *Literacy learning and technology*. Retrieved from [http://www.curriculumsupport.education.nsw.gov.au/literacy/assets/pdf/packages/tech\\_lit\\_learn.pdf](http://www.curriculumsupport.education.nsw.gov.au/literacy/assets/pdf/packages/tech_lit_learn.pdf)
- nal, Ýnci. (2010). Tarihsel deđiþim srecinde yaþam boyu ðrenme ve okuryazarlýk: Trkiye deneyimi. *Bilgi Dnyasý*, 11(1), 101-121.
- ngz, Sakine (2011). Bir ðrenme-ðretme aracy olarak elektronik kitap. *5th International Computer & Instructional Technologies Symposium*, 22-24 September 2011 Fýrat University. Retrieved from: <http://web.firat.edu.tr/icits2011/papers/27727.pdf>
- Pamuk, Snmez, akýr, Recep, Ergun, Mustafa, Ylmaz, Bayram, Ayas, Cemalettin. (2013). ðretmen ve ðrenci bakýþ asýyla tablet pc ve etkileþimli tahta kullanýmý: Fatih projesi deđerlendirmesi. *Kuram ve Uygulamada Eitim Bilimleri*, DOI: 10.12738/estp.2013.3.1734, 13 (3), 1799-1822.

- Peters, Otto. (2000). Digital learning environments: new possibilities and opportunities. *International Review of Research in Open and Distance Learning*, 1 (1), Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/3/336>
- Prensky, Marc. (2009). H. sapiensdigital: From digital ýmmigrants and digital natives to digital wisdom. *Innovate: Journal of Online Education*, 5 (3).
- Saraç, Mehlika, Çiftçiođlu, Aydem. (2010). Örgütlerde e-öđrenme açýlýmý. *Uludađ Üniversitesi Yktisadi ve Ydari Bilimler Dergisi*, 29 (1), 29-52.
- Siemens, George. (2013). Connectivism: A learning theory for the digital age. *Instructional Technology and Distance Education*, 2(1), 3–10.
- Soydan, Ersoy. (2012). E-kitap teknolojisi ve basýlý kitabýn geleceđi. *Batman University International participated Science and Culture Symposium*, 18-20 April 2012 Batman, Turkey, *Journal of Life Sciences*, 1(1), 389-399.
- TDK, (2016). *Büyük Türkçe Sözlük, Güncel Türkçe Sözlük* Retrieved from [http://tdk.gov.tr/index.php?option=com\\_bts&arama=kelime&guid=TDK.GTS.57c151f45edf11.39635230](http://tdk.gov.tr/index.php?option=com_bts&arama=kelime&guid=TDK.GTS.57c151f45edf11.39635230)
- TED, Dijital eđitimde fýrsatlar ve riskler: Bir yol ayrýmýnýn tarihsel tanýklýđý. Retrieved from <https://www.ted.org.tr/TR/Genel/dg.ashx?DIL=1&BELGEANAH=4963&DOSYASIM=DijitalEgitimdeFirsatlarveRiskler.pdf>
- TÜYK, (2015). *Türkiye Ýstatistik Kurumu Eđitim Ýstatistikleri*.
- TÜYK, (2016). *TÜYK Haber bülteni: Ýstatistiklerle kadýn*, 2015. Retrieved from <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=21519>
- TYB, (2016). Türkiye Yayýncýlar Birliđi 7. Türkiye Yayýncýlık Kurultayý Sonuç Bildirgesi, Retrieved from <http://turkyaybir.org.tr/7-turkiye-yayincilik-kurultayi-sonuc-bildirgesi/#.V9KMO5iLTIU>
- VanderArk, Tom, Carri, Schneider. (2012). How digital learning contributes to deeper learning. *Getting Smart*.
- Warschauer, Mark. (2007). The paradoxical future of digital learning. *Learning Inquiry*, 1 (1), 41-49.
- Wood, Karen. (2011). Bridging print literacies and digital literacies using strategy guides. *Journal of Adolescent & Adult Literacy*, 55 (3), 248-252.
- Yamamoto, Gonca Telli, Demiray, Uđur, Kesim, Mehmet, (2010). *Türkiye’de e-öđrenme geliþmeler ve uygulamalar*. ISBN: 978-605-88891-2-5 Ankara: Cem Ofset.

**A. Asli Sezgin** is an assistant professor in the department of Political Science and Public Administration at Osmaniye Korkut Ata University, Turkey. Sezgin’s research focuses on communication studies, new media, social media, media literacy and higher education.