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The Implementation of Adult Digital Literacy: Analysis of the Adult Digital Literacy in South Korea and Turkey

Berkay Bulus ^{a, *}, Muzaffer Musab Yilmaz ^a, Metin Isik ^a, Ummugulsum Korkmaz Bulus ^a

^a Sakarya University, Turkey

Abstract

This study explores adult digital literacy practices in South Korea and Turkey according to their contents, perspectives and scopes. The main purpose of the study is to present a general portrait of adult digital literacy practices in both countries by revealing how these policies are constructed. Using a qualitative content analysis research approach, the study allowed us to take a comprehensive view of adult digital literacy contents and understand how this phenomenon is defined. Adult digital literacy implementations were divided into codes, then the obtained data were tabulated. The analysis enabled to view the differences and similarities on how adult digital literacy is being addressed in these two countries. Also, the findings allowed us to discuss the perspectives and scopes of adult digital literacy practices with digital literacy theories and critical literacy theories. We believe this study will benefit practitioners, educators and policymakers.

Keywords: digital literacy, adult digital literacy, adult literacy, adult literacy implementations, South Korea digital literacy implementations, Turkey digital literacy implementations.

1. Introduction

Our understanding of literacy is changing day by day because of the development of digital technologies, the spread of online environments, and the conceptual importance of digital literacy (Belshaw, 2011; Hobbs, 2010; Lankshear, Knobel, 2008; Manderino, Castek, 2016). What it means to be literate and therefore what it means to be “literate,” changes, evolves, and shifts during the emergence of new technologies (Kellner, Share 2007). Digital literacy also changes over time and may require different tools and new habits of mind. The individual’s technological environment can also change and transform.

Digital literacy education and implementation are mostly aimed at children and adolescents (Hagood, 2003; Jacobs et al., 2014; Livingstone et al., 2005; Pendell et al., 2013). However, these concepts are also extremely important for adults who do not have school-based literacy or sufficient digital abilities. For such reasons, we argue that literacy research and practices belong to all ages and should not be limited to children and adolescents. We do not accept the exclusion of adults from new information and communication technology environments.

Digital literacy belongs to people of all ages and affects all humanity. Scholars who examine adult digital literacy provide insight into technological environments and develop new ways of thinking about the nature of digital literacy. As stated by Guzzetti and Foley: “Digital technologies and online spaces offer new opportunities for adults to advance their own and others’ digital and print literacies” (Guzzetti and Foley, 2014: 461).

* Corresponding author

E-mail addresses: berkaybulus@sakarya.edu.tr (B. Bulus)

Our primary aim in this paper was to reveal how researchers in South Korea and Turkey define adult digital literacy practices and how they approach the concept of digital literacy. Among digital literacy implementations, we focused only on adult-centered practices. We outlined and summarized these implementations and explored how adult digital literacy is positioned. The existing research on implementation gave us the opportunity to take a closer look at program content and current definitions of adult digital literacy. We coded and tabulated adult digital literacy practices in both countries according to their approaches. While examining adult digital literacy practices, we preferred a content analysis method because we needed to look at the texts to find the answers to our research questions (Krippendorff, 2003). Content analysis showed us the perspectives, scopes, and trends in these implementations. We asked the following questions to guide our qualitative research:

1. What does adult digital literacy implementation in South Korea and Turkey tell us?
2. When the implementation processes carried out in South Korea and Turkey are compared, what similarities or differences stand out?
3. How are adult digital literacy practices in South Korea and Turkey constructed?

We believe that, besides providing a clearer view of the implementation, analyzing adult digital literacy implementation in South Korea and Turkey reveals the scope of the field in these countries. We believe that our findings on implementation will benefit practitioners, educators, and policy makers.

2. Materials and methods

First, we examined in detail the adult digital literacy practices in South Korea and Turkey. We analyzed adult digital literacy practices, programs, projects, documents, reports, and web addresses by dividing them into appropriate units. We distributed adult digital literacy practices to analysts and ensured consistent application of analytical procedures and standards (Krippendorff, 2003). In this study, we compare South Korea and Turkey. This is because although the two countries have some similar socio-economic characteristics in the historical context, there is a visible distinction in their digital technology policies. Until the 1980s, South Korea and Turkey had similar social and economic determinants. (Ustabaş, Ersin, 2020). However, the differentiation of the relationship they have established with digital technologies from this date to the present has brought about deviations between the two countries in different fields. At this point, it is aimed to see that how differentiation in technology policy affects adult digital literacy practices. It has been tried to be revealed through the examples of South Korea and Turkey, which are similar in various aspects.

In the beginning, we carefully examined and synthesized applications, projects, presentations, training kits and teaching materials, and websites carried out by South Korea and Turkey government agencies in terms of how they addressed adult digital literacy. We used data from the practices of each government agency and resynthesized this information with other information we gathered from different sources. We took help from Contemporary East Asian Studies major Nijat Guluzade to understand forms that meet the syntactic requirements of data languages for content analysis. This showed us the definitions of terms related to the construction of languages as well as the basic features of data languages and allowed us to understand the variables (Krippendorff, 2003).

When starting our analysis, we preferred the strategy of separating the data by source (Schreier, 2012). We divided all the categorized implementations into the codes we had already chosen. This allowed us to understand more clearly how adult digital literacy implementations are built. Finally, we aimed to describe the results of qualitative analysis—the big picture—by quoting, drawing parallels, and elaborating on the analyzed texts of the practices and their contexts from the literature (White, Marsh, 2006). Our aim was to show the conceptual depth of digital literacy. In this qualitative analysis, we revealed different voices and alternative perspectives in adult digital literacy practices. We searched for multiple interpretations by accounting for the different uses of the analyzed texts (Krippendorff, 2003).

We limited our study to adult digital literacy implementations applied in South Korea and Turkey. The main reason for focusing on the policies implemented by governmental institutions is that we wanted to address the government-mediated digital literacy policies in these two countries. For this reason, personal perspectives and interpretations of academic approaches and academic writing series were outside the scope of our study. We did not summarize the findings chronologically; instead, we organized them according to their expression styles of digital literacy

practices. We focused only on adult literacy that is related to digital environments. Traditional (print) literacies were outside the scope of our study. While collecting the research data, we did not order the studies carried out by the institutions and the organizations affiliated to them chronologically. However, because the start dates for digitalization in South Korea and Turkey are in different years, we have designated the year 2022 (the year in which the research is concluded) as the end date without including the start year.

Throughout our study, we made systematic evaluations by examining adult digital literacy practices. We did not include topics that were not relevant to our study, such as basic literacy, traditional (print) literacy, or literacy of children and adolescents. We conducted research within the framework that suited our codings. However, during the research data collection process, we realized that adults were included in the implementations for children and adolescents as “family, parent, caregiver.” For this reason, we have included applications related to children and adolescents because they include adults. Nonetheless, without focusing on the differences between digital immigrants and digital natives (Prensky, 2001), we excluded discussion of the distinctions and connections between generations.

In our study, we focused on adult digital literacy practices in South Korea and Turkey. By carefully examining the existing texts on adult digital literacy, we found a comprehensive analysis framework by covering the literature comprehensively (Krippendorff, 2003). We found that the content analysis method accurately revealed both the content of the materials and the meaning of the qualitative material in a systematic way (Schreier, 2012).

We analyzed the patterns of meaning and the relationship networks in adult digital literacy practices in South Korea and Turkey. Then, we aimed to understand the literacy trends, messages, approaches, and essences of the large amounts of data found in these practices. We made sense of the data by identifying important patterns and establishing a logical chain of evidence for our research results (Patton, 2014). We paid attention to the contextual features of adult digital literacy practices in South Korea and Turkey (Hoffman et al., 2012). To compare how adult digital literacy is handled in these countries, we discussed the practices by their sources. To test research question, we defined, interpreted, and analyzed texts according to how their context are located (White, Marsh, 2006). These sources are stated in Data Collection section. We used combinations of analytical techniques to examine patterns in written texts (Hoffman et al., 2012). In these applications, we evaluated the way in which adult digital literacy is handled and how the trends are followed. These trends were handled by considering their topics, aims, training methods, collaborations, and online network maps. We made inferences from the texts, accounting for the goals and acquisition of adult digital literacy applications (Hoffman et al., 2012).

We focused on the outputs of adult digital literacy applications conducted by public enterprises in South Korea and Turkey, including digital literacy teaching and its elements, activities, projects, education kits, and information forms. We converted the content into text within the framework of predetermined classifications and divided the data into meaningful parts while preserving the integrity of meaning among these parts (Miles, Huberman, 1994). When conducting content analysis, we paid attention to the comparative approach and the equal distribution of terms, definitions, and categories. We found it necessary to reduce the variety of alternatives to be tabulated to deal with large blocks of written material in a statistical manner. Therefore, we made our analysis by categorizing the material for an in-depth description, with a strategy based on data from a wide variety of sources (Schreier, 2012). The columns and rows we prepared for the table make the analysis visible. The data, codes, comparisons, and contexts that emerged from the qualitative content analysis were matched each other. In presenting the research results, we provided a gradual collection of details on the textual plane, rather than resorting to numbers in tables to show relationships (White, Marsh, 2006). With the content analysis method, we created categories about adult digital literacy, and it became possible to make inferences according to the actors at the source of the studies.

Coding Steps

In our study, we created codes to systematically reveal adult digital literacy practices. We created our categories based on the contents of adult digital literacy applications and the theoretical materials that we used to evaluate these contents (Schreier, 2012). We each assigned codes to the applications and then met to discuss the coding. We looked at the answers from the codes we created within the applications, breaking down the converted data into meaningful parts and, while doing this, preserving the integrity of meaning between these parts and approving the

codes (Miles, Huberman, 1994). During the coding process, we kept analytical notes to record the contents of the applications. For each code, we created a data table to identify examples from the data set and generate findings related to the research questions. As we searched for more information on adult digital literacy practices, we sought ways to interpret digitality concepts in data sets. We then systematically coded practices on adult digital literacy by identifying digital literacy patterns and improved our understanding of concepts by deductively identifying and categorizing these practices (i.e., implementation title, content, purpose, collaborations, implementation goals, method of the implementation) “in a data-driven way, that is, by allowing the categories to emerge from the material” (Schreier, 2012: 84; see Table 1 and Table 2). We were interested in how each application focused on adult digital literacy. Therefore, we identified and highlighted the definitions of data in accordance with preconstructed descriptive or analytical and explanatory codes (Miles, Huberman, 1994).

Considering the important role practice materials play in teaching, we created a research volume for digital literacy materials that we used for content analysis (Hoffman et al., 2012). To ensure agreement between different analysts when all members of the research team defined the encoding and recording units, we defined these annotation units as the smallest units that carry all the information needed in the analysis (Krippendorff, 2003). In each examined application, we preferred the same method while coding. We identified 13 applications that were suitable for our coding. Because of these codes, we were able to illustrate the data by categorizing the applications in the field of adult digital literacy and to create small categories of information from the data (Creswell, 2008). Focusing on what was relevant to the research question, each member of the research group read and coded each application (Schreier, 2012). We used Saldana’s Cycle Coding Processes to highlight the parts of the data that were significant to the research question and topic (Saldana, 2013).

Data Collection

We examined in detail the digital literacy practices in South Korea and Turkey. Based on our research questions, we tried to understand how these implementations define adult digital literacy. At each meeting, we shared the codes, reviewed and improved the coding system, and formed a common perspective for reliability. Next, we combined the answers corresponding to the codes into a table. Three researchers categorizing adult digital literacy practices in South Korea and Turkey formed the data according to codes and divided them into thematic groups. However, we did not consider data that did not address the adult digital literacy phenomenon and did not fully fit into these two categories. The first step in data collection was to determine which applications would be selected for analysis.

We organized our data using existing sources on adult digital literacy practices in South Korea and Turkey. These data sources included literacy practices and content, network maps, published training kits, in short, all kinds of written and online materials. When we examined the applications related to the subject of our research, we reached certain definitions that are targeted in applications when adults are mentioned. This process has evolved from specific definitions in digital applications (e.g., adult) to broader representations (e.g., parents, family members, and caregivers).

Based on these discussions, we analyzed the practices independently and then met together. We tested the reliability of our findings by cross-matching the coding revision process and the data collection process (Patton, 2014; Stake, 1995). This phase involved searching the data line by line, categorizing the contents of adult digital literacy studies in applications, and then finding themes that emerged in the codes.

Data Analysis

To understand how digital literacy and adult education synergies emerge and their impact on adult critical literacy practices, we analyzed multiple qualitative data sources through pre-identified themes. We focused on each of the applications in the field of adult digital literacy separately. We consider them in the context of how they are implemented and conducted. In the content analysis part of the research, we focused on the kind of outlook that would emerge when the studies on adult digital literacy of institutions in Turkey and South Korea are compared.

We chose content analysis as a method in the study to reveal the similarities and differences in the applications that come to life in the preferred topic, and we wanted to deal with these relationships in depth. In our research, we analyzed the data not as quantitative data, but as descriptive (qualitative) data. We wanted to uncover how adult digital literacy was defined in each application. For that reason, we identified and emphasized these definitions in each article we

reviewed. We created a table containing information on adult digital literacy practices in South Korea and Turkey. While preparing the columns and rows in the table, we made the visual analysis visible, and thus clearly revealed the way the actors dealt with the issue and the analysis of their work. Using the descriptive content analysis method, we examined the contents of the data and revealed the trends of the studies. While applying content analysis, we paid attention to the “equal distribution of categories” in comparative studies (Lune, Berg, 2017: 177-178). In this way, we aimed to reveal the characteristic structure of the current situation in the field of adult new media literacy.

Such an analysis also presupposes to offer a better understanding of the cultural uses of digital literacy, how digital literacy is shaped in applications, and ultimately how those who use applications experience the world around them. Finally, we obtained our findings by evaluating and synthesizing the codes and themes that emerged from the data sources we gathered methodologically from all applications with conceptual frameworks.

3. Discussion

We looked at the context of the word *digital* in terms of literacy and wanted to show where digital literacy fits among literacies (Lankshear, Knobel, 2006). In fact, digital literacy is not a new concept. Its history as “computer literacy” dates to the 1980s (Buckingham, 2006: 23) and early conceptual definitions pointed to its functional side. The first definitions of digital literacy used a technology-centered approach and contained an equivalent meaning to technology literacy. This form of literacy usually refers to having the minimum skills necessary to work effectively with software tools and performing various basic tasks while using digital devices (Manderino, Castek 2016). If we extend definition of digital literacy, we can define digital literacy as numerous applications and concepts that are produced, received, distributed, or exchanged through digital coding to create meaning (Lankshear, Knobel, 2008). There have been changes in the definition of digital literacy as well as changes in the field of technology. Over time, adult digital literacy has encompassed much more than functional issues such as learning basic computer use and searching online.

Although reading and writing are widely accepted parts of literacy, the digital prefix adds much more to this concept. The first digital literacy studies were focused mainly on teaching topics such as *how* to do things but in subsequent studies, the defined boundaries and contexts of digital literacy expanded. Having a digital skill is only part of digital literacy. In the discussions of adult literacy, scholars argue that literacy should not be understood as a “state” that defines a personal success but must be understood as a “process” (Gee, 2015: 35-36). Today, literacy is often realized through digital technologies rather than traditional learning materials (paper, pen, or printed media). It is not possible to consider literacy independently from social, technological, and economic factors (Kress, 2010). In addition, while drawing attention to the transformation of traditional media literacy, Kress (2010) stated that there has been a transition from the dominance of text, which lasted for many years, to the dominance of the image. Kellner and Share (Kellner, Share, 2005) stated that in the age of technology, the literature on computer literacy needs to be studied more extensively. They claimed that there are multiple literacies. Livingstone stated that digital literacy is “different from traditional literacy because of skills, experiences, cultural values related to text, institutions, and the internet” (Livingstone, 2007: 106-112).

Those who approach the concept of digital literacy in an instrumentalist way state that digital devices provide access to an endless source of information, including the internet, simulations, animated 3D models, dynamic representations, embedded images linked into texts, audio, and video. However, we should note that the instrumentalist approach is not sufficient for digital literacy. We cannot see digital environments as places where information transfer takes place only in a functional or instrumental way (Buckingham, 2006). Some digital literacy theories argue that the idea of digital literacy is based on the need to raise awareness of consumer societies against harmful digital environments and to protect people from online risks. Likewise, these theories also discuss the necessity of taking advantage of what digital environments bring to contemporary societies (Livingstone, 2008). While internet literacy enables the individual to be equipped against online risks, it also shows the way to benefit from online opportunities. Similarly, digital and media literacy competencies are necessary not only to strengthen people’s capacity to acquire information but also to address the potential risks associated with mass and digital media (Hobbs, 2010).

Digital literacies represent multiple ways in which people collaborate, create, and communicate using digital texts and tools. Adults need applications to take advantage of these contexts and create information in digital environments. Digital literacies are not only tools to use

to become competent in something. They create opportunities to create, understand, discover, communicate, and critique knowledge (Goss et al., 2016). They are not just learning tasks to master, but rather tools that help individuals attempt to solve intellectual and real-world problems. Some definers of digital literacy see digital environments from an established, sociocultural perspective as individuals participate in digital discourse practices. As Jenkins (Jenkins, 2009) mentioned, in the participatory culture components, *affiliations expressions collaborative problem-solving* and *circulations* are also valid adult digital literacy phenomena. It is important for individuals to use digital media within these five competencies, not just as a structured place to consume. At this point in time, scholars use participatory culture as a term that covers educational practices, creative processes, community life, and democratic citizenship.

Chung et al. (Chung et al., 2022: 375) stated that “digital media climate, audiences can now join as storytellers through story submission and commenting features on news sites and various social media”. Adult digital literacy includes organizing educational programs to increase adult individuals’ interest, skills and confidence in digital participation. In this way, “motivates people to develop literacy and language skills, numeracy, scientific and cultural literacy” (Jimoyiannis, 2015: 216). Although many factors are responsible for these changes in adult digital literacy, digital literacy types offer opportunities to individuals such as accessing, evaluating, changing, and analyzing. Adult digital literacy finds its value only when critical literacy is the main theoretical frame. By this way, these critical digital literacy (CDL) practices share a specific focus on navigating, interrogating, critiquing, and shaping textual meaning across digital and face-to-face contexts (Aguilera, Pandya. 2021: 102). As Pangrozio (Pangrozio, 2016) suggested, adult digital literacy framework intertwine with the concepts *visualisation, critical self-reflection and transcendentalism*. Thus, instead of focusing specific technologies, adult digital literacy practices aim to discover the process while using digital environments.

In this article, we argue that adult digital literacy is not to reject implementations that help adults to acquire literacy, numeracy, digital skills and a broader skill set by progressing toward a high school qualification or the equivalent, but rather to put critical and participatory cultural practices in critical context with practices in a broader sense. Such rapid technological changes pave the way for parents and educators to equip young people for a digital future. The same is true for other literacy concepts.

Table 1. Analysis of the Adult Digital Literacy Implementations of Turkey

Implementation Title	Content	Collaborations	Implementation Goals	Method of Implementation
Secure Web	Advice to parents on how to use the internet safely and how to protect themselves and their children from its dangers	Information Technology and Communication Agency (ITCA), Secure Help Center, Internet Hotline	Keeping children’s internet and computer use under control of filtering software, developing content to protect parents and their children from harmful and illegal content on the internet, and to protect them from malicious software and sites	Publish online presentations, catalogs, brochures, and other materials
Digital Literacy Guide	Supporting teachers so that they have all the knowledge, skills, and understanding needed for digital literacy	Ministry of Education, Radio, and Television Supreme Council (RTSC)	Including digital literacy issues in daily practices, providing suggestions that can help students to create a common language with their classmates	Guidebook Publishing online-printed materials

Digital Turkey	Preparing a digital transformation road map and creating a digital ecosystem in the public sector (e-Government), creating cooperation among public institutions, local governments, and the private sector to provide more quality and integrated services	Turkey Presidency	Increasing the number of services within the application, expanding the scope of these services, and facilitating the use of e-government by all citizens by preparing user-friendly interfaces	Preparing interfaces, mobile applications, managing information networks of public institutions
Internet Hotline	Evaluating the notifications received within the scope of combating illegal content that may be encountered on the internet and taking necessary measures	(RTSC), Internet Help Center, Internet Hotline, Security Web	To protect children from sexual abuse, obscenity, use of substances dangerous to health, prostitution, gambling, suicide, and drug and stimulant use, and to fight crimes against Atatürk on the internet	To prevent access from crimes committed on the internet, to provide information about crimes
Internet Help Center	To provide answers, information, and advice regarding the problems experienced by users within the scope of conscious, safe, and effective use of the internet.	(RTSC), Secure Internet Center, Internet Hotline, Security Web	To offer solutions for problems of illegal content on the internet, privacy, information security and safe shopping, social networking platforms, safe internet service, digital games, cyberbullying, internet and health	Guidance and informing on legal processes
Radio and Television Supreme Council	To inform about the risks that can be encountered while using the internet, determining the rules to be followed while using the internet	Ministry of Education	To study how the media can be used in the education of children, to gain the ability to access, analyze, evaluate, and communicate messages in multiple modes	Organizing workshops, supporting projects, translating documents

Table 2. Analysis of the Adult Digital Literacy Implementations of South Korea

Implementation Title	Content	Collaborations	Implementation Goals	Method of Implementation
National Information Society Agency (NIA) (Former Korean Agency)	Produces strategies on digitalization and digital literacy on a	Korea Network Information Center (KRNIC), Electronics and Telecommunications	Adapting to the fourth industrial revolution. To carry out studies to realize digital	Generating data processing policies. Providing IT consulting services to

for Digital Opportunity & Promotion, KADO).	national scale. It works on behalf of the government on issues such as e-government, open data, and digital inclusion	Research Institute (ETRI), Korea Information Security Agency (KISA), Korea Education and Research Information Center (KERIS), Internet Protocol version (IPv6)	transformation at the social level. Generating datacentric policies. Developing strategies for the smart society. Developing ICT in the legal system for the realization of smart society	developing countries. Managing the information networks of public institutions
Center for Digital Literacy	To provide teachers with information on digital literacy. Supporting people who are talented on digital issues. Educating seniors in the use of digital photo management, mobile maps, subway use, high-speed trains, theaters, and health-related applications	Google Korea Korean Government	Increasing digital literacy level 20% by 2045. Creating “digital humanities.” Strengthening teachers’ digital skills. Establishing a separate education program for asylum seekers, children with disabilities, and other vulnerable groups	Providing appropriate training to people of all ages in government centers and schools. Organizing seminars and courses
ASEAN Women’s Economic Empowerment Through Digital Literacy and e-Business Education	To provide the necessary knowledge and skills to ASEAN women entrepreneurs who want to participate in the digital economy	Sookmyung Women’s University. Asia Pacific Women’s Information Network Center (APWINC)	Strengthening women’s digital literacy to achieve gender equality. Increasing women’s participation in the digital economy. To encourage women in ASEAN member countries to engage in ICT. Increasing ASEAN–Korea cooperation	Presentations, seminars, developing software
Digital Literacy Education Centers	To learn how to use a smartphone, chat over a mobile messaging application, and order from cafes or restaurants. To teach how to save contacts on a phone. To make a phone call. To send SMS. Learning to use a kiosk to buy bus or train tickets	The Seoul Metropolitan Government	Ensuring the correct use of digital tools by older individuals	Organizing courses to increase digital literacy. Giving practical training. Establishing digital literacy training centers

ParentsOn	To inform parents about primary and secondary education and education policies through digital platforms where they can be more involved in their children's education	Korean Ministry of Public Education	Giving curriculum lessons to adults, especially parents	Online education, seminars, improving the curriculum
Neulbaeum	Personalized lifelong learning services so users can manage their learning portfolios	Korean Ministry of Education, National Lifelong Education Promotion Agency (NLEPA)	Providing lifelong education by focusing on specific age and learning characteristics. Creating a holistic, inclusive culture of lifelong learning. Developing contents in sign languages for deaf people	Developing and publishing online content
K-MOOC (Korean Massive Open Online Course)	A free online learning system open to the public. Reaching anyone and everywhere with online courses	Korean Ministry of Education. (NLEPA), Hyundai Motor Group. Ministry of National Defense. Yeonggi Province Business Foundation, National Institute for International Education, Korea Foundation, Korea National Research Foundation, Korea Development Institute, and LG Innotek. Korean Civic Education Institute for Democracy	Enabling lifelong learning by providing comprehensive higher education content. Strengthening personal abilities for employment, discovering new working areas, and increasing professional competence. Learning about the latest trends based on individual talents and interests	Massive Open Online Courses. Developing mobile applications. Organizing interviews. Developing online materials. Online video lessons

4. Results

In this section, we present a synthesis of 13 implementations reviewed by codes. In this part of the study, we sought answers to the questions about what adult digital literacy practices are, how they are structured, what is their content, and what should be done about adult digital literacy considering the emerging synergies (Knobel, Lankshear, 2014). Although adult digital literacy practices often allow for multiple codings, we organized the findings in this way to provide an overview of our research (see Tables 1, 2). By sharing our findings, we hope to draw attention to adult digital literacy practices. We present the results of our analysis in this section to reveal the how they approach the concept of adult digital literacy practices in the two countries under consideration. After analyzing the data, we reveal which directions adult digital literacy practices are taking.

How Do Digital Literacy and Adult Define in Implementation in South Korea and Turkey?

We begin by discussing how adult digital literacy is defined in South Korea and Turkey to clarify how the term is used and how the definition is suggested in the implementations. Then we will examine how adults are defined in implementations in both countries and the scope of the implementations developed for them. We will uncover perspectives on digital literacy practices

through the information we collected from them. Finally, we will focus on discussions on digital culture and digital citizenship that take place in these implementations.

In both countries, adult digital literacy practices are defined as tools to implement practices specific to this discipline. In these practices, scholars sometimes define digital literacy as avoidance of negative media-mediated effects via a protectionist approach, and sometimes with a critical perspective, acceptably define it as creation of an individual awareness against these negative effects. In some implementations, scholars state that the presence of digital media tools in many areas of life negatively affects development in early childhood. In some other implementations, digital tools are a way for students to develop their skills between home and school. In some implementations, scholars state that the rise of fake news is caused by insufficient examination of the reliability of various online sources. In other implementations, people consider blogs, videos, and other online information resources to be extremely important. Some implementations in South Korea state that social media, laptops, and mobile phones increase career skills and participation in social, civic, and political action in adults. Such practices focus on acquisition and the contexts of meaning and analysis, referring to the potential impact of digital environments on the social construction of knowledge. It satisfies the need for adults to have opportunities to examine, explore, criticize, and defend their preferences in digital environments.

Digital literacy implementations in South Korea started in the 1980s. Scholars have researched how the internet can be used for the benefit of society, and a way has been determined accordingly. Digital literacy studies in Turkey are newer than in South Korea. Studies in this area started in the mid-2000s in Turkey. Digital literacy approaches in Turkey mostly associated digital tools with a skill-oriented focus and shared the idea that those in need of protection are helpless, passive consumers. Therefore, a protective attitude prevailed against the harmful effects of digital environments. When we looked at the definition of adult in both countries, the difference was striking. The definition of *adult* in adult digital literacy practices in Turkey is generally those in families with children. Therefore, scholars have mainly carried out studies based on domestic use within the family. This practice stems from the thought that parents will protect children from the harmful effects of the internet. Practices in Turkey are mostly based on adult *supervision*, and the practices in South Korea are mostly based on adult *participation*.

The strategy of practices in Turkey to approach parents as a supervisory mechanism is a product of efforts to protect “potentially offensive or harmful content, including violent, sexual, sexist, racist, or hate material” (Hobbs, 2010: 29). We can state that the practices in Turkey are themed around children and safety. In the words of Shin, Lwin (Shin, Lwin, 2022), *parents’ digital literacy* adult mediate children's use of digital media in applications in Turkey. When we look at the definition of adult in South Korea, we come across citizens from all walks of life (including caregivers, teachers, and family coaches). In adult digital literacy practices in South Korea, adults are defined as individuals who must extend the knowledge they acquired in school. Implementations are not only aimed at young people but also at people from all segments of society. As seen in the Center for Digital Literacy application, neither parent coaches nor parents are ignored. In addition, studies are available for families or caregivers to continue digital literacy education in the domestic area.

In practices in South Korea, digital literacy is defined as the requirement to individuals of all ages within lifelong learning programs. Among the established purposes of providing digital literacy education to adults in South Korea, there is not only mention of protecting children and young people from the dangers of the digital environment. On the contrary, agencies encourage parents to have the codes of the new world that their children already have, and to enter the future world with their children in a more equipped way. In South Korea, the state knows the components of the future world, such as industry 4.0 and web 3.0, and intends to prepare its people for the world to come. It is doing this *en masse* so that there are no citizens left behind who do not know the language of the digital world. We can define the practices that come to life in South Korea as guiding programs. Coming from a future perspective, South Korea tries to bring the traditional into the future with its digital learning culture. In Turkey, the traditional structure is the state itself, and it tries to shape the future by speaking the language of the past.

Adult Digital Literacy: Just About Skills and Competence?

We advocate for a critical literacy that enables adults to think at deeper levels not only about how to read and write or produce content online, but also how to do so as productive, responsible, and digital citizens. In the digital age, critical literacy emerges as a big umbrella concept for the

quality of information produced by digital tools. Thanks to digital literacy practices fed by critical theory, individuals can question the codes presented to them. Digital literacy provides the groundwork for critically examining the messages conveyed in adult material and resources. This critical literacy lens asserts that no text is neutral and all texts are created from particular ideological positions or perspectives (Gee, 2008). Critical digital literacy involves understanding how digital media is constructed and how interactive communication is structured. A digitally literate person is an active and productive individual who produces and circulates his own language and discourse (Buchholz et al., 2020). Thus, critical digital literacy, which is at the beginning of questioning this techno-social system “might therefore provide opportunities to consider and critique the broader social, political and economic issues, alongside programmes that seek to develop technical mastery” (Pangrazio, 2016: 170). In this part of the study, by including critical digital literacy discussions, we looked at how critical digital literacy context take place in implementations in both countries.

In the practices in South Korea, critical digital literacy is focused not only on a protective effort but also on the effective use of digital media as both a source of information and a means by which citizens can express and represent themselves. In the practices in South Korea is emphasized that it should be an awareness-raising activity. Even if critical literacy is the main constituent of digital literacy, it can be said that critical theory is ignored in the implementations in Turkey. We can say that a *skills approach* is dominant in Turkish practices (Street, 2017).

When we looked at the content of the applications in South Korea, we saw that the emphasis is placed on individuals who not only consume but also construct, criticize, and question. They are conscious and responsible individuals. The content is aimed at benefitting the smart society, as we saw in the examples of producing data-centered policies, developing strategies for a smart society, and promoting financial efficiency to maximize performance in national informatics. In some practices in South Korea, there are expressions in the digital media structure—such as developing digital creativity and production skills, raising awareness about copyright, economic interests, and fictional discourses – that cannot be separated from certain ideologies and economic-political contexts.

To develop digital literacy skills in practices in South Korea, there is an active need for *participatory culture* for content created in digital environments (Jenkins, 2009). In these practices, scholars have also based studies on the step-by-step teaching of the educational processes to adults to increase their intellectual level and civic awareness. Adult digital literacy practices in Turkey are based on a perspective that focuses on protecting children from the harmful effects of technology. For example, in Turkey, digital literacy practices carried out by Radio and Television Supreme Council, Ministry of National Education, and Information and Communication Technologies Authority designed to protect children and young people from the negative effects of the digital media.

The Secure Web website, which are products of Information Technology and Communication Agency, emphasize the importance of online security and give advice to children, parents, especially parents of young children for handling the internet through a protective approach. In the *advice for families* section made for this purpose the issue of online safety is at the center. As a result, we found that the practices in Turkey exclude adult individuals (except for child supervisors) from the process, both in the planning and implementation stages.

Reconceptualizing Adult Digital Literacy: From Digital Literacy to Citizens of a Digital Culture

Becoming a digital citizen requires more than technical skill. Manderino and Castek argued that “One must be digitally literate to take advantage of the open and free Web and to solve problems and communicate solutions” (Manderino, Castek, 2016: 79). Digital literacy is not just about teaching with or through digital media or technology. Digital literacy requires a basic understanding of ethical and legal issues surrounding the use of information (Lankshear, Knobel, 2006). Also digital literacy is directly proportional to keeping up with information flows (Bykov, Medvedeva, 2022).

Digital citizenship and online rights mean that every citizen has and should equally enjoy digital rights. Some of the debates in the field of digital literacy are about the extent to which citizens have the necessary competence to take advantage of the possibilities offered by new technologies in different environments. “All adults, no matter their experience and backgrounds, must bridge the digital divide and acquire the knowledge, skills, and attitudes needed for personal, social, and economic success in the wired world of the 21st century” (Jacobs et al., 2014: 3). Gee

referred to an equality crisis in traditional print literacy, writing that “poor children do not learn to read and write as well as richer children” (cited in [Lankshear, Knobel, 2008: 10](#)). Improving the digital literacy levels of adults bridge the digital divide and contributes to strengthening human capital ([Jimoyiannis, 2015: 215](#)).

Although physical access to computers and the internet in Turkey is still an important variable in bridging the digital divide, expanding the concept and adding other elements such as literacy, technology literacy, content, language, network structure, and pricing for accessing the internet shows that “the digital divide is widening” ([Binark, 2015: 11](#)). However, as seen in [Table 2](#), the Center for Digital Literacy, one of the applications in South Korea, aims to improve people’s digital literacy levels and close the digital gap, regardless of their geographic circumstances.

In South Korea, we saw an educational approach that supports active citizen participation. In the implementations we argued that citizens should have access to open data, including publicly available data, and be able to participate in online activities. South Korean practices are based on securing benefits for everyone, including those living in less privileged areas, as well as people with limited resources or disadvantages of education, age, gender, ethnicity, or disabilities. Policies are produced to combat the digital divide in practice, provide more social equality, better public education, and reduce social inequality.

Practices in South Korea help people reflect on the ethical decisions they face when using digital tools and platforms to create a more equitable society. In Digital Literacy Education Centers, digital literacy trainings are produced by the municipality’s established teams for the whole public. These applications include the ability to use technology as a tool to research, organize, evaluate, and communicate information. These applications can close the digital divide by providing information technology consultancy services to developing countries. These apps offer adults the opportunity to learn and develop digital skills by connecting on social networks. Education technology experts and technology investors (e.g., Hyundai Motor Group and LG Innotek) participated in the development of K-MOOC courses in South Korea. These applications are supported by the proliferation of digital devices and laptop applications in school districts.

Although digital literacy practices in Turkey are limited to online websites and computer devices with an instrumentalist approach, the tools and environments used in applications in South Korea are broader. In the Digital Literacy Education Centers implementation, a person can learn how to use a kiosk to order food at a chain restaurant in South Korea or to buy bus or train tickets at a transportation station. People can be trained in digital photo management, mobile maps, use of the subway, high-speed trains, attending theaters, and the use of health-related applications. This app is committed to creating a better digital life for seniors as well.

We observed that in South Korea, official institutions and organizations cooperate with nongovernmental organizations (NGOs). We also found that NGOs are ignored in practices in Turkey. In implementations in South Korea, NGOs or small businesses are also trained to use new technologies correctly. The practices in South Korea aim to create a lifelong education culture that includes all members of society. For example, the Center for Digital Literacy application was created for the development of content in sign language for the hearing impaired, asylum seekers, children with disabilities, and other vulnerable groups.

In the South Korean practices, the emphasis is on empowering women’s digital literacy and making women more present in the digital world to ensure gender equality. In this regard, the ASEAN Women’s Economic Empowerment Through Digital Literacy and e-Business Education application aims to train qualified women entrepreneurs for the digitalized labor market, so that women entrepreneurs can benefit from digital devices along with software applications available on the internet according to their business purposes and conditions. In Turkey, on the other hand, there is no effort to prevent gender discrimination related to adult digital literacy.

As a result, when we considered the adult digital literacy practices in both countries, we saw that the practices are different and that digital literacy is fed from different disciplines and perspectives. We saw that the efforts of policy makers in Turkey in the field of digital literacy are not sufficient. Institutions in South Korea support each other on digital literacy practices. When we studied the practices in the studies conducted in Turkey, we saw that a commission consisting of academics from some universities had been established.

Conversely, in South Korea, collaborations are made with universities, not academics. Policy-making institutions strive to complete the theoretical and intellectual framework by providing university cooperation. These supports are provided by sponsorships, funding, or project manager

support. However, there is an important distinction here: Collaboration with the academy takes place at the university and faculty level in South Korea, whereas in Turkey there is an advisory board established by only a few academics. However, we believe that teachers' practical skills should be strengthened in both countries. The Center for Digital Literacy implementations in South Korea are similar to the Digital Literacy Guide application in Turkey in terms of purposes and content. Both applications must be properly supported by the Ministry of National Education so that teachers can have all the knowledge, skills, and understanding they require in the field of digital literacy.

5. Conclusion

In this paper, we explored the perspectives on adult digital literacy implementation, in South Korea and Turkey. First, we can say that the various contexts of the functioning of literacy in digital literacy practices in both countries diverge and converge. Our content analysis suggested the presence of adult digital literacy practices to create safe and accessible environments for children and teenagers at home, school, or public facilities for everyone in Turkey and South Korea (parents, teachers, caregivers, and family coaches), wherever they are. We hope these findings will contribute to knowledge about the practices in which adults choose why and how to develop their literacy skills and abilities through digital means as well as provide implications for adult digital literacy practices.

Our analysis of 13 implementations suggested that inclusion and production processes in digital technologies require all citizens to participate at the same level and with the same effectiveness to make learning outcomes and benefits of digital literacy implementation more visible. However, we agree with Martin that "digital literacy is a condition, not a threshold" (Martin, 2006: 20), on this issue, and Belshaw, who said that "digital literacy cannot be developed in a one-off, context-free half-day workshop" (Belshaw, 2011: 204). Policy makers must address practices by building opportunities and situations that facilitate learning that is flexible in time and space, thereby creating a learning society for all. Studies such as ours remind educators that collaboration can give us autonomy and that we need to be strategic about the purpose of collaborative efforts. Individuals who have received digital literacy education should not be limited to having digital skills. We argue that expanding adult digital literacy practices is crucial as adults face the growing problems of exclusion and marginalization in modern social life through digital means.

Creators should shape each stage of digital literacy implementation independent of current political and economic policies for each country. Practices designed in this context have shown that they are important to developing an understanding of human rights, equality, critical thinking, and self-awareness well as forms of digital citizenship. Examining digital literacy implementation helped us to see how adult literacy education has been relatively neglected, both in policy and practice, and provided an opportunity to address this imbalance through sustainable development goals (via local, regional, state, and national initiatives). Digital literacy implementations showed that they should be evaluated in different contexts for every individual of any age. For example, practices are necessary that help adults to develop critical thinking within a culture of participatory digital environments while combating the social exclusion of individuals who do not have the qualifications and skills necessary to meet the contemporary needs of the adult labor market. Participatory digital environments point out that the skills required to use a technology are not sufficient (using technology to benefit from a piece of information) and that it is necessary to think, be involved, and participate in digital environments to have better or more creative solutions with digital devices in daily life practices.

Finally, our analysis provides useful grounds for thinking about what new debates are emerging in current adult digital literacy practices, from what perspectives scholars are evaluating digital literacy, and what next steps need to be taken. Manderino and Castek stated that in "accessing and evaluating information, using and representing information, and producing and exchanging information" (Manderino, Castek, 2016: 336) and we also hope that adult digital literacy practices will be supported by different topics and perspectives.

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