Opinions of academicians on digital literacy: A phenomenology study

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Abstract

Social media has become an indispensable part of our lives in recent days, in which a new concept has emerged. This concept is Digital Literacy. We can define digital literacy as the ability to produce information using digital technologies. Digital literacy skills are among the most important skills that individuals should have in our age. Today, children are introduced to digital tools and started to use, before learning, to read and write. According to the researches, teachers and/or academics are not able to keep up with this digital progress of the new generation, but they fall behind. In this context, teachers and/or academics are expected to use digital tools effectively and have digital literacy skills in order to keep up with the digital transformation. The aim of this study is to apply the opinions of academicians about the concept of digital literacy which is rapidly entering our lives and to reveal the level of awareness about the related concept. Phenomenology design, one of the qualitative research methods, was used in the study. Phenomenology is a research design that is used to reveal cases that we are aware of but we do not have in-depth knowledge of it. For research purposes, the sample of the research consists of 10 academicians working as lecturers in various departments with a Vocational School of Technical Sciences of a university in Turkey. As a data collection tool, Semi-Structured Interview Form on Digital Literacy developed by Kozan (2018) was used with the permission of the researcher. In the context of the conceptualisation of the collected data, the thematic content analysis method was used. At the end of the study, it was revealed that all of the academicians who are working in the study group are familiar with the concept of digital literacy and they are ready to participate in the training to be given to them by relevant institutions and organisations.

Keywords: Digital literacy, Academics, 0pinion, Phenomenology Study.

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1. Introduction

The concept of literacy is divided into some sub-branches, such as information literacy, network literacy, visual literacy, digital literacy and library literacy, in the development process. Among these sub-branches, the concept of digital literacy comes to the forefront regarding information and communication technologies.

Digital literacy is defined as the ability to access and reveal information through digital tools. In order to be digital literate, individuals need to fulfil high-level critical thinking skills such as research, inquiry, problem solving and decision making (Duran & Ozen, 2018). Using technology at a top-level is not defined as being digital literate. This is why digital literate individuals are expected to summarise, synthesise, create and present information, and to have the ability to accurately access information contained in virtual environments. According to Martin (2008), with digital literacy, individuals also acquire competencies such as using the information they acquire in their life, transferring it, and making a critical assessment of the knowledge gained. Individuals with these skills become more advantageous over time compared to other individuals. For example, when we look at job advertisements in various sectors, often mastered office programs, think analytically etc., expressions appear to indicate digital literacy.

Information, skills and features related to digital literacy are structured in various dimensions within the context of the European Commission's Digital Competence and New Models framework. These dimensions are: 'components of digital competence', 'information and data literacy', 'communication and collaboration', 'digital content creation' and 'security and problem solving' dimensions (Carretero, Vuorikari & Punie, 2018).

One of the most important areas in which the concept of digital literacy is mentioned in the education sector (Kozan, 2018; Digital Education at School in Europe Eurydice Report, 2019; McGarr, Mcdonagh, 2019; Surmelioglu and Seferoglu, 2019.). With the increase in digitalisation, there have been changes in the qualities and numbers of digital vehicles entering the classes. Considering that today's children and teens are digital natives who meet technology as soon as they are born, spend time at the tablet, smartphone or computer, their educators have to keep up with this generation and digital transformation.

Ozerbas and Erdogan (2016), in their research on digital class, concluded that students enjoyed teaching done in digital classrooms. Gunduzalp and Sener (2018) focused on academicians' views on digital transformation at universities. According to the research result, adaptation of the opinions of academicians towards digital transformation to the modern technological age, the use of technological elements together, the transfer of information to digital media (e-information), facilitating life, easy access to information, easy use of information, effective use of information and technology tools, cost savings, quality and effective education revealed that the information was easily disseminated and the content of the lessons was enriched. Kurudayioglu's (2019) aim of the study is to examine the digital literacy levels of prospective teachers studying in elementary school classroom teaching and social studies teaching in terms of some variables. According to the results of the study, the male teacher candidates' digital literacy levels were significantly higher than those of female teacher candidates. In addition, it was determined that the participants had a medium level of digital literacy in general. When the student sample is examined, Kaya (2020) investigated the relationship between secondary school students' digital citizenship and digital literacy levels. In this context, he had performed studies with 847 secondary school students. As a result, it is concluded that secondary school students' digital citizenship levels are high. It has been observed that there is a significant difference between the digital citizenship

levels of the secondary school students and the year of use of the internet, and there is no significant difference between the variables of gender, class level and time spent daily on the internet.

1.1. Purpose of The Research

The aim of this study is to get the opinions of academicians about the concept of digital literacy, which is frequently encountered today, and to raise awareness on the subject in this context.

1.2. The importance of research

It is not enough to find information so that persons can use the 21st century technology competently. They should analyze, produce the correct information and determine the accuracy of the information.It is an important point that they have the awareness and ability of this situation. Those who acquire these skills will be added to their responsibilities to produce research. It may be appropriate to start from the young generation in gaining this awareness. In this context, the presence of academicians who will guide the young generation is also remarkable. It is predicted that the results obtained with this research will reveal the digital literacy competence levels of academics and in this sense, their expectations and deficiencies will be revealed. In addition, in line with the answers given by academicians to open-ended questions, their expectations from institutions and organisations in the field of Information and Communication Technologies regarding digital literacy and, more importantly, digital transformation will be revealed. Another important point is that it will shed some light on future in-service studies on the needs and deficiencies that are revealed.

2. Method

2.1. Model of the research

In this study, the phenomenology model, which is included in the scope of the qualitative research method, was used as a research design. Phenomenology focuses on fact cases, which we are aware of in our daily lives but do not have in-depth and detailed knowledge (Creswell, 2018; Yildirim & Simsek, 2018). This research may not give precise and generalisable results; however, it can present examples, themes and experiences that will help to describe and reveal a phenomenon.

2.1.1. Participants

The participants of the research consists of 10 academicians working as lecturers with the Vocational School of Technical Sciences of a University in Turkey.

2.1.2. Demographic features of participants

Table 1 illustrates the demographic characteristics of the participants.

Table 1. Demographic Features of the Participants

Lecturers	Degree	Gender	Department	Priority (as year)
F1	Assi. professor	Female	I.T.	1
F2	Lecturer	Female	Architecture	10
M1	Assi. professor	Male	Machine	11
M2	Lecturer	Male	Architecture	9
M3	Lecturer	Male	Architecture	8
M4	Lecturer	Male	Machine	8
M5	Lecturer	Male	I.T.	6
M6	Lecturer	Male	Electric	5
M7	Lecturer	Male	Electric	5
M8	Lecturer	Male	Electric	8

In Table 1, an analysis of the 10 academicians constituting the study group is performed: 2 females and 8 males in terms of gender; 2 assistant professors, 8 lecturers in terms of degree; 2 information technology, 3 architecture, 2 machine, 3 electric in terms of the department; and their priority has also been shown to vary.

2.2. Data collection tool

In the study, the 'Semi-Structured Interview Form for Digital Literacy' developed by Kozan (2018) was used with the permission of the researcher. The questions in the interview form are open-ended questions and consist of 4 demographic questions in total.

2.3. Data collection method

After obtaining the necessary official permissions for the collection of research data, the measurement tool was applied to 10 academics, in different departments and different titles, working at the Vocational School of Technical Sciences of a university in Turkey.

2.4. Analysis of data

The analysis of the data was carried out using the thematic content analysis method in the context of conceptualising the collected data. Thematic content analysis is the conclusion of research results in a specific discipline area to a common synthesis from a thematic critical point of view (Au, 2007; Calik & Sozbilir, 2014; Calik et al., 2008). For this reason, it provides a rich resource that enables researchers working in the related field and who cannot access all the studies in the field via a single resource (Calik, Ayas & Ebenezer, 2005; Ultay & Calik, 2012). In this study, thematic content analysis method was used since it was aimed to determine the opinions and awareness levels of academicians about the concept of digital literacy.

3. Findings and Discussion

The findings of the research and the literature-based comments of the findings obtained in this context are presented in the following:

Table 2. Have you heard of the concept of digital literacy before?

Yes, I know about the concept.	No, I don'tknow about the concept.
10	0

When Table 2 is analysed, it is revealed that all of the academics participating in the research have information about digital literacy. This situation has proved the awareness of academicians towards the concept of digital literacy, which is one of the indispensable qualifications of the world that we have encountered in recent years and entered digital transformation.

Table 3. What kind of benefits does being a digital literate individual provide for the person?

Themes	(n)
Quick and easy access to information	2
Saving on time	6
Finding the right information in a short time	7
Effective work	3
Using of different source and environment	4
Choosing the information, interpret, organize	1
Competence to use different technologies	1
Access to information any time and any place	4
Digital access all kinds of information	2
Development of research ability	1
Search, discovery, internalization of the information	1
Sharing of the information	3
Socialization, participation of modern life	1
More information with less effort	2
Reduction in cost	1
Interaction ability with social media	1
Surface new ideas by creating awareness	1

When Table 3 is analysed, 'What kind of benefits does being a digital literate individual provide to the person?' the academicians' answers were examined, it was revealed that the frequency was on the theme of "finding the right information in a short time". The maximum frequency for this item is 7. In this context, today, individuals have the opportunity to access information whenever they want,

wherever they want. This situation seems to be a positive situation, but it also brings a pile of information. Individuals need to filter which information is useful and which is unnecessary.

When other thematic answers are examined, there is diversity. Another important point in this question in the interview form is that academicians are aware of their digital literacy skills and can define their digital competence skills in this context. When the quantitative studies on the subject are examined; In his study, Kozan (2018) investigated the digital literacy levels of pre-service teachers in the Department of Computer Education and Instructional Technologies, and found that the digital literacy levels of pre-service teachers were high. As a similar result, Arslan (2019), in her research, found that digital literacy levels of teachers working in primary and secondary schools were high. Akkoyunlu and Yılmaz Soylu (2010) found in their research that the digital competencies of teachers in different branches are at a medium level. In addition, when analysed in terms of components, it was found that the motivation and awareness levels of teachers are high and their competence and technical access levels are medium.

Table 4. What should instructors pay attention to in the process of raising digital literate individuals?

Themes	(n)
Closely following the change and development of digital technologies.	1
Allowing individuals access to correct information by considering individual differences.	1
To gain the ability to connect the existing knowledge with the information obtained.	1
Being aware of the benefits of digital technologies as well as their damages.	5
Preventing the digital world from directing individuals as they wish to be conscious about this issue.	1
To be able to provide leadership and guidance to learners as an instructor in reaching the right information on digital platforms.	3
Being open to lifelong learning on digital literacy	1

In Table 4, the theme of 'being aware of the benefits of digital technologies as well as their damages' in the context of 'issues to be paid attention by instructors in the process of raising digital literate individuals' is remarkable. In this context, it has emerged that academics are aware that unnecessary and harmful use of technology can cause negative consequences and risks as well as using technology correctly and beneficially. When other thematic answers are examined, there is diversity. In particular, most academics support the view that 'as an instructor, they should lead and learn learners in terms of

accessing accurate information on digital platforms'. When looking at their digital platforms, it should be remembered that although they are very rich in content, they create information pollution. Considering that young people in today's world are considered to be digital indigenous, the view that they will not bother to get the right information, they will accept the correct information they see first. Therefore, it is thought that awareness that will be gained by instructors will be important in this context.

In addition, attention was drawn to lifelong learning on the topic. When the literature is examined; in their research, Yazar and Keskin (2016) examined prospective teachers' digital competencies in the context of lifelong learning. As a result, when all the sub-dimensions of lifelong learning are examined, it is revealed that the pre-service teachers' digital competency levels are at the level of 'I am partially proficient' and close to the level of 'I am proficient'. In the context of continuing education or lifelong learning, awareness training to be provided to teachers, prospective teachers and/or academicians by Information Technologies institutions and organisations are considered to be important.

Table 5. What kind of studies should the institutions do to raise digital literate individuals?

Themes	(n)
Providing hands-on training on the correct and effective use of the digital world.	5
Giving in-service trainings supporting digital literacy.	3
To include digital literacy supportive and instructive courses in the curriculum.	2
Providing relevant support services from experts.	3
Completing the infrastructure services required for digital literacy.	2
Opening courses and training programs on the subject.	4
Development of user-friendly technological products that facilitate digital literacy skills.	1
Organizing events such as seminars, workshops, symposiums by experts.	2
Increasing access of digital libraries and providing free membership.	1
Considering the individual differences in accessing digital data, developing products, environments, and equipment to suit these differences. For example: for people with disabilities or individuals who need special education	1

When the answers given by the academicians to the related question were examined, it was determined that the frequency was on 'providing hands-on training on the correct and effective use of the digital world.' The maximum frequency for this item is 7. When other thematic answers are analysed, it is seen that although there is diversity, academicians are open to education at the point of developing themselves on the subject. When the literature is examined, Kozan (2018) revealed the opinions of prospective teachers on this subject through the same data collection tool used in the research. Accordingly, pre-service teachers have emphasised that the educators who educate them expect them to carry out an efficient education and training process in the awareness of being a role model in digital literacy. At this point, it was determined that the expectations of both the academicians 'and university students' on this topic were common. Academics stated that more digital libraries should be created and free membership should be provided for easier access to information in the digital world. In addition, academics drew attention to individual differences and emphasised the need to develop more digital media, products and equipment for these differences. In line with the thematic answers, it is foreseen that the training to be provided by experts in the context of increasing the prevalence of digital literacy, as well as the contributions to the subject, will be important. In line with the thematic answers, it is foreseen that the training to be provided by experts in the context of increasing the prevalence of digital literacy, as well as the contributions to the subject will be important.

4. Conclusion and Suggestion

In this study, it is aimed to get the opinions of academicians about the concept of digital literacy, which we often encounter in our age, and to raise awareness about the subject in this context. In this research, which was used as the data collection tool of the 'Semi-Structured Interview Form for Digital Literacy' developed by Kozan (2018), it was aimed to get the opinions of academicians working at the Vocational School of Technical Sciences of a university. The answers given by academics to open-ended questions are as follows:

In the research, all of the academicians asked 'Have You Heard the Concept of Digital Literacy Before?' They answered yes to the question. In this context, it has been revealed that all the academicians participating in the research have information about digital literacy.

In the research, academicians asked 'What kind of benefits does being a digital literate individual provide to the person?' When the thematic answers they gave to the question were examined, it was revealed that the frequency was on the theme of 'finding the right information in a short time'. When other thematic answers are examined, it is determined that there are many diversities such as "saving on time', 'reduction in cost', 'effective work', 'sharing of the information', 'search information', 'discovering', and 'internalising'. An important point that draws attention to this question is that academics have an awareness of digital literacy skills and can define digital competence skills in this context. In the context of raising digital literate individuals, the issues that educators should be aware of, the frequency is found to be on the theme of 'being aware of the benefits of digital technologies as well as their damages'. In this context, it has emerged that academics are aware that unnecessary and harmful use of technology can cause negative consequences and risks as well as using technology correctly and beneficially. When other thematic answers are examined, it is determined that there is diversity. In particular, it has been suggested that most of the academics support the view that 'to be able to provide leadership and guidance to learners as an instructor in reaching the right information on digital platforms'. In addition, academicians drew attention to the phenomenon of lifelong learning regarding this issue. Finally, when the answers given by the academicians to the question of what kind of studies are needed to raise digital literate individuals, the frequency is on 'providing hands-on training

on the correct and effective use of the digital world'. In line with the thematic answers, it is foreseen that the training to be provided by experts in the context of increasing the prevalence of digital literacy, as well as the contributions to the subject will be important.

Suggestions put forward regarding the results of the research are presented as follows:

• In order to provide academics and students with digital literacy awareness in higher education institutions, digital literacy courses that can be managed by experts should be included in the curriculum.

• Activities such as continuing education and in-service training should be organised under the leadership of relevant institutions and organisations to increase the digital literacy skills of academicians.

• In-service trainings for academicians can be given in the context of "Learning and Teaching in Higher Education in the Digital Age".

• It is anticipated that the Information Technologies and Communications Institution's activities such as seminars, workshops and symposia on digital literacy will increase the awareness of the subject.

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