

Determining Students' Views on Digital Competency Training Needs

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ABSTRACT: In this study, it is aimed to determine the views of primary school 4th grade students on digital competence training needs. In the research, phenomenology (phenomenology) design, one of the qualitative research designs, was used. The study group of the research consisted of 7 students in a primary school in Fatih district of Istanbul in the 2021-2022 academic year. The data of the research were obtained with the semi-structured interview form applied to the students. Content analysis was used to analyze the answers of the students in the interview forms, first the data were coded, and then the categories (themes) that explained the data at a general level were determined. The related literature, interview questions and the answers given by the students to the questions were used to determine the themes. From the analysis of the data, four themes were identified: virus, citing the source, unwanted content, pirated product, and not knowing the notification addresses.

1. INTRODUCTION

Mankind has been in constant communication with its environment since its existence. Face-to-face communication in the first place has changed with the development of different communication tools. Recently, with the development of technology, many kinds of communication tools have emerged. Therefore, the age we live in; It is called the age of technology. There are rapid developments in information and communication technologies. In the age of technology, the use of computers and the internet has increased to a great extent. This increase affects the life of individuals at all ages and at all levels and their relationship with their environment. In this age, the internet and computer duo are among the indispensable parts of our lives.

In another definition, the internet is a communication system based on globally widespread computer networks that enables two or more computers to communicate with each other and to enable computers to communicate with each other repeatedly (İçel, 2015: 483).

According to the "Household Information Technologies Usage Research" report published by TURKSTAT in Turkey every August, it is seen that internet usage rates have increased in internet usage statistics in Turkey. While the general usage between the ages of 16-74 is 75.3% in total, the rate of internet usage among men is higher than that of women (TÜİK, 2019). This research, which was carried out throughout Turkey, was carried out for the first time in April 2013, including children in the age group of 06-15.

Children between the ages of 9 and 16 who participated in the research within the scope of the European Children Online Project stated that they started using the internet around the age of 10 (METU, 2014). In the research conducted by TUIK (2013), it is stated that the age of children in the 06-15 age group to start using the Internet is around 9, and the age of children in the 11-15 age group to start using the Internet is around 10.

It has been determined that children aged 9-16 who participated in the research in the European Online Children Project use the internet for 1-1.5 hours a day. Children stated that they mostly use the Internet for

schoolwork (92%), while playing games (49%), reading or watching the news (40%), entertainment - watching video clips (59%), downloading music or movies (40%) and their friends also stated that they use it to share on social networks (48%). If all communication-based activities are analyzed together (sending instant messages, e-mail and social networking), it is seen that Turkish children do these activities less than other children in Europe (approximately 44% vs 60%). In addition, it has been determined that 60% of children in Turkey connect to the internet at school, while 51% use internet cafes (ODTÜ, 2014).

Looking at developing countries, they are working on reducing device prices, expanding internet access infrastructure, and providing individuals with skills that will improve their basic information and communication technology skills and digital competencies (Bilgi Toplumu Stratejisi Eylem Planı, 2015).

In this direction; Digital Competence: "Digital Competence: "It covers the safe and critical use of information society technologies for daily life and communication. The competence in question is supported through basic skills such as accessing information and using computers to evaluate, store, produce, present and exchange information in information communication technology, as well as participating in common networks and communicating via the Internet" (MoNE, 2017). has been done. Looking at these directly quoted statements, it is seen that the content of the "Digital Competence" field and the skills it aims to gain are related to digital citizenship and its sub-dimensions. At the same time, it is seen that the field of "Digital Competence" is related to the sub-dimensions of digital citizenship, digital access, digital literacy, digital ethics, digital communication and digital rights and responsibilities.

When the literature is examined, it has been determined that the studies directly on primary school children are quite limited. Considering that the age of internet use falls to the average age of 8-10 years, this age group coincides with the primary school age, and considering the risks that may be encountered in internet use and in line with the recommendations in the studies in the literature, the necessity of conducting a study for students in primary school has emerged.

The main purpose of this research is to determine the needs of primary school 4th grade students for an education program.

2. METHOD

This research was carried out to determine the digital competency training needs of primary school 4th grade students. This research was conducted based on the needs of 4th grade students regarding the digital competency training program. In line with this need, male and female students were interviewed. The research is a study designed with phenomenology (phenomenology), one of the qualitative research methods. Phenomenology research was preferred because it was aimed to gain in-depth information from experience, experience and perceptions. Similarly, as Yıldırım and Şimşek (2011) stated, they stated that the phenomenology design is a research design that is used when we want to obtain information from a person's experiences and experiences in a deeper and more detailed way. The aim of phenomenology studies is to reveal the perceptions of the person about a situation and the meanings they attribute to this situation (Yıldırım ve Şimşek, 2008). These studies serve as a guide for other studies. Since phenomenology research aims to obtain information from the experience and experience of the individual, it is possible to collect information by using various data collection tools, especially interviews. The collected data are analyzed and reported in line with the research questions and answers to the research questions (Bogdan ve Biklen, 1998; Creswell, 2005; Smith ve Osborn, 2004; Yıldırım ve Şimşek, 2005). In this study, which was carried out using the qualitative research method, purposive sampling was preferred in the formation of the study group. The reason why the purposeful sample is preferred can be shown as the fact that the researcher is informative about the subject to be researched.

(McMillan ve Schumacher, 2006). In this context, easily accessible case sampling, which is one of the purposeful sampling methods, was used. The reason for choosing this sample is to provide speed and convenience to the researcher. The researcher chooses a situation that is close and easy to access.

(Yıldırım ve Şimşek, 2008). For this reason, in order to reach the participants more quickly and easily, I have chosen the participants from the institution I work for.

2.1. Working group

Selection of the participants was deemed appropriate by the researcher by examining the characteristics such as Gender, Age, whether or not to use the Internet, the Technology they use for Internet Connection.

Table 1 Information on Students' Gender, Age

participants	Gender	Whether or not to use the Internet	The technology they use for internet connection	Purpose of using the internet
H	Male	Yes	Bilgisayar	Homework - Game
İ	Girl	Yes	Tablet	Homework
A	Male	Yes	Bilgisayar	Homework – Game-watching videos
E	Girl	Yes	Bilgisayar	Homework
G	Male	Yes	Telephony	Homework – Game-watching videos
N	Girl	Yes	Tablet	Homework – Game-watching videos
Y	Male	Yes	Tablet	Homework – Game

The research was carried out with the participation of students in a primary school in Istanbul in 2021-2022. The research was carried out with the voluntary participation of seven students in total.

Table 1. When examined, it is seen that four of the seven children interviewed are girls and three of them are boys. The reason why three of the seven students are girls and four are boys is to ensure an equal distribution between boys and girls. Having an internet connection at home is assumed as a sufficient criterion. It was realized with the voluntary participation of children. The names of the students are hidden and coded with

the initials of H, İ, A, E, G, N, Y in terms of research ethics. Table 1 When examined, one of the children stated that he used a phone while connecting to the internet, while three of the other children used a tablet and the other three used a computer.

2.2. Data Collection Process

Interview, one of the qualitative data collection methods, was used in the research. According to Patton, the purpose of the interview is to enter an individual's inner world and understand his or her point of view. (Patton, 1987). Interviewing tries to understand what exists and cannot be observed abstractly, such as experiences, attitudes, thoughts. Therefore, the interview technique is very suitable for studies aiming to reveal how individuals perceive their daily life experiences in order to determine the needs of students regarding the digital competency training program. In this context, the data of the study were collected through semi-structured interview. In this interview format, the researcher chooses the topics in advance, but during the interview, he/she can decide on the expression and order of the questions. With the probes used in the interviews, the comprehensiveness of the research can be increased (McMillan & Schumacher, 2006). The interview questions used in this study were prepared by the researcher, and the draft interview form was examined by 5 people, a language expert, a field expert, and three peers. And as a result of these investigations, necessary adjustments were made. After the necessary arrangements, it was tested by applying questions to a student for trial purposes. At the end of this meeting, the questions were rearranged. Appropriate hours were determined with the people to be interviewed by the researcher and in-depth interviews were conducted. Notes were taken manually during the interviews, but their voices were recorded with the permission of the interviewees in order to eliminate possible missing notes or misunderstandings with the participant, and the interviews lasted approximately 35 minutes. However, one of the participants did not allow audio recording. For this reason, notes were taken by drawing figures. Audio recordings have been transcribed. The notes taken and the transcripts made were sent to the participants, and the participant's confirmation was received.

2.3. Data collection tool

A fully structured information form including demographic information and a semi-structured interview form for interview questions were prepared to receive the opinions of the students. Stewart ve Cash

(1985) "Interview Technique; They defined it as a mutual and interactive communication process based on the style of asking and answering questions for a predetermined and serious purpose. In line with this definition, as well as in research, "process" means continuity and dynamism in communication; "reciprocity", comparison between two or more individuals; "interactivity" means that the individuals participating in the interview are members of the same group and interact; "a predetermined and serious purpose" means that the individuals involved in the interview have a specific purpose related to the issue; "Asking and answering questions" also means asking questions to the individuals involved in the interview and getting the answers to the questions asked during the interview (Yıldırım ve Şimşek, 2011).

16 open-ended questions were prepared for the students participating in the research. For the validity study, the opinions of 5 experts and peers were consulted as stated above. For reliability, the formula of Reliability = Consensus / Consensus + Disagreement x 100 was applied on the coding made by the researcher and the expert. The percentage of agreement between the researcher and the expert was calculated as %. Reliability was ensured in terms of data analysis, since the percentage of agreement was 70% or higher. The codes that were compatible with the coding made by the researcher and the expert lecturer were taken as the basis for the themes. The themes were tried to be determined in a wide enough scope to cover related concepts and narrow enough to exclude irrelevant concepts. Integrity was ensured by controlling the relationship between these themes and the sub-themes that make up the themes, and the relationship of each theme with the others. The mean reliability among coders was found to be 78%.

2.4. Analysis of Data

Descriptive analysis technique was used while analyzing the collected data. Based on the answers of the participants, coding was done for each question in this direction. Categories and themes in this context were created from these codes. As coding, descriptive coding was used. The reliability of the themes created was evaluated by giving the themes to a peer from the field. The data obtained in line with the descriptive analysis are summarized and interpreted according to the previously determined themes. In descriptive analysis, direct quotations are included in order to reflect the views of individuals. The purpose of this type of analysis is to present the findings to the reader in an

organized and interpreted way. Accordingly, the collected data is first described. Parallel to this, the descriptions are interpreted, the cause-effect relationships are examined, and the results are reached (Yıldırım ve Şimşek, 2000).

3. FINDINGS AND COMMENTS

All of the children stated that they connected to the internet to do homework, but some students also stated that they played games and watched videos (Tik Tok). The answers given by the students to the interview questions were presented in line with the themes.

Theme 1: Virus

Children stated that they had difficulty in identifying the virus. They stated that they did not know which virus programs they were and what to do to prevent virus contamination from the internet.

H : "I don't know about virus programs, but I know what virus is, it blocks some things on the computer, it deletes some things"

İ : "I have not heard of virus programs, now I am hearing from you, I would like to know first"

E : "I know what the virus is, one day my mother's phone was infected, everything was freezing"

G : "I have never used a virus program, I have never heard of it before"

A : "There is a cheat program called Apk, there are people who use them, so I deleted it immediately when I found out that it harmed Android. Apk is such a program that infects your computer with a virus. If there are programs to remove viruses, I would like to learn about them"

Theme 2: Citation

Children say that they use the internet while doing homework, but they get an information, a picture, etc. from the internet. They stated that they did not know, did not need, or did not want to indicate where they got an expression from.

A : "I do homework using the internet, but I do not specify from which source I got it"

İ : "I do research on the internet while doing my homework, but I do not need to cite the source while doing this."

H : "I don't show"

N : "I do not cite sources when I take homework online. Because the teacher doesn't want it either. If my teacher wants, I will do it"

Theme 3: Unwanted content

Children stated that they do not know what to do when they encounter unwanted content while searching for homework, watching videos, or playing games on the Internet. They stated that they had never heard of the existence of a website or phone number that they should refer to when they encounter undesirable content. All seven students interviewed stated that they did not know what their legal rights were when they encountered an undesirable content.

H : "When I come across content that I don't want, I inform my parents and then I turn it off with my own efforts"

İ : "I don't know if there is a website or phone number that I can refer to when I encounter unwanted content on the Internet, but I would like to know"

G : "When I encounter unwanted content on the Internet, I immediately call my father, because my father knows everything"

A : "I am announcing from you for the first time that there are websites and telephone lines that I can report when I come across content that I do not want when I use the Internet"

Theme 4: Pirate product

Children stated that when they tried to download something unwanted while searching homework, watching videos or playing games on the internet, they did not know whether it was pirated or what it meant.

E: "I don't know what pirate means"

A: "I am not aware if I downloaded pirated product. I don't know what pirated product means"

G: "I don't know if downloading videos is piracy."

Theme 5: Not knowing the notification addresses

Children stated that they did not know that there is a website or phone number to complain about when they encounter unwanted content while researching homework, watching videos or playing games on the Internet.

İ: "When I come across unwanted content on the Internet, I block that person or tell my family or teacher. I don't know if there is a site or number to complain about"

A: "We can call the police when a crime is committed. It would be nice to have the number we need to call in internet crimes. I don't know which number is."

Y: "When my mother gave me her phone, she said that

she closed some web pages while surfing the internet so that I wouldn't enter, but when I saw negative content, I didn't hear that there was a page we could complain about. Our teacher didn't say it."

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