

The Impacts of Distance Education on Equality and Inequality of Opportunity in Education

Dr. Öğr. Üyesi Cansu ŞAHİN KÖLEMEN

Beykoz University

cansusahinkolemen@beykoz.edu.tr

ORCID: 0000-0003-2376-7899.

ABSTRACT

The globalization of information and communication technologies has caused a worldwide education system to arise. The advances experienced in several informatics systems, including but not limited with the progress of computers and internet, have also established new practices in educational area. One of such practices is the distance education. The distance education is the planned learning process as performed by making use of various communication methods linked to the electronic systems, and capable of overcoming the time and space limitations. The eminent advantages of distance education, such as being free from the time and space limitations or reduction of educational costs, ensures equality of opportunity in education; however, the practice has been deemed to cause also the inequality of opportunity in certain areas of education. Accordingly, the object of this study has been designated as to establish the factors of equality and inequality of opportunity provided and caused by the distance education with regard to the learner. It is hereby targeted to observe the problems faced by the students practicing the distance education and to express the solution recommendations in relation. The study has been conducted as a case study which is a qualitative research method. The research group consists of the faculty members and students. The group has been chosen under criterion sampling process whereas the criterion has been identified as the past distance lecturing for the faculty members and past distance learning for the students. A total of 47 research participants have been interviewed as 21 faculty members and 26 students. A semi-structured interview form has been used as data gathering tool. The content analysis has been carried on the obtained data. The findings include the direct quotations from the participants, as well as the conceptual analysis results, in support for the formation of the study themes. The findings have clarified even better the problems existing in the education system with regard to the equality of opportunity provided by the distance education to the learner.

Keywords: equality of opportunity in education, distance education, education technologies

INTRODUCTION

The change and progress of the information technologies have performed a particularly fast pace in this first quarter of 21st century. Such change and progress contributed significantly to the distance education processes. The concept had not been sufficiently employed in past decades however evolved to an easily applicable practice thanks to the global communication tools in the present. The teachers that make use of the information technologies are also required to be proficient in employing the global educational practices. The leading global educational practice is the distance education. The distance education is defined as the audio and visual interaction of the teachers and learners acting in physically distant environments from each other (İşman, 2011). The distance education brings out solutions against the increasing education costs, assists the lifelong learning objectives and improves the mass learning approach; whereas, consequently, aims to maintain the equality of opportunity in education.

The concept “equality of opportunity in education” is the provision of equal conditions and opportunities to all the same scale learners. In addition to that, the concept requires any individual to favor the education rights in a nondiscriminatory manner (Korkmaz and Toraman, 2021). In other words, it means any individual needing to learn a subject then to be able to favor the educational means in an equitable manner. The opportunity to access to all the required sources by the learner through the education process is defined as a democratic and equitable education system. When considered the opportunities provided to the learners and the capabilities of the governments, it can be seen that the equality of opportunity in education has not been fully established in the underdeveloped countries (Franchi, 2020).

Despite the individuals favoring more or less equal conditions and opportunities, disadvantaged learners of any kind but accessing the education, time/space limitations being eliminated and etc. achieved outcomes obtained from the integration of education systems and technological advances, several problems do exist by means of inequality drawbacks. This study, relatedly, has attempted to designate both the equality and inequality of

opportunity in education under a substantial approach with regard to the distance education concept. The objective has been to contribute to the respective literature through obtaining the opinions of both the students and the faculty members.

Distance Education

The most important factor determining the development level of the societies is the education. Any developed or developing country needs to adapt their education systems to the requirements of the contemporary age. The informatics technologies are now in use to solve the existing problems of the education system. The integration of the informatics technologies into the learning processes has given birth to the innovative model of distance education. The distance education is an official learning method much more flexible compared to the conventional learning since permits the learner and the teacher to interact despite existing in different physical environments (Verduin and Clark, 1994). In principle, the distance education is the conduct of the learning and teaching processes by making use of mass-communication tools where the learners and the teachers act in different physical environments. The stakeholders of the distance education communicate/interact with each other through many tools such as printed materials, videos, audio records or computer communication etc (Holmberg, 2008). In distance education, the teacher and the learner can use different technological tools to interact free from time and space limitations (Koloğlu, Kantar and Doğan, 2016). The distance education is a substantially planned and systematic process which provides flexibility by means of learning hours. In addition, it also eliminates the learning place limitations. Last but not the least, the practice ensures a certain flexibility for the learning speed (Uşun, 2006).

The interaction between the learner and the teacher is one of the topics most examined when considering the distance education process. The synchronous and asynchronous practices, i.e. simultaneous and non-simultaneous processes, exist in the distance education (İşman, 2011). Yorgancı (2015) has designated the synchronous distance education as the bilateral communication and interaction of the teacher and the learner in different physical environments however in the same time-slice. The asynchronous distance education, in turn, has been designated as the provision of the required educational documents/materials to the learner in the web environment but free from time and space limitations. The synchronous distance education enables the learner and the teacher to communication through different technologies and therefore eliminates the past-challenge of existence of both in the same physical environment. Accordingly, the parties may also favor the advantages of face-face education. The asynchronous distance education however gifts the advantage of self-learning means to the learner as free from the need for the existence of the teacher. The distance education processes are functioned for the solutions of education-learning problems being faced both in Turkey and the world (Dündar, Candemir, Demiray, Genç Kumtepe, Öztürk, Sağlık Terlemez and Ulutak, 2017).

The distance education, despite produces solutions towards certain problems experienced in education-learning processes, includes some advantages and drawbacks. Kaya (2002) claims that the capability to offer several education options to the learners is one of the advantages favorable. Thus, it decreases the inequality of opportunity in education to certain extent. The other benefits may be listed as reduction of education/learning costs, enhancement of the education quality, presence of various learning contents, establishing self-learning skills and equipping the individual with self-arrangement capabilities. The drawbacks or limitations of the distance education can be summarized as non-socialization of the learners, lack of success experienced by the students without any individual learning skills, consumption of the resting periods of the individuals who both work and study, insufficient training in applicable subjects, non-achievement of behavioral changes that would support skill and attitude improvements and addictive manners towards the information and communication technologies. The advantages and disadvantages of the distance education also express/include the dimensions of the equality and inequality of opportunity in education.

Equality of Opportunity in Education

The concept of equality is described, socially and ethically, as the individuals being attributed with same values and holding the same positions (Mercik, 2015). The equality of opportunity has been defined by Ashford (2015) as persons having the existing opportunities or means that are required to perform successfully throughout their lives. The equality of opportunity in education has been understood to be a multi-dimensional concept when considered socially and individually. The basis for the equality of opportunity in education consists of maintaining the equality of the means (opportunities) for success (Eğitim Reformu Girişimi, Education Reform Initiative, 2020). When considering the principle of equality for the learning environments, many factors are required to establish the equality of opportunity in education also including the strengthening the technologic infrastructure as one of the most important requirements (Gamoran and Long, 2007). The equality of opportunity in education is the provision of the respective means required for utilization of the education services at an equal level by each individual as without any discrimination and enabling each person to improve his/her competencies at best

(İnan and Demir, 2018). The purpose of the equality of opportunity in education is to eliminate the obstructing economic challenges or others' privileges faced by the individuals while they are attempting to establish their social identities and statuses. Thus, any desiring individual may take his/her place in the society in line with own wishes and abilities, i.e. reach the level of living he/she desires, without being obstructed by his/her existing socio-economic situation (Ergün, 1997).

In cases when inequalities in society affect the education processes adversely, or in other words when the equality of opportunity in education is replaced by the inequality of opportunity in education, the idealism of "equality" should be dominantly defended as to overcome the social and economic disadvantages faced by certain communities or layers (Küçüker, 2010). Under normal circumstances, it is aimed to provide equal opportunities and means for every individual under the principle of the equality of opportunity in education (Saribaş and Babadağ, 2015). The criterion for the principle of equality is its level of abstract sufficiency. However, the main principle evolves to a more concrete body in education as that the disadvantaged students to favor the advantaged practices (Satz, 2008). Not all the students in Turkey may continue their education processes as desired due to social or economic reasons. Accordingly, the distance education comes as a means (a potential) for the students who cannot carry on their education processes (İşman, 2011). Can (2004) explains some of the most important benefits provided by the distance education to the students as follows: (1) opportunity to learn in their own place of living, (2) assisting the lifelong learning, (3) assisting to conduct the professional life and education activities concurrently, (4) elimination of supply-demand imbalances in education and (5) minimization of opportunity and means inequalities. On the other hand, the distance education process requires a quiet personal learning space with less number of stimulants, high speed internet connection and hardware such as computer, camera etc. (Yıldız and Akar Vural, 2020).

The advance of information and communication technology demonstrates a fast progress in Turkey and world; however, the inequalities in accessing the technology come together also with such accelerated progress. These inequalities are described as digital gaps (Sezgin and Fırsat, 2020). The concept of digital fall references to the differences existing between the various socio-economic levels and geographies of the different societies by means of internet use and accessibility to information and communication technologies (OECD, 2011). Digital gap may also be defined as the inequality among the people for accessing the internet, information and communication technologies and in utilization of such technologies. In other words, the digital gap does not only point out the ownership of information and communication technologies, but also the differences between the individuals who may and may not use such technologies effectively (Bagchi, 2005).

According to Helbig, Gil-García and Ferro (2009), the digital gap includes three levels. The first level is a technological approach which distinguishes the individuals that access and may not access the technology. The second level expresses multidimensional factors such as the differences between the developing and developed countries or technical competencies of the individuals. The third level is a multi-nations approach that concentrates on the beliefs, communicative skills and values of the individuals. When all these levels are considered, it is claimed by Bozkurt and Sharma (2020) that the digital gap has been continuing, still, to be a threat. In addition to that, they have also expressed that many individuals could have not favored the educational opportunities.

Taking into account the opportunities offered for the learners and capabilities of the governments, it can be seen that the equality of opportunity in education could have not been maintained in the underdeveloped and developing societies (Franchi, 2020). There are ongoing debates to clarify if the distance education models may establish the desired (but lacking) equality of opportunity in education. Accordingly, in this study, the author has aimed to examine the distance education practices at length and to assess the equality and inequality of opportunity by means of obtaining the opinions of the faculty members and students. If the inadequacies can be crystalized through such assessment, then the outcomes shall be understood as important and socially mattering assets for ensuring the equality of opportunity in education. Having that said, this study targets to obtain and interpret the opinions of the faculty members and the students about the impacts of the distance education on the equality and inequality of opportunity in education and accordingly to establish the related solution proposals. Thus, the responses towards the following questions have been searched:

1. What are the opinions of the faculty members towards the impacts of the distance education on the equality and inequality of opportunity in education?
2. What are the opinions of the students towards the impacts of the distance education on the equality and inequality of opportunity in education?
3. What are the suggestions for improving the distance education under the main objective of eliminating the inequality of opportunity in education?

METHOD

Research Design

This study has been conducted under qualitative research method. The qualitative research attempts to question and interpret the subject matter whereas, also, works for comprehending the central problem in conjunction with its natural peripheral frame (Klenke, 2016). The case study approach, a qualitative research tool, has been used. The case study approach concentrates on a single case or event at length and in detail instead of assessing more than one variable. Under the case study title, the study has preferred the descriptive sub-course. This approach is utilized for providing information about the subject matter (Davey, 1991). The case, under the scope of this study, has been identified/selected as the past exposure to the distance education process.

Research Group

The qualitative researches employ various sampling types however the rationale has been generally defined as to access to the samples which may help the most correct description of the problem and may best contribute to the solution of the problem (Baltacı, 2018). Particularly for the qualitative researches conducted with groups including lesser number of participants, the method preferred for increasing the quality of the obtained data is to repeat the study on the same sample group through certain intervals i.e. to reach more accurate details (Neuman and Robson, 2014). The research group of this study has been consisting of the faculty members who have lectured through distance education and students who have been lectured in the same manner for a semester. The sampling method utilized has been criterion sampling as one of the purposive sampling tools. The criterion sampling looks for the persons, cases or events who hold the determined characteristics as related to the studied problem (Büyüköztürk, Çakmak, Akgün ve Karadeniz, 2008). The study included 21 faculty members (12 females and 9 males) and 26 students (16 males and 10 females) making in total 47 participants. The demographic data of the participating faculty members are given under Table 1 and of the participating students under Table 2.

Table 1. Demographic Information of the Participating Faculty Members

Code	Assignment	Gender	Age	Department
ÖE1	Faculty Member 1	Female	28	Comp. and Teach. Tech. Dept.
ÖE2	Faculty Member 2	Female	31	Comp. and Teach. Tech. Dept.
ÖE3	Faculty Member 3	Male	38	Psychology
ÖE4	Faculty Member 4	Male	27	Physiotherapy
ÖE5	Faculty Member 5	Female	35	Comp. and Teach. Tech. Dept.
ÖE6	Faculty Member 6	Male	42	Educational Management
ÖE7	Faculty Member 7	Female	44	Psychology
ÖE8	Faculty Member 8	Male	36	Educational Management
ÖE9	Faculty Member 9	Female	35	Software Engineering
ÖE10	Faculty Member 10	Female	35	Pre-School Teaching
ÖE11	Faculty Member 11	Female	32	Psychology
ÖE12	Faculty Member 12	Female	26	Physiotherapy
ÖE13	Faculty Member 13	Male	39	Business Administration
ÖE14	Faculty Member 14	Male	36	Psychology
ÖE15	Faculty Member 15	Female	41	Computer Engineering
ÖE16	Faculty Member 16	Female	44	Handicapped Teaching
ÖE17	Faculty Member 17	Male	29	Computer Engineering
ÖE18	Faculty Member 18	Male	31	Handicapped Teaching
ÖE19	Faculty Member 19	Female	28	Pre-School Teaching
ÖE20	Faculty Member 20	Male	30	Software Engineering
ÖE21	Faculty Member 21	Female	33	Handicapped Teaching

Table 2. Demographic Information of the Participating Students

Code	Assignment	Gender	Age	Department
Ö1	Student 1	Male	19	Informatics Security Technologies
Ö2	Student 2	Male	18	Computer Programming
Ö3	Student 3	Male	18	Informatics Security Technologies
Ö4	Student 4	Female	21	Pre-School Teaching
Ö5	Student 5	Male	22	Psychology
Ö6	Student 6	Female	21	Political Science and Int. Rel.
Ö7	Student 7	Male	20	Psychology
Ö8	Student 8	Female	20	School Teaching

Ö9	Student 9	Male	23	Pre-School Teaching
Ö10	Student 10	Female	21	Banking and Insurance
Ö11	Student 11	Female	22	Information and Document Mgmt.
Ö12	Student 12	Male	22	Software Engineering
Ö13	Student 13	Male	21	Computer Programming
Ö14	Student 14	Male	24	Handicapped Teaching
Ö15	Student 15	Male	22	Psychology
Ö16	Student 16	Female	19	Sociology
Ö17	Student 17	Male	23	Software Engineering
Ö18	Student 18	Female	24	Software Engineering
Ö19	Student 19	Male	21	Computer Programming
Ö20	Student 20	Female	20	Banking and Insurance
Ö21	Student 21	Male	23	Sociology
Ö22	Student 22	Male	19	Informatics Security Technologies
Ö23	Student 23	Female	24	Computer Engineering
Ö24	Student 24	Female	23	Business Administration
Ö25	Student 25	Male	20	Computer Engineering
Ö26	Student 26	Male	22	Handicapped Teaching

Data Gathering Tool

The qualitative study/research methods mostly prefer structured or semi-structured interviews, observations, focus group discussions etc. data collection tools (Forrester and Sullivan, 2018). This study has utilized a semi-structured interview form. The interview is the data collection technique through which the participants express their information, feelings and thoughts about the subject of the study. The objective of the interview as a data collection tool is to enter in the personal envisagement of the participants and accordingly crystalize the points of view thereof. The interview tool then provides an opportunity to access for the non-observable information such as the experiences, ideas, attitudes, perceptions, responses and comments of the participants in relation with the subject matter of the study (Bengtsson, 2016).

The interview form consists of three open-ended questions. To ensure the volunteered participation to the study, the subjects (participants) have been read an information statement and they have signed a related Consent Form. The open-ended questions of the interview are as follows: (1) What is the equality of opportunity in education?, (2) What is your evaluation about the impacts of distance education practices on the equality and inequality of opportunity in education and (3) What are your suggestions to maintain the equality of opportunity in distance education? The respective literature has been scanned and the specialist assistance from a faculty member active in education management branch has been received. While determining the study questions, focus has been put on the issues that may pave a way towards solutions for the subject problem; whereas, any deviating detail which may cause loss of time has been avoided.

Data Gathering and Analysis

After the participants are concreted and the data gathering tools are established, the data gathering (collection) process shall commence (Creswell, 2002). Generally three methods are proposed for qualitative data analyses. The content analysis is one of those methods and has been preferred in this study. The content analysis requires a detailed examination of the obtained data and reaching to the codes and themes that explain the information at hand. The content analysis, then, focuses on the obtained data. Moreover, the codes are extracted from the data set by means of grouping the continuously repeated or underlined by the participants. The codes lead to categories and thereafter the resulting themes may be formed. In other words, the codes interrelated will be summed and interpreted through the use of resulting themes (Merriam and Grenier, 2019).

The validity in qualitative research shall be understood as the conclusion and solution reached by the author for the studied problem however in a neutral (impartial) manner. Thus, the participants have been asked frequently for validity feedback through clarifying/complementary/confirmatory questions such as “Did you mean.....” or “Should I understand from your statements?”

The repeatability of the study findings relates to the reliability. Accordingly, the data obtained by the author has been opened to the interpretation of a different area specialist and this has made positive contributions to the reliability of the work. Besides, the conclusions drawn from the study have been checked against and supported with the conclusions of different studies. The themes drawn from the data have been validated by the statements of the participants. The faculty members are shown as with codes “ÖE1, ÖE2...” and the students as “Ö1, Ö2.....”

FINDINGS

The first research question had been “What are the opinions of the faculty members towards the impacts of the distance education on the equality and inequality of opportunity in education?” The respective analyses have been performed in relation with the question. Upon the held interviews, a content analysis has been conducted in line with the obtained data. Then, under the coverage of the first question, the study has formed 2 themes and 7 codes. These codes are:

- a) Learning at personal pace (speed)
- b) Easy access to information
- c) Problems faced when accessing the technology
- d) Internet connection problem
- e) Disregarding the learner competencies
- f) Establishment of convenient learning environment
- g) Increase of the differences among the students.

The themes and codes formed may be seen under Table 3.

Table 3. The Themes Related To The Opinions Of The Faculty Members Towards The Impacts Of The Distance Education On The Equality And Inequality Of Opportunity In Education.

Themes	Codes	Participants
Impact on Equality of Opportunity	Learning at personal pace	ÖE1, ÖE5, ÖE8, ÖE9, ÖE13, ÖE17, ÖE18, ÖE20, ÖE21,
	Easy access to information	ÖE1, ÖE2, ÖE4, ÖE8, ÖE9, ÖE10, ÖE11, ÖE14, ÖE16, ÖE17, ÖE20, ÖE21
Impact on Inequality of Opportunity	Problems faced when accessing the technology	ÖE1, ÖE2, ÖE3, ÖE4, ÖE7, ÖE11, ÖE12, ÖE19, ÖE21
	Internet connection problem	ÖE1, ÖE2, ÖE3, ÖE4, ÖE6, ÖE7, ÖE8, ÖE11, ÖE12, ÖE15, ÖE19, ÖE20
	Disregarding the learner competencies	ÖE3, ÖE8, ÖE12, ÖE15
	Establishment of suitable learning environment	ÖE2, ÖE5, ÖE7, ÖE8, ÖE10, ÖE13, ÖE17, ÖE19
	Increase of difference between the students	ÖE1, ÖE4, ÖE9, ÖE11, ÖE16

Considering the opinions of the faculty members, it has been seen that the positive impacts of the distance education on the equality of opportunity in education had come as proceeding at own personal pace (personal learning speed) and easy access to information. In face to face learning environment, the student must adapt itself to the academic pace of the class whereas the distance education provides the great advantage of learning in line with own learning pace to the student. The access to information has also become easier thanks to the fast progress of information and communication technologies. Therefore, the distance education provides the required information to the student free from time and space limitations and this conclusion has come as one of the positive impact of distance education on the equality of opportunity. Some statements of the participants as related to this theme are as follows:

“The students being able to use the technology and considering the sources embedded in the structure of distance education system, any desired information or subject is accessible conveniently.” (ÖE11)

“Some students may themselves acquire information about the subject I have been teaching. Thus, the distance education permits them to perform self-learning.” (ÖE18)

Considering the opinions of the faculty members, it has been seen that the negative impacts of the distance education on the equality of opportunity in education had come as, generally, the unsuitable learning environments and internet/infrastructure problems of the students. The inequality of opportunity in education is thought to occur through distance education due to the living environments of some students and also economic levels faced by them. That is to say, the students from lower economic levels may occasionally not find sufficient internet connection to follow the distance education process. Besides, a suitable learning environment from time to time requires also different tools in addition to the basic computer hardware. The procurement of

such extra learning tools naturally relates to the financial capabilities of the student. Thus, this may be claimed as a reason of inequality of opportunity in education. Besides such financial capabilities, disregarding the skills and interests of the learners towards the information and communication technologies may also cause an inequality of opportunity. The respective statements of some participants are as follows:

“The technology is a big source; however, despite it seems like everybody is in charge of it, for sure there are students who do not own a tablet or a computer.” (ÖE12)

“The limited internet quotas cause great challenges occasionally.” (ÖE8)

“We, unrealistically, deem any student just to deal with computer technologies would be competent of the issue.” (ÖE3)

“The distance education enables an independence from the space; however, we should not forget the necessity of student’s environment be convenient for learning process.” (ÖE13)

“Some students adapt to distance education at once but some other experience difficulties. Thus, differences are to occur between the academic successes of the students.” (ÖE4)

The second research question had been “What are the opinions of the students towards the impacts of the distance education on the equality and inequality of opportunity in education?” The respective analyses have been performed in relation with the question. Upon the held interviews, a content analysis has been conducted in line with the obtained data. Then, under the coverage of the second question, the study has formed 2 themes and 5 codes. These codes are:

- a) Financial capabilities
- b) Freedom from time limitations
- c) Free of charge education
- d) Access to various sources
- e) Internet problem.

The themes and codes formed may be seen under Table 4.

Table 4. The Themes Related To The Opinions Of The Students Towards The Impacts Of The Distance Education On The Equality And Inequality Of Opportunity In Education.

Themes	Codes	Participants
Contribution to Equality	Freedom from time limitations	Ö3, Ö4, Ö6, Ö9, Ö10, Ö11, Ö15, Ö17, Ö24, Ö26
	Free of charge education	Ö1, Ö2, Ö4, Ö7, Ö11, Ö19, Ö20, Ö21, Ö23
	Access to various sources	Ö5, Ö12, Ö14, Ö15, Ö16, Ö18, Ö25
Causes for Inequality	Financial capabilities	Ö4, Ö7, Ö11, Ö14, Ö18, Ö19, Ö22, Ö23, Ö25,
	Internet problem	Ö1, Ö3, Ö4, Ö7, Ö10, Ö13, Ö19, Ö22, Ö24, Ö25

According to the opinions of the students, the distance education contributes to the equality of opportunity in education by means of being not subject to time limitations, free of charge nature and access to the various sources. It may be claimed that it provides a great flexibility to the student since he/she may access to the information whenever he/she deems suitable. Relatedly, the distance education may be said to improve the time management skills of the students. The sources provided or advised by the faculty members are served or accessed free of charge by each student and this may be reported as a contribution to the equality. It is also a fact that not only the faculty member but also the learner enjoys a rich content by means of accessing various sources through internet. Some statements of the participants in relation with this theme are as follows:

“It is very favorable that I can follow the recorded lessons whenever I want since I am a working student.” (Ö17)

“The distance education is free of charge and it makes great benefits to follow the lectures from this channel.” (Ö1)

“There are plenty of sources and contents both in internet environment and in our distance education platform. This is an important asset.” (Ö12)

Considering the opinions of the students, it has been seen that the negative impacts of the distance education on the equality of opportunity in education had come as the internet problem and the financial capabilities of the students. The financial insufficiency and internet problem titles demonstrate similar findings with the opinions of the faculty members. It can be said that the differing financial capabilities of the students cause an inequality and the increasing of the digital gap. Some statements of the participants in relation with this theme are as follows:

“Of course the biggest challenge I face in relation with the inequality is my financial issues.” (Ö11)

“When everybody joined the distance training at a time, we faced internet connection problems. Particularly in the pandemic period, this was a major problem and made quite difficult to comprehend the contents of the courses.” (Ö4)

The third research question had been “What are the suggestions for improving the distance education under the main objective of eliminating the inequality of opportunity in education? “The respective analyses have been performed in relation with the question. Upon the held interviews, a content analysis has been conducted in line with the obtained data. Then, under the coverage of the third question, the study has formed 1 theme and 6 codes. These codes are:

- a) Determination of the learner characteristics
- b) Access to technology
- c) Improving digital literacy skills
- d) Resolution of internet infrastructure problems
- e) Official budgeting to be provided for technology access
- f) Teachers to provide consultancy services to the students

The themes and codes formed may be seen under Table 5.

Table 5. Themes Related To The Achievement Of Equality Of Opportunity In Education Through Distance Education Process

Themes	Codes	Participants
	Determination of the Learner Characteristics	ÖE2, ÖE3, ÖE7, ÖE10, ÖE11, ÖE13, ÖE20
	Access to Technology	Ö1, Ö5, Ö9, Ö21, Ö24, Ö25, ÖE1, ÖE7, ÖE11, ÖE12, ÖE19, ÖE21
	Improvement of Digital Literacy Skills	ÖE2, ÖE5, ÖE11, ÖE20
Suggestions	Resolution of Internet Infrastructure Problems	Ö4, Ö7, Ö10, Ö13, Ö19, Ö26, ÖE3, ÖE4, ÖE6, ÖE7, ÖE8, ÖE11, ÖE12, ÖE15, ÖE19
	Official Budgeting by the State for Access to the Technology	ÖE4, ÖE6, ÖE9, ÖE13, ÖE14, ÖE17, ÖE20
	Teachers Providing Consultancy Services to the Learners	ÖE1, ÖE4, ÖE7, ÖE8, ÖE11, ÖE14, ÖE18, ÖE21

For the purpose of eliminating the inequality of opportunity in education, a theme as “the suggestions of the faculty members and the students” has been formed. In line with the scope of such theme, it is seen that the determination of the student characteristics in the very beginning of the process i.e. understanding the competencies and interests thereof, might have improved their academic successes and also could have

strengthened their inadequacies. As understood, the students should be assisted not only for increasing their grades (points), but also for making them capable in knowing how to access the desired correct information. With regard to the maintaining the access to the technology and resolution of the internet problem, the government should update its respective policies and provide assistance to the families. Finally, the faculty members should concentrate much more on the processes rather than the academic points of the students; whereas, they should contact with the students to provide the required consultancy for contributing to the equality of opportunity concept. Some statements of the participants in relation with this theme are as follows:

“Likewise our attempts, in conventional teaching, to start the process by knowing the students better for understanding their competencies, we should try to know and understand each student better.” (ÖE7)

“Since the access to the technology is now a financial problem, both the government and, even maybe, the school should assist the students accordingly.” (ÖE12)

“Besides the academic success of the student, we should also assist them in digital literacy skills that is a contemporary 21st century asset.” (ÖE11)

“One of the greatest problems experienced is the internet problem. This should be urgently solved by the technology companies and national means.” (ÖE6)

“Now we cannot hold the technology apart from the education; thus, the government (state) should restructure the budget and update its respective policies accordingly.” (ÖE9)

“Consultancy sessions may be organized for the students to avoid the perception of non-support and this may ease the process significantly.” (ÖE4)

DISCUSSION AND CONCLUSION

The information and communication technologies have become the sine qua non features of the daily life. Such a fast pace of progress also causes changes in the education system. The distance education practices are the leading factors in evolving the education systems due to such technological advances. Besides, the informatics technologies also change the course of the distance education practices (Firat, 2019). Thus, this study has aimed to express the opinions of the faculty members and students in relation with the impacts of the distance education on the equality and inequality of opportunity in education, and to establish the respective solution proposals.

With regard to the first question of the research, the opinions of the faculty members have provided the following positive and negative aspects of the distance education: Learning at personal pace (speed), Easy access to information, Problems faced when accessing the technology, Internet connection problem, Disregarding the learner competencies, Establishment of convenient learning environment and Increase of the differences among the students. When the literature is scanned for the subject of access to technology, the similar conclusions have been spotted to exist. According to Sezgin and Firat (2020), a requirement for purchasing a second computer by the households has arisen in line with the evolving needs of the individuals. Once the distance education has rushed in our lives intensively, many learners have started to use different digital tools. Accordingly, besides the benefits of the technology and internet, a digital map has also started to arise. The Statistics Institution of Republic of Turkey (TÜİK) has performed a research on Household Informatics Technologies Utilization Figures and spotted that one over every ten household in Turkey had not established an internet connection. İşman (2011) claims the "progress in personal learning pace" as an advantage of the distance education. Besides, the non-existence of any time or space limitation also facilitates the access to the information. Particularly in the pandemics period, it has been seen that the learners should have self-orientation and self-management skills to keep in line with the open, accessible and flexible online distance education practices (Knowles, 1975). Bozkurt (2020) expresses the significance of these competencies. Otherwise, certain differences between the academic successes of the students may be faced.

With regard to the second question of the research, the opinions of the students have provided the following positive and negative aspects of the distance education on equality and inequality of opportunity in education: Financial capabilities, Freedom from time limitations, Free of charge education, Access to various sources and Internet problem. The declaration made by UNESCO (2020) clarifies that half of the all students in the world still don't have an access to a computer. Turkish Education Society (TEDMEM, 2020) also expresses that the inadequacies in access to internet and technological capabilities do affect effectiveness of the distance education and equality of opportunity in education. That is a rational determination when considered that the most important efficiency indicator of the distance education processes have been the technological means employable by the students at their homes. It has been seen that the students from higher socio-economic levels had been more successful compared to their counterparts through distance education processes (Özer and Suna, 2020). All these aforementioned conclusions support the findings of this study.

With regard to the third question of the study, the students have provided the following suggestions in relation with the impacts of the distance education on the equality and inequality of opportunity in education: Determination of the learner characteristics, Access to technology, Improving digital literacy skills, Resolution of internet infrastructure problems, Official budgeting to be provided for technology access and Teachers to provide consultancy services to the students. Firat and Güney (2020) have also claimed the need for works in relation with the digital infrastructure, resolution of internet problems and equipping the teachers and students with digital literacy skills. In addition to that, it has been foreseen that such improvements would evolve to more general education policies. When we examine the world, the same kind of improvement works can be spotted. China (both the government and private corporations) has established base stations and broadband network in rural areas to make the internet infrastructure even better. Also, assisting policies for improvement of the broadband network and mobile data payments have been enacted (Xiheng, 2020). Considering the suggestion for improving the digital literacy skills, it can be seen that the digital gap not only relates to the internet access issues but also to the effective use of the information and communication technologies, as also defended by Fuchs and Horak (2008). Finally, it has been suggested that the competencies and skills of the students should have been known by the teachers and, whereas, the respective consultancy sessions should be provided to the formers in line with their needs.

BIBLIOGRAPHY

- Ashford, N. (2015). *Özgür toplumun ilkeleri*. (Çev. Can Madenci), 4. Baskı, Liberte Yayınları.
- Bagchi, K. (2005). Factors Contributing to Global Digital Divide: Some Empirical Results. *Journal of Global Information Technology Management*, 8(3),47-65.
- Baltacı, A. (2018). Nitel araştırmalarda örnekleme yöntemleri ve örnek hacmi sorunsalı üzerine kavramsal bir inceleme. *Bitlis Eren Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 7(1), 231– 274.
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *Nursing Plus Open*, 2, 8-14.
- Bozkurt, A. (2020). Educational technology research patterns in the realm of the digital knowledge age. *Journal of Interactive Media in Education*, 2020 (1), 18.
- Bozkurt, A., Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education*, 15(1), 1-6
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö., Karadeniz, Ş., ve Demirel, F. (2008). *Bilimsel araştırma yöntemleri*.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative*. Prentice Hall Upper Saddle River, NJ.
- Davey, L. (1991). The application of case study evaluations. *Practical Assessment, Research and Evaluation*, 2(9).
- Dündar, S., Candemir, Ö., Demiray, E., Kumtepe, E. G., Öztürk, S., Terlemez, M. S., ve Ulutak, İ. (2017). Anadolu Üniversitesi çalışanlarının açık ve uzaktan öğretime ilişkin tutumları. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, 3(4), 187-227.
- Ergün, M. (1997). *Eğitim Sosyolojisi Nedir?* Ankara: Ocak Yayınları.
- Firat, M. (2019). *Uygulamadan Kurama Açık ve Uzaktan Öğrenme*. Ankara: Nobel Akademi Yayınları.
- Firat, M. ve Güney, Y. (2020). Açıköğretim'in toplumda dijital dönüşüm işlevi. *AUAd*, 6(1), 53-62. Fuchs, C. ve Horak, E. (2008). Africa and the digital divide. *Telematics and informatics*, 25(2), 99-116.
- Forrester, M., ve Sullivan, C. (2018). Doing qualitative research in psychology: A practical guide. *Doing Qualitative Research in Psychology*, 1-376.
- Franchi, T. (2020). The impact of the COVID-19 pandemic on current anatomy education and future careers: A student's perspective. *Anatomical Sciences Education*, 13(3), 312-315.
- Gamoran, A. and Long, D. A. (2007). Equality of educational opportunity: a 40 year retrospective. In M. Teese, Richard; Lamb, Stephen; Duru-Bellat (Ed.), *International Studies in Educational Inequality, Theory and Policy* (ss. 23–47). Dordrecht: Springer.
- Helbig, N. ve Gil-García, R., ve Ferro, E. (2009). Understanding the complexity of electronic government: Implications from the digital divide literature. *Government Information Quarterly*, 26(1), 89–97.
- Holmberg, B. (2008). The Evolution, Principles and Practices of Distance Education. *Studien und Berichte der Arbeitsstelle Fernstudienforschung der Carl von Ossietzky Universität Oldenburg*, 11.
- İnan, M. ve Demir, M. (2018). Eğitimde fırsat eşitliği ve kamu politikaları: Türkiye üzerine bir değerlendirme. *Ankara Hacı Bayram Veli Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 20(2), 337-359.
- İşman, A. (2011). *Uzaktan eğitim*. Ankara: Pegem Akademi.
- Kaya, Z. (2002). *Uzaktan eğitim*. Ankara: Pegem Akademi.
- Klenke, K. (2016). *Qualitative research in the study of leadership*. Emerald Group Publishing Limited.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. New York: Association Press.

- Korkmaz, G., ve Toraman, C. (2021). Exploring medical students' readiness for e-learning and knowledge sharing behaviors in emergency remote learning environments during Covid-19. *Journal of Education in Science Environment and Health*, 7(3), 259-268.
- Küçükler, E. (2010). Türkiye'de eğitim planlaması neyi hedefliyor. *International Conference on New Trends in Education and Their Implications*, 11-13 Kasım, Antalya, 153-157.
- Mercik, V. (2015). *Eğitimde fırsat eşitliği, toplumsal genel başarı ve adalet ilişkisi: PISA projesi kapsamında Finlandiya ve Türkiye deneyimlerinin karşılaştırılması*, (Yayınlanmamış Yüksek Lisans Tezi), Sosyal Bilimler Enstitüsü, Balıkesir Üniversitesi.
- Merriam, S. B., and Grenier, R. S. (2019). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass Publishers.
- Neuman, W. L., and Robson, K. (2014). *Basics of social research*. Pearson Canada Toronto
- OECD (2011). *Education Attainment. in OECD Factbook 2011-2012: Economic, Environmental and Social Statistics*, OECD Publishing.
- Özer, M., ve Suna, H. E. (2020). *Covid-19 salgını ve eğitim. Küresel Salgının Anatomisi: İnsan ve Toplumun Geleceği*. Eds. Şeker, Muzaffer, Özer, Ali and Korkut, Cem. Ankara: Türkiye Bilimler Akademisi (TÜBA), 171-192.
- Sarıbaş, S. ve Babadağ, G. (2015). Temel eğitimin temel sorunları. *Anadolu Eğitim Liderliği ve Öğretim Dergisi*, 3(1), 18-34.
- Sezgin, S., ve Fırat, M. (2020). Covid-19 pandemisinde uzaktan eğitime geçiş ve dijital uçurum tehlikesi. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, 6(4), 37-54.
- Türk Eğitim Derneği. (2007). *Türkiye'de okul öncesi eğitim ve ilköğretim sistemi temel sorunlar ve çözüm önerileri*, özet rapor (Birinci Baskı). Ankara: Adım Ajans.
- Uşun, S. (2006). *Uzaktan Eğitim*. Ankara: Nobel Yayın Dağıtım.
- Verduin, J. R., ve Clark, T. A. (1991). *Distance education: The foundations of effective practice*. Jossey-Bass.
- Xiheng, J. (2020). *How to bridge the digital divide in online education?*
- Yıldız, A. ve Akar Vural, R. (2020). *Covid-19 pandemisi ve derinleşen eğitim eşitsizlikleri*. Türk Tabipleri Birliği Covid-19 pandemisi altıncı ay değerlendirme raporu. Ankara: Türk Tabipler Birliği.
- Yorgancı, S. (2015). Web tabanlı uzaktan eğitim yönteminin öğrencilerin matematik başarılarına etkileri. *Kastamonu Eğitim Dergisi*, 23(3), 1401-1420.