Paradigm shift in education in the post-COVID-19 world: Is decentralized education possible?

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Abstract

Decentralization in education, which is an approach based on learner effectiveness independent of a certain institutional and bureaucratic authority, has become a current issue again due to the global COVID-19 pandemic. This study aims to examine the views of 1648 faculty members working at different universities in Turkey regarding the potential paradigm shift in education in the post-COVID world. A five-question questionnaire was used to collect the data. The data were interpreted with descriptive statistics such as frequency and percentage in terms of the academic title, seniority and academic field. The results reveal that instructors expect a great paradigm shift in education after the pandemic. Despite different opinions in terms of the title, the expected changes in education after the pandemic according to seniority and academic field were found to be similar. In addition, faculty members believe that the COVID-19 pandemic has changed the way people and educators view education; however, it has been concluded that they do not expect a transformation towards certification-based competency regardless of the institution from which the diploma is obtained. In this context, although the faculty expect a paradigm shift in education, they believe that centralization in education will remain as it is.

Keywords: Centralization; centralized education system; educational decentralization; paradigm shift; faculty members; COVID-19

1. Introduction

Centralization is a broad concept used in many fields ranging from politics to economics, from law to administration, from philosophy to education. Centralization can be defined as a system that aims to have authority in the execution of national or regional actions and activities (Ay, 2012; Yetiş, 2006). In this context, the concept can be considered a government principle and control mechanism adopted by nation states, which means the decision-making is done at the highest level within the government

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(Demir, 2019). Therefore, centralization can be interpreted as a non-technical control mechanism (Demir, 2014). The concepts such as central examination, central curriculum, central standards, central institution, and central structure, which are widely used in the education literature, clearly show how dominant the principle of centralization is in education. In this regard, centralization in education means that all activities related to education are carried out centrally.

Curriculum development, implementation and evaluation, conducting educational activities inside and outside the school , teacher education and training, and supervision of schools are the primary activities which adopt the principle of centralization. In other words, for the implementation of standard practices in the context of education throughout a country, government-appointed curriculum experts develop the curricula and share these with teachers to be implemented in all schools in that country (Carl, 2005; Hoang et al., 2020; Parveen & Bone, 2017; Rawling, 2020; Rossi & Kirk, 2020). According to Strike and Posner (1976), a curriculum is developed by political agents (such as the Ministry of National Education) which correspond to a particular ideology, and this curriculum is shared within regions, cities, schools, and finally the classroom environment. However, depending on the region, city, school or class, some elements in the curriculum are neglected intentionally or unintentionally, or it emerges as a curriculum that is included in the extra-curricular activities implemented by transferring emotions and knowledge which are consistent with the curriculum. This is the aspect that emerges in relation to the knowledge and emotions in the curriculum content. Similarly, there are knowledge and emotions that are planned to be taught at school, such as norms, values and beliefs transmitted both in the learning environment, which are not included in formal curriculum They can be ideological, religious, or related to traditions, or they can be very subjective. In this context, the curriculum contains ideological goals and philosophical perspectives (Apple, 1990: 14; Pinar, Reynolds, Slattery & Taubman, 2004: 125).

A centralized curriculum, whether learner-centered or teacher-centered, addresses an "audience". This "audience" basically consists of teachers, students, administrators and parents, and their duty is to "consume" this curriculum "produced" for them. Although these stakeholders contribute to the curriculum development process, their contribution as a "producer" is limited in terms of time and space dynamism. In the countries where the centralized education system is adopted, the teacher is the "consumer" of the curriculum content and pedagogy, and the transmitter of knowledge. The learner, on the other hand, is the "consumer" of the curriculum content and educational situations determined in the curriculum. In addition, the concepts of success and failure are determined in line with this structure of the curriculum. Therefore, in the countries where centralized education system is adopted, measurement and evaluation practices to determine student success are mostly carried out centrally (high school entrance exam, university exam, etc.). Özdemir (2011) states that centralized education is to raise individuals in line with the goals of the industrial society. In this respect, learner centered goals are pushed into the background in centralized education systems, and industrial production is considered as the only means of achieving individual and social welfare.

Developed countries try to ensure a large-scale participation in the decision-making process by moving away from centralization in the management of education, expanding the powers of local authorities, schools and parents, and improving and restructuring school systems. In fact, Although the efforts such as school-based curriculum development, management are observed recently (Şişman & Turan, 2003), these cannot be put into practice.

Due to the global COVID-19 pandemic in 2019, the question "Is decentralized education possible?" has been raised once again. Decentralized education is a system based on student autonomy independent of a certain institutional and bureaucratic authority. However, this does not mean the abolition of educational institutions or anarchist destruction of the teaching profession. Although educational bureaucracy is beneficial in some respects, especially in situations such as social security, order and predictability, it has many problems, especially in the context of actuality, locality and individuality. First of all, a curriculum is usually shaped only by a particular political view of a group, and therefore cannot meet the societal needs. Secondly, a curriculum is implemented over a long period of time and is difficult to change, which therefore becomes out of date, and it takes away students' time and competence.

The concept of "centralization" in education has become important again due to many factors such as creating learning networks, self-directed learning, student interaction in online environments, and taking individual responsibility in learning during the pandemic. This study aims to examine faculty members' views regarding the potential paradigm shift in education in the post-COVID world. The following are the research questions:

- What are the faculty members' views regarding the question "Does COVID-19 pandemic cause a change in education?"
- What are the faculty members' views regarding the question "Has COVID-19 pandemic changed how people view education?"
- What are the faculty members' views regarding the question "Has COVID-19 pandemic changed the way educators view education?"
- What are the faculty members' views regarding the question "Is it possible to have a competency-based certification system rather than just having a diploma to be able to practise a profession?"
- What are the faculty members' views regarding the question "If education becomes independent and decentralized, how do you think the concept of equality in education will be affected by this situation?"

2. Method

This descriptive study examines the faculty members' views about the potential paradigm shift in education as a result of the experiences in education during the COVID-19 pandemic.

2.1. Participants

Purposive sampling was used in the study. The data were collected from all the faculty members working across Turkey. To do this, the researchers used Higher Education Council (YÖK) website and listed all universities in Turkey. The e-mail addresses of all faculty members were accessed through the web pages of these universities. An informative e-mail with a Google Forms link and information about the content of the research was sent to the faculty members. Participation in the research was carried out on a voluntary basis. To do this, the researchers placed an option ""I consent to participate in the research" on Google Forms. Only the faculty members who gave their consent could see the questions in the form. When using purposeful sampling, researchers determine the characteristics of the people who will form the research universe and reach people who fit these characteristics. Based on the researcher's knowledge of the universe, it is ensured that the people (subjects) who can provide the best information for the purpose of the research are selected (Christensen, Johnson & Turner, 2014; McMillan & Schumacher, 2014). Table 1 indicates some demographic variables of 1648 faculty members participating in the research.

Table 1. Demographic variables about the participants

	Variable	Frequency	Percentage
Gender	Female	860	52.2
	Male	788	47.8
Academic Title	Research Assistant	198	12
	Lecturer	200	12.1
	Dr. Research Assistant	112	6.8
	Dr. Lecturer	124	7.5
	Assistant Professor	404	24.5
	Associate Professor	314	19.1
	Prof. Dr.	296	18
Seniority	Less Than 5 Years	290	17.6
	6-10 Years	450	27.3
	11-15 Years	282	17.1
	16 Years and Above	626	38
Academic Field	Educational Sciences	592	35.9
	Health Sciences	296	18
	Engineering	346	21
	Arts	72	4.4
	Law	70	4.2
	Architecture	38	2.3
	Life Sciences	72	4.4
	Liberal Arts and Basic Sciences	22	1.3
	Foreign Languages/Philology	54	3.3
	Applied Sciences	22	1.3
	Social Sciences and Humanities	16	1
	Theology	48	2.9

2.2. Data Collection Instrument and the Process

A questionnaire was developed by the researchers. To do this, a literature review was conducted for the questionnaire and questions were listed. To ensure the validity and reliability of the items in this pool, the researchers asked for expert opinions The experts included three measurement and evaluation experts, a curriculum and instruction

expert, an educational administration expert, a lifelong learning expert, an educational psychology, and two critical pedagogy experts. The consistency between the expert opinions was evaluated with Krippendorff Alpha, and it was found to be .91, which is a high level of consistency (Krippendorff, 2004). The questionnaire form was finalized according to expert opinions. In the data collection process, an e-mail was sent to the faculty members. The content of the e-mail consisted of the information about the researchers, the scope of the research, and the Google Forms link for the questionnaire. Participants reached the questionnaire via a Google Forms link. To participate in the questionnaire, the participants were asked to give their consent to state that they participate in the study voluntarily. The data were extracted from the system to an excel file, transferred to the statistical analysis program and analyzed.

2.3. Data Analysis

The data were transferred to the JAMOVI package. The reason for choosing this software is that it is free of charge. The data were interpreted with descriptive statistics such as frequency and percentage in terms of the variables of academic title, seniority and academic field.

3. Findings

3.1. Findings about the first research question (Does COVID-19 pandemic cause a change in education?)

All of the participants answered "Yes" to the question "Does COVID-19 pandemic cause a change in education?". The following question was "If your answer is "Yes", what kind of change are you expecting?". Table 2 shows the responses given to this question.

Table 2. Expected changes in education after the pandemic

	Statements	f	%
1	The change will take place in the learning environment (virtual classroom, etc.).	1648	100
2	Educators will have to change.	1600	97.1
3	Society's expectations from education will change.	1012	61.4
4	There will be changes in the technological devices and tools used in education.	1550	94.1
5	Curriculum will have to change.	1260	76.5
6	Educational administration and management mentality will change.	1064	64.6
7	Central structures (Higher Education Council or Ministry of National Education) on education will lose their impact on education.	488	29.6
8	The number of physical educational environments (such as universities, public schools, private schools, colleges) will be less.	824	50
9	Initiatives that offer educational opportunities in the digital environment (such as YouTube, Udemy) will increase and become stronger.	1404	85.2
10	Digital platforms (Microsoft Teams, Google Meets, Adobe Connect, Zoom, etc.) will become stronger and diversified.	1598	97
11	Augmented reality software in education will become widespread and cheaper.	1256	76.2
12	Where you receive education and who provides it will not matter, and independent units that evaluate the quality of the education will be formed.	920	55.8

It is clear that faculty members expect great changes in education after the COVID-19 pandemic. According to the percentages, most of them believe that learning environments and the curriculum used today will have to change, what society expect from education will be different from now, there will be changes in the technological devices and tools used in education, and digital platforms will become stronger and diversified. However, they do not expect any change related to the loss of power in the central education structures, they believe that where you receive education and who provides it will not matter. Table 3 shows the expected changes in education after the pandemic according to participants' seniority.

Table 3. Expected changes in education after the pandemic according to participants' seniority

	Statements	Less than 5 Years	6-10 Years	11-15 Years	16 Years and over
		f(%)	f(%)	f(%)	f(%)
1	The change will take place in the learning environment (virtual classroom, etc.).	290(100)	450(100)	282(100)	626(100)
2	Educators will have to change.	280(96.6)	436(96.9)	274(97.2)	610(97.4)
3	Society's expectations from education will change.	170(58.6)	278(61.8)	172(61)	392(62.6)
4	There will be changes in the technological devices and tools used in education.	268(92.4)	434(96.4)	268(95)	580(92.7)
5	Curriculum will have to change.	220(75.9)	348(77.3)	222(78.7)	470(75.1)
6	Educational administration and management mentality will change.	192(66.2)	298(66.2)	172(61)	402(64.2)
7	Central structures (Higher Education Council or Ministry of National Education) on education will lose their impact on education.	102(35.2)	128(28.4)	80(28.4)	178(28.4)
8	The number of physical educational environments (such as universities, public schools, private schools, colleges) will be less.	146(50.3)	244(54.2)	148(52.5)	286(45.7)
9	Initiatives that offer educational opportunities in the digital environment (such as YouTube, Udemy) will increase and become stronger.	250(86.2)	374(83.1)	248(87.9)	532(85)
10	Digital platforms (Microsoft Teams, Google Meets, Adobe Connect, Zoom, etc.) will become stronger and diversified.	286(98.6)	424(94.2)	276(97.9)	612(97.8)
11	Augmented reality software in education will become widespread and cheaper.	218(75.2)	372(82.7)	220(78)	446(71.2)
12	Where you receive education and who provides it will not matter, and independent units that evaluate the quality of the education will be formed.	164(56.6)	252(56)	156(55.3)	348(55.6)

The expected changes in education after the pandemic are almost at same level in terms of participants' seniority. This shows the fact that the faculty members have common ideas about the expected changes in education. The expected changes in education after the pandemic according to participants' academic titles were given in Table 4.

Table 4. Expected changes in education after the pandemic according to participants' academic titles

	Statements	Res. Assist.	Lec.	Dr. RA	Dr. Lec.	Asst. Prof.	Assoc. Prof.	Prof.Dr.
		f(%)	f(%)	f(%)	f(%)	f(%)	f(%)	f(%)
1	The change will take place in the learning environment (virtual classroom, etc.).	198(100)	200(100)	112(100)	124(100)	404(100)	314(100)	296(100)
2	Educators will have to change.	184(92.9)	196(98)	108(96.4)	118(95.2)	398(98.5)	308(98.1)	288(97.3)
3	Society's expectations from education will change.	146(73.7)	124(62)	68(60.7)	62(50)	244(60.4)	182(58)	186(62.8)
4	There will be changes in the technological devices and tools used in education.	192(97)	190(95)	106(94.6)	120(96.8)	378(93.6)	295(93.6)	270(91.2)
5	Curriculum will have to change.	156(78.8)	160(80)	92(82.1)	90(72.6)	316(78.2)	224(71.3)	222(75)
6	Educational administration and management mentality will change.	128(64.6)	136(68)	74(66.1)	64(51.6)	284(70.3)	188(59.9)	190(64.2)
7	Central structures (Higher Education Council or Ministry of National Education) on education will lose their impact on education.	60(30.3)	70(35)	30(26.8)	28(22.6)	132(32.7)	84(26.8)	84(28.4)
8	The number of physical educational environments (such as universities, public schools, private schools, colleges) will be less.	90(45.5)	112(56)	60(53.6)	72(58.1)	204(50.5)	140(44.6)	146(49.3)
9	Initiatives that offer educational opportunities in the digital environment (such as YouTube, Udemy) will increase and become stronger.	164(82.8)	162(81)	94(83.9)	116(93.5)	350(86.6)	266(84.7)	252(85.1)
10	Digital platforms (Microsoft Teams, Google Meets, Adobe Connect, Zoom, etc.) will become stronger and diversified.	192(97)	188(94)	108(96.4)	122(98.4)	394(97.5)	306(97.5)	288(97.3)
11	Augmented reality software in education will become widespread and cheaper.	158(79.8)	146(73)	96(85.7)	100(80.6)	310(76.7)	228(72.6)	218(73.6)
12	Where you receive education and who provides it will not matter, and independent units that evaluate the quality of the education will be formed.	114(57.6)	108(54)	60(53.6)	78(62.9)	212(52.5)	176(56.1)	172(58.1)

According to Table 4, assistant professors are the ones who do not think that society's expectations from education will change. While the expectation of "Educational

administration and management mentality will change" is not high in lecturers who have a Ph.D. degree, it is higher in assistant professors. Research assistants, lecturers and lecturers (Ph.D.) highly expect that "Central structures (Higher Education Council or Ministry of National Education) on education will lose their impact on education". The expectation of "The number of physical educational environments (such as universities, public schools, private schools, colleges) will be less" is high in the lecturers, doctoral research assistants and lecturers (Ph.D.). The lecturers (Ph.D.) also believe that that "where you receive education and who provides it will not matter, and independent units that evaluate the quality of the education will be formed". Table 5 shows the expected changes in education after the pandemic according to the participants' academic field.

Table 5. Expected changes in education after the pandemic according to the participants' academic field

	Statements	Educational Sci.	Health Sci.	Social Sci.	Life Sci.	Applied Sci.
		f(%)	f(%)	f(%)	f(%)	f(%)
1	The change will take place in the learning environment (virtual classroom, etc.).	592(100)	296(100)	260(100)	94(100)	406(100)
2	Educators will have to change.	574(97)	290(98)	250(96.2)	92(97.9)	394(97)
3	Society's expectations from education will change.	376(63.5)	174(58.8)	164(63.1)	48(51.1)	250(61.6)
4	There will be changes in the technological devices and tools used in education.	554(93.6)	276(93.2)	254(97.7)	84(89.4)	382(94.1)
5	Curriculum will have to change.	474(80.1)	234(79.1)	186(71.5)	68(72.3)	298(73.4)
6	Educational administration and management mentality will change.	394(66.6)	180(60.8)	160(61.5)	64(68.1)	266(65.5)
7	Central structures (Higher Education Council or Ministry of National Education) on education will lose their impact on education.	170(28.7)	92(31.1)	66(25.4)	28(29.8)	132(32.5)
8	The number of physical educational environments (such as universities, public schools, private schools, colleges) will be less.	300(50.7)	152(51.4)	126(48.5)	52(55.3)	194(47.8)
9	Initiatives that offer educational opportunities in the digital environment (such as YouTube, Udemy) will increase and become stronger.	486(82.1)	264(89.2)	222(85.4)	78(83)	354(87.2)
10	Digital platforms (Microsoft Teams, Google Meets, Adobe Connect, Zoom, etc.) will become stronger and diversified.	570(96.3)	286(96.6)	252(96.9)	90(95.7)	400(98.5)
11	Augmented reality software in education will become widespread and cheaper.	450(76)	226(76.4)	210(80.8)	68(72.3)	302(74.4)
12	Where you receive education and who provides it will not matter, and independent units that evaluate the quality of the education will be formed.	340(57.4)	174(58.8)	134(51.5)	60(63.8)	212(52.2)

In order to conduct the data analysis regarding the expected changes in education after the pandemic according to the academic field more easily, twelve academic fields (Educational Sciences, Health Sciences, Engineering, Arts, Law, Architecture, Life Sciences, Basic Sciences, Foreign Languages/Philology, Applied Sciences, Social Sciences and Humanities, Theology) are combined under five basic fields (Educational Sciences, Health Sciences, Social Sciences, Natural Sciences and Applied Sciences). Faculty members' opinions about the expected changes in education after the pandemic in terms of their academic fields are similar. The biggest expectation is that the change will take place in the learning environment (virtual classroom, etc.), educators will have to change,

there will be changes in the technological devices and tools used in education, initiatives that offer educational opportunities in the digital environment (such as YouTube, Udemy) will increase and become stronger, digital platforms (Microsoft Teams, Google Meets, Adobe Connect, Zoom, etc.) will become stronger and diversified. On the other hand, the lowest expectation was that central structures (Higher Education Council or Ministry of National Education) on education will lose their impact on education. These findings reveal that all faculty members expect many changes in education in the post-COVID world, and their opinions are common regardless of their academic fields; however, centralized education will not lose its power. Apart from these frequently expressed statements, some faculty members stated the following using the "Other" option:

- A flexible approach will of course be adopted in education, but no technology can replace face-to-face education in the classroom environment.
- Even if the educational needs change, there will not be a radical change in Turkey unless the governmentality changes.
- Quality management system in education will gain importance. The diplomas given by universities will not be that much important anymore. A competence-based approach and central assessment and evaluation system will be required for each profession.
- The quality of education will decrease.
- A Bitcoin-like decentralized education system will be possible.
- It will be necessary to produce support solutions that require practice and performance in the fields of arts.
- If education is carried out online, education will always leave lots to be desired.
- Centralized education by governmental bodies cannot be prevented unless the authorities give up. In terms of law, person has rights and responsibilities. If YouTube gives a diploma or a school gives a diploma through YouTube, it will cause legal disputes in the future. States/governments are necessary for the protection of the citizen. The most important is the authority of "responsibility". What happens if incompetent and unprofessional people become medical doctors, teachers or judges…
- Traditional methods used to measure success in education will not be sufficient and "continuous quality improvement" processes according to international standards will be on the agenda of all universities.
- There will be great changes in terms of equal opportunity in education, and measurement and evaluation practices in education will improve.
- Individuals who learn how to learn can monitor and will be able to evaluate themselves.
- Homeschooling may now be a topic of discussion in Turkey.
- Hybrid form of education may become widespread especially in universities.
- Most of the physical learning environments (school buildings, campuses, etc.) will remain idle. The transformation of buildings will be inevitable. In addition, cooperation between educational institutions will increase.
- The importance of diploma will decrease, and certification will gain more importance. Good schools will still maintain their importance in the short term; however, in the long run, experts will gain importance.

- The importance of face-to-face education will increase. Social environment, social relations, face-to-face relations between educators and students, etc. are very important for education. The environment where the education is provided is very important for students.
- The quality of education in the departments of applied sciences will be affected negatively.

3.2. Findings about the second research question (Has COVID-19 pandemic changed how people viewed education?)

920 (55.8%) of the faculty members participating in the study said "Yes" to the question "Has COVID-19 pandemic changed how people view education?" while 728 (44.2) of them answered "No". The question that followed this question was "If your answer is yes, what kind of change has taken place?" The most frequent answers given by the participants to this question are shown in Table 6.Assume that your reader has a professional knowledge of statistical methods. Do not review basic concepts and procedures or provide citations for the most commonly used statistical procedures. If, however, there is any question about the appropriateness of a particular statistical procedure, justify its use by clearly stating the evidence that exists for the robustness of the procedure as applied.

Table 6. Changes in society's view about the education after the pandemic

	Statements	f	%
1	People will give importance to the quality of the education they receive rather than the diploma they get.	403	24.5
2	People lose their belief in the possibility of changing their social status through education.	419	25.4
3	People will have difficulty in having a job with a diploma, and they will take more training and short-term courses in which they can gain competency.	622	37.7
4	People will try to receive training from foreign countries in digital environments.	622	37.7
5	People will force central structures (Higher Education Council or Ministry of National Education) by demanding more from the authority.	622	37.7
6	People will value specialties in education more, and they will value receiving training from a better professional/expert (i.e., looking for a good doctor when you are sick) rather than the institution.	311	18.9

Faculty members believe that people will have difficulty in having a job with a diploma, and they will take more training and short-term courses in which they can gain competency, they will try to receive training from foreign countries in digital environments, people will force central structures (Higher Education Council or Ministry of National Education) by demanding more from the authority. Table 7 shows the expected changes about how society view education according to faculty members' seniority.

Table 7. Expected changes about how society view education according to faculty members' seniority

Statements	Less than 5 years	6-10 years	11-15 years	16 years and over
	f(%)	f(%)	f(%)	f(%)
1 People will give importance to the quality of the education they receive rather than the diploma they get.	65(22.4)	103(22.9)	80(28.4)	155(24.8)
2 People lose their belief in the possibility of changing their social status through education.	65(22.4)	108(24)	83(29.4)	163(26)
3 People will have difficulty in having a job with a diploma, and they will take more training and short-term courses in which they can gain competency.	98(33.8)	160(35.6)	122(43.3)	242(38.7)
4 People will try to receive training from foreign countries in digital environments.	98(33.8)	160(35.6)	122(43.3)	242(38.7)
5 People will force central structures (Higher Education Council or Ministry of National Education) by demanding more from the authority.	98(33.8)	160(35.6)	122(43.3)	242(38.7)
6 People will value specialties in education more, and they will value receiving training from a better professional/expert (i.e., looking for a good doctor when you are sick) rather than the institution.	49(16.9)	80(17.8)	61(21.6)	121(19.3)

Expectations regarding the changes that will occur in the society's perspective on education according to the seniority (year of experience) are at low level. However, regardless of their seniority, they believe that people will have difficulty in having a job with a diploma, and they will take more training and short-term courses in which they can gain competency, they will try to receive training from foreign countries in digital environments, People will force central structures (Higher Education Council or Ministry of National Education) by demanding more from the authority. Table 8 shows what changes the faculty member expect in the society's view of education after the pandemic by academic title.

Table 8. Faculty members' expectations about the change in the society's view of education after the pandemic according to their academic titles.

	Statements	Res. Assist.	Lec.	Dr. R.A	Dr. Lec.	Asst. Prof.	Assoc. Prof.	Prof. Dr.
		f(%)	f(%)	f(%)	f(%)	f(%)	f(%)	f(%)
1	People will give importance to the quality of the education they receive rather than the diploma they get.	49((24.7)	50(25)	28(25)	39(31.5)	99(24.5)	73(23.2)	65(22)
2	People lose their belief in the possibility of changing their social status through education.	50(25.3)	50(25)	31(27.7)	39(31.5)	105(26)	76(24.2)	68(23)
3	People will have difficulty in having a job with a diploma, and they will take more training and short-term courses in which they can gain competency.	78(39.4)	74(37)	46(41.1)	58(46.8)	152(37.6)	116(36.9)	98(33.1)
4	People will try to receive training from foreign countries in digital environments.	78(39.4)	74(37)	28(25)	62(50)	205(50.7)	116(36.9)	91(30.7)
5	People will force central structures (Higher Education Council or Ministry of National Education) by demanding more from the authority.	78(39.4)	74(37)	46(41.1)	61(49.2)	155(38.4)	116(36.9)	100(33.8)
6	People will value specialties in education more, and they will value receiving training from a better professional/expert (i.e., looking for a good doctor when you are sick) rather than the institution.	39(19.7)	37(18.5)	23(20.5)	29(23.4)	76(18.8)	58(18.5)	49(16.6)

The faculty members' expectations regarding the views of the society towards education after the COVID-19 pandemic seem to be quite similar to each other. The difference in the expectations is in the statement "People will try to receive training from foreign countries in digital environments.". Research assistants, lecturers, doctoral research assistants, associate professors and professors have this expectation in the range of 30-40% while lecturers (Ph.D.) and assistant professors have this expectation around 50%. Table 9 shows the faculty members' expectations regarding the views of the society towards education after the COVID-19 pandemic according to their academic fields.

Table 9. Faculty members' expectations regarding the views of the society towards education after the COVID-19 pandemic according to their academic fields

	Statements	Educational Sci.	Health Sci.	Social Sci.	Life Sci.	Applied Sci.
		f(%)	f(%)	f(%)	f(%)	f(%)
1	People will give importance to the quality of the education they receive rather than the diploma they get.	142(24)	62(20.9)	75(28.8)	26(27.7)	98(24.1)
2	People lose their belief in the possibility of changing their social status through education.	151(25.5)	63(21.3)	78(30)	27(28.7)	100(24.6)
3	People will have difficulty in having a job with a diploma, and they will take more training and short-term courses in which they can gain competency.	218(36.8)	98(33.1)	110(42.3)	36(38.3)	160(39.4)
4	People will try to receive training from foreign countries in digital environments.	218(36.8)	99(50.5)	110(42.3)	31(32.9)	160(39.4)
5	People will force central structures (Higher Education Council or Ministry of National Education) by demanding more from the authority.	218(36.8)	100(33.8)	120(46.2)	41(43.6)	160(39.4)
6	People will value specialties in education more, and they will value receiving training from a better professional/expert (i.e., looking for a good doctor when you are sick) rather than the institution.	109(18.4)	49(16.6)	55(21.2)	18(19.1)	80(19.7)

Faculty members' expectations regarding the views of the society towards education after the COVID-19 pandemic according to their academic fields seem to be very similar to each other. The expectation of faculty members who work in the field of health sciences is somewhat at higher level than those working in other fields. They believe that "People will try to receive training from foreign countries in digital environments." Apart from this frequently expressed statement, some faculty members stated the following using the "Other" option:

- Initiatives to benefit from educational opportunities will increase.
- People will try every way to get a diploma because they receive insufficient and poor quality education in institutions.
- People may want to use the advantages of online education despite being aware of its disadvantages. They may look for an online option rather than in a physical learning environment. Because everyone is now convinced that it is possible to progress even with a bad online education.
- The perception that the teacher or faculty members get paid without being physically in a classroom environment may change the perspective society about academia.
- Students will give more importance to the diplomas and grades they received from the courses rather than the quality of education.
- I wish there were changes written above, but I am not very hopeful.
- The quality of education has always been important. Why would you prefer to get a diploma if you are not competent enough for that profession?
- The faculty member evaluation criteria will change.
- I think education will not be as effective as it used to be, and students will be less enthusiastic about education.

- Even parents have had some experience about online learning platforms while they are checking their children's learning. In my opinion, these parents will demand online education courses for themselves.
- Education will be more valuable, and the best education will be received from wherever it is provided.
- Those who said "computers will reduce the need for teachers, learning is possible without teachers" realized that they were wrong.
- Online courses will turn into a "pot of gold". This sector will earn good money.

3.3. Findings about the third research question (Has COVID-19 pandemic changed how educators view education?)

Faculty members were asked the question "Has COVID-19 pandemic changed the way educators view education?". 1484 (90%) of the faculty said "yes" whereas 164 (10%) of them said "no". Those who answered "yes" were asked what changes occurred. Table 10 shows the responses given to this question.

Table 10. Faculty members' views about the changes in educators' view of education after the pandemic

	Statements	f	%
1	The educators who cannot keep up with the changes and requirements of the age and who cannot keep up with digitalization will have to retire.	970	58.9
2	The educators who cannot keep up with the requirements of the age and cannot keep up with digitalization will be pushed out of the system (will not be able to work at educational institutions).	568	34.5
3	The educators will have to develop the necessary skills (using digital media, preparing interactive materials for online learning environments, etc.).	974	59.1
4	The educators will take online courses in order to improve themselves and use digital platforms that provide certificates.	986	59.8

More than 50% of the faculty members who answered "yes" focused on the expectations "The educators who cannot keep up with the changes and requirements of the age and who cannot keep up with digitalization will have to retire", "The educators will have to develop the necessary skills (using digital media, preparing interactive materials for online learning environments, etc.) and "The educators will take online courses in order to improve themselves and use digital platforms that provide certificates." Table 11 shows the expected changes in educators' view of education after the COVID-19 pandemic according to the seniority of the faculty members.

Table 11. Expected changes in educators' view of education after the COVID-19 pandemic according to faculty members' seniority

	Statements	Less than 5 Years	6-10 Years	11-15 Years	16 Years and over
		f(%)	f(%)	f(%)	f(%)
1	The educators who cannot keep up with the changes and requirements of the age and who cannot keep up with digitalization will have to retire.	174(60)	266(59.1)	166(58.9)	364(58.1)
2	The educators who cannot keep up with the requirements of the age and cannot keep up with digitalization will be pushed out of the system (will not be able to work at educational institutions).	111(38.3)	149(33.1)	93(33)	215(34.3)
3	The educators will have to develop the necessary skills (using digital media, preparing interactive materials for online learning environments, etc.).	168(57.9)	261(58)	173(61.3)	372(59.4)
4	The educators will take online courses in order to improve themselves and use digital platforms that provide certificates.	174(60)	269(59.8)	185(65.6)	358(57.2)

Expected changes in educators' view of education after the COVID-19 pandemic according to faculty members' seniority are similar to each other. Table 12 shows the expected changes in educators' views of education after the pandemic according to the academic titles of the faculty members.

Table 12. Expected changes in educators' view of education after the pandemic according to the academic titles of the faculty members

	Statements	Res.Assis.	Lec.	Dr.RA	Dr.Lec.	Ass.Prof.	Assoc.Prof.	Prof.Dr.
		f(%)	f(%)	f(%)	f(%)	f(%)	f(%)	f(%)
1	The educators who cannot keep up with the changes and requirements of the age and who cannot keep up with digitalization will have to retire.	116(58.6)	120(60)	56(50)	92(74.2)	258(63.9)	156(49.7)	172(58.1)
2	The educators who cannot keep up with the requirements of the age and cannot keep up with digitalization will be pushed out of the system (will not be able to work at educational institutions).	72(36.4)	81(40.5)	34(30.4)	48(38.7)	126(31.2)	106(33.8)	101(34.1)
3	The educators will have to develop the necessary skills (using digital media, preparing interactive materials for online learning environments, etc.).	112(56.6)	122(61)	60(53.6)	81(65.3)	257(63.6)	170(54.1)	172(58.1)
4	The educators will take online courses in order to improve themselves and use digital platforms that provide certificates.	113(57.1)	128(64)	66(58.9)	82(66.1)	250(61.9)	190(60.5)	157(53)

In terms of the faculty members' academic titles, the changes that they expect in the way educators view education after the COVID-19 pandemic are similar. However, it has been observed that the expectation "The educators who cannot keep up with the changes and requirements of the age and who cannot keep up with digitalization will have to retire" is higher for the lecturers with Ph.D. than for other academic titles. Table 13 shows the changes that faculty members expect in the way educators view education after the COVID-19 according to academic field.

Table 13. The changes that faculty members expect in the way educators view education after the COVID-19 according to academic field

	Statements	Educational Sci.	Health Sci.	Social Sci.	Life Sci.	Applied Sci.
		f(%)	f(%)	f(%)	f(%)	f(%)
1	The educators who cannot keep up with the changes and requirements of the age and who cannot keep up with digitalization will have to retire.	342(57.8)	166(56.1)	158(60.8)	62(66)	242(59.6)
2	The educators who cannot keep up with the requirements of the age and cannot keep up with digitalization will be pushed out of the system (will not be able to work at educational institutions).	210(35.5)	99(33.4)	88(33.8)	37(39.4)	134(33)
3	The educators will have to develop the necessary skills (using digital media, preparing interactive materials for online learning environments, etc.).	345(58.3)	156(52.7)	154(59.2)	65(69.1)	254(62.6)
4	The educators will take online courses in order to improve themselves and use digital platforms that provide certificates.	399(67.4)	177(59.8)	153(58.8)	62(66)	195(48)

According to the academic fields, faculty members' expectations of changes in the perspective of educators towards education after the COVID-19 pandemic revealed that the faculty members from the Department of Life Sciences stated "the educators who cannot keep up with the changes and requirements of the age and who cannot keep up with digitalization will have to retire" more than the faculty members from other academic fields. Similarly, the faculty members from the academic field of Life Sciences and Applied Sciences expect that the educators will have to develop the necessary skills (using digital media, preparing interactive materials for online learning environments, etc.) more than the faculty members from other academic fields. On the other hand, the faculty members from the Applied Sciences are the ones who do not much expect that the educators will take online courses in order to improve themselves and use digital platforms that provide certificates. Some faculty members stated the following using the "Other" option:

- I believe the ones who think distance education process has more disadvantages will increase in number, will try to change the role of the educator.
- The educators who cannot keep up with the date and the necessities have to accept that they are not competent enough instead of finding the system or online education inadequate.
- It is not fair to put all the burden on the shoulders of educators.

- Due to the pandemic and online education, the incompetent faculty members who could not contribute enough to students' learning in terms of quality even before the pandemic, but who try to give the impression that they are doing great, and who have always been nice to the university/school to get administration positions have now had another opportunity to graduate students by giving them undeserved grades.
- I think educators believe that this process (online education) will be temporary. However, in the near future, especially in higher education, digitalization will increase regardless of the pandemic. However, this is a political choice. A government who advocates social democracy can move away from the online education market and increase support for face-to-face education.
- Scientific studies will make us decide on this…Educational scientists will produce research-based solutions on many issues such as the need for planning and programming of education, sociology, method, approach, environment, reality, philosophy, evaluation, and if the educational policy makers allow and trust the system, they will run it. Of course, in this process, they will think better than the society and experts of other disciplines.
- Although some subjects can be taught through remote Teaching, we need educators in applied sciences. They need to observe and facilitate students' learning. Therefore, the fields which require hands-on practice needs physical environment but can be supported by online environments.
- Some educators will have to redefine their educational audience and teaching opportunities. Even if they do not officially work at an institution, they will be able to choose the masses they want to teach.
- Educator mobility will take place among universities.
- Educators will have to evaluate themselves according to certain criteria.
- Real educators will not be pushed out of the system; therefore, they will develop and adapt themselves to the current requirements.
- Access to information and knowledge will be easier. Materials such as lecture notes that some educators keep secret (not shared) will have no value.
- Educators will be polarized as traditionalists or modernists, just like medical professionals do.

3.4. Findings about the fourth research question (Is it possible to have a competency-based certification system rather than just having a diploma to be able to practise a profession?)

In the United States or many European countries, it is not enough to have a degree from a university to start a profession. In order to be able to work in that profession, you need to have your competency approved by getting a certificate from an institution that makes an independent assessment. Certificates are not valid for life. For instance, three years after you get that certificate, you need to have your proficiency level approved again by taking an exam. In this case, it doesn't matter where you have received your education or diploma. To be certified, you need to develop your competences. According to the responses, 678 (41.1%) of the faculty members stated that they expect such a change in this direction, and 970 (58.9%) do not. This finding indicates that the faculty members

do not believe the competency-based certification system can substitute for diploma system. In addition, the finding shows that the faculty members who participated in the study do not have enough information about the competency-based training and certification system which is quite common in the USA and Europe.

3.5. Findings about the fifth research question (If education becomes independent and decentralized, how do you think the concept of equality in education will be affected by this situation?)

The faculty members were asked the question: "If education becomes independent and decentralized, how do you think the concept of equality in education will be affected by this situation?". Table 14 shows the participants' responses.

Table 14. Participants' opinions about how equality of opportunity in education is affected by decentralization

	Statements	f	%
1	Equality of opportunity will not suffer from the decentralization of education.	156	9.5
2	Since equality of opportunity in education have never been achieved, decentralized education does not affect inequality or equality of opportunity.	316	19.2
3	The internet is open to everyone and easy to access. Equality of opportunity will be positively affected by this.	592	35.9
4	Education has already been in an uneven environment due to the private sector. Decentralized education will support equal opportunities for everyone.	298	18.1
5	Those who have enough money can receive online education, which deepen the inequality of opportunity in education.	984	59.7

What faculty members expect most is "those who have enough money can receive online education, which deepen the inequality of opportunity in education" whereas the least expected one is "Equality of opportunity will not suffer from the decentralization of education". Table 15 shows the expected changes about how equality of opportunity in education is affected by decentralization.

Table 15. Participants' opinions about how equality of opportunity in education is affected by decentralization according to their seniority

	Statements	Less than 5 Years	6-10 Years	11-15 Years	16 Years and Above
		f(%)	f(%)	f(%)	f(%)
1	Equality of opportunity will not suffer from the decentralization of education.	20(6.9)	42(9.3)	32(11.3)	62(9.9)
2	Since equality of opportunity in education have never been achieved, decentralized education does not affect inequality or equality of opportunity.	74(25.5)	94(20.9)	42(14.9)	106(16.9)
3	The internet is open to everyone and easy to access. Equality of opportunity will be positively affected by this.	90(31)	170(37.8)	90(31.9)	242(38.7)
4	Education has already been in an uneven environment due to the private sector. Decentralized education will support equal opportunities for everyone.	52(17.9)	92(20.4)	44(15.6)	110(17.6)
5	Those who have enough money can receive online education, which deepen the inequality of opportunity in education.	170(58.6)	256(56.9)	184(65.2)	374(59.7)

According to the responses, "Equality of opportunity will not suffer from the decentralization of education" was expected most by the faculty members who have 11-15 years of experience while the ones who has less than 5 years of experience do not expect that much. In other expectations, faculty members have almost the same expectation level according to their seniority. Table 16 shows the expected changes about how the equality of opportunity in education is affected by decentralization in education according to the academic titles of the faculty members.

Table 16. Expected changes in equality of opportunity in education in case of decentralized education after the pandemic according to faculty members' academic titles

	Statements	Res.Assis.	Lec.	Dr.RA	Dr.Lec.	Ass.Prof.	Assoc.Prof.	Prof.Dr.
		f(%)	f(%)	f(%)	f(%)	f(%)	f(%)	f(%)
1	Equality of opportunity will not suffer from the decentralization of education.	14(7.1)	18(9)	10(8.9)	12(9.7)	38(9.4)	30(9.6)	34(11.5)
2	Since equality of opportunity in education have never been achieved, decentralized education does not affect inequality or equality of opportunity.	46(23.2)	34(17)	20(17.9)	22(17.7)	90(22.3)	42(13.4)	62(20.9)
3	The internet is open to everyone and easy to access. Equality of opportunity will be positively affected by this.	70(35.4)	60(30)	56(50)	42(33.9)	124(30.7)	126(40.1)	114(38.5)
4	Education has already been in an uneven environment due to the private sector. Decentralized education will support equal opportunities for everyone.	38(19.2)	30(15)	26(23.2)	24(19.4)	66(16.3)	62(19.7)	52(17.6)
5	Those who have enough money can receive online education, which deepen the inequality of opportunity in education.	100(50.5)	134(67)	62(55.4)	80(64.5)	254(62.9)	190(60.5)	164(55.4)

While professor doctors, assistant professors, lecturers (Ph.D.) and lecturers are the ones who do not expect the equality of opportunity in education will be affected by decentralization of education, doctor assistant researchers have this expectation the most. Similarly, while research assistants do not expect that those who have enough money can receive online education, and this will deepen the inequality of opportunity in education, the lecturers, lecturers (Ph.D.), assistant professors and associate professors have the highest expectation about this. Table 17 shows the expected changes about the equality of opportunity in education in case of decentralization in education according to faculty members academic fields.

Table 17. Expected changes about the equality of opportunity in education in case of decentralization in education according to faculty members' academic fields

	Statements	Educational Sci.	Health Sci.	Social Sci.	Life Sci.	Applied Sci.
		f(%)	f(%)	f(%)	f(%)	f(%)
1	Equality of opportunity will not suffer from the decentralization of education.	48(8.1)	18(6.1)	26(10)	10(10.6)	54(13.3)
2	Since equality of opportunity in education have never been achieved, decentralized education does not affect inequality or equality of opportunity.	110(18.6)	70(23.6)	50(19.2)	26(27.7)	60(14.8)
3	The internet is open to everyone and easy to access. Equality of opportunity will be positively affected by this.	212(35.8)	84(28.4)	86(33.1)	40(42.6)	170(41.9)
4	Education has already been in an uneven environment due to the private sector. Decentralized education will support equal opportunities for everyone.	114(19.3)	50(16.9)	42(16.2)	24(25.5)	68(16.7)
5	Those who have enough money can receive online education, which deepen the inequality of opportunity in education.	394(66.6)	184(62.2)	144(55.4)	60(63.8)	202(49.8)

The faculty members who work in applied sciences do expect that equality of opportunity will suffer from the decentralization of education while the ones who work in the field of health sciences expect inequality of opportunity will arise in case of decentralization in education. This finding shows that faculty members in health sciences have hesitations about the decentralization of education. This may be due to the fact that education in health sciences is based on certain international standards which are accepted across the world. In other words, if education is provided that independently from certain standards, the graduates will not have the same competences, and this may not be good for the public health.

Most of the faculty members in Life Sciences believe that decentralized education does not affect inequality or equality of opportunity since the equality of opportunity in education have never been achieved while the faculty in Applied Sciences think just the opposite. Similarly, most of the faculty in Life Sciences think that equality of opportunity will be positively affected because the internet is open to everyone and easy to access whereas the faculty in Health Sciences do not expect the equality of opportunity in education will be positively affected because of easy access to the internet.

Another finding is that most of the faculty in Life Sciences think that decentralized education will support equal opportunities for everyone as education has already been in an uneven environment due to the private sector. However, the faculty members in the field of health sciences, social sciences and applied sciences do not expect that this will happen. On the other hand, most of the faculty in the field of Educational sciences, health sciences and life sciences expect that the inequality of opportunity in education will increase because the people who have enough money can receive online education while the faculty in applied sciences do not believe that having money to get online education will deepen the inequality of opportunities in education. Apart from these

statements, some faculty members selected the "Other" option for the following statements in the questionnaire form:

- Education is a human right. Decentralization is not advantageous for the ones who cannot afford it.

- The transformation of culture is needed before we can discuss if decentralization. If we adopt decentralized education with this governmental management structure, we cannot succeed in education, and it will cause more inequalities.

- Only centralized education can provide us with the equality of opportunity. Therefore, rather than decentralization, the system should be fixed.

- Independent and decentralized education system can only work in developed countries. If the gap between rich and poor is that big, if there is a difference in the socio-economic system among people, how can you expect the decentralization will have a positive impact on the equality of opportunity in education?

- Decentralized education is like a ship without a route.

- The educational policy makers from governmental bodies cannot have a control over education if decentralization becomes the norm.

- What if the companies that provide online education platforms create another authority? Decentralization in education can create the centralization itself. In other words, the authority that create centralization may not be the government only.

- Our own perspective determines the equality and inequality of opportunity in education. It has nothing to do with centralization or decentralization in education.

- Those who want to get a good score, or grade can get it easily from independent organizations which guarantee high score as long as you give the necessary amount of money. Aren't private schools like that? That is to say, decentralization does not seem to be something which enables equality of opportunity in education.

- As long as there are idealistic educators, distance education is a chance in terms of equal opportunity. A lot of my students took free online lessons from the institutions abroad such as Harvard and MIT. It was just a dream years ago. I believe this is great for the quality of opportunity in education.

4. Discussion

The results reveal that faculty members who participated in the study expect great changes in education in the post-COVID-19 world. However, according to their views decentralization in education does not seem to be possible in the near future. Similarly, they do not expect that the institutions will lose its power against online education; therefore, they still think that the diplomas to be received from universities will still be important. However, they believe that a lot of changes will take place in terms of the learning environments, educators, society's expectations from institutions and education, technological devices used in instruction. In addition, the faculty members expect a curriculum change due to the transformation of education. They also reckon that digital

platforms will become stronger and diversified, and Augmented reality software in education will become widespread and cheaper. The expected changes in post-pandemic era are almost at the same level in terms of seniority.

Given the expectations for potential changes in education in the post-COVID world according to the academic title, lecturers (Ph.D.) do not expect that society's expectations about the education will be different. In addition, they do not believe that educational administration and management mentality will change whereas assistant professors think just the opposite. The research assistants, lecturer and assistant professors highly expect that central structures (Higher Education Council or Ministry of National Education) on education will lose their impact on education. The expectation of "The number of physical educational environments (such as universities, public schools, private schools, colleges) will be less" is high in the lecturers, doctoral research assistants and lecturers (Ph.D.). The lecturers (Ph.D.) also believe that that "where you receive education and who provides it will not matter, and independent units that evaluate the quality of the education will be formed".

Regardless of the academic field and seniority level, the faculty members expect great changes in education, after the COVID-19 pandemic. They believe that this change will take place in the theory and practice of education, and in the educational environment and tools. This finding is partly in line with the study by Croucher and Locke (2020) in that universities and other higher education providers will try to gradually reorganize their activities and workforce after the pandemic. However, although the participants believe that the entrepreneurial companies that offer online education in the digital environment will diversify, the expectation level of change regarding the loss of power of the central structures in education is very low compared to the other changes. Several other studies also suggest, that after the COVID-19 pandemic, higher education and other institutions face immediate and long-term challenges, especially in the fields of management, finance, academia, technology and learning opportunities (Igoe & Chadwick, 2020; Muftahu, 2020; Nganga, Waruru & Nakweya, 2020; Smalley, 2020). It can be said that these challenges are reflected in the views of the participants regarding the post-COVID-19 education.

More than half of the faculty members (58.9%) who participated in the study stated that there will not be a great change in term of competency-based certification system independent of the institution from which the diploma is obtained, in order to be able to practise a profession in Turkey. Similarly, the expectation about the flexibility of the central structures in education is mostly stated by research assistants, lecturers and lecturers (Ph.D.). This shows that novice academicians believe in decentralization of education more than other faculty members with higher academic titles. In addition, more than half of the faculty members (55.8%), regardless of their seniority, academic title, or their academic fields, emphasized that the COVID-19 pandemic changed society's perspective about education. These expectations are most likely to be in a single-degree education approach based on a single competency and expertise, and that the education will take place in a way that goes beyond national borders. In addition, people's expectations about education will force central structures in this respect. In this regard, these findings are in line with the findings of the study by Croucher and Locke (2020) in that universities will feel pressure to redesign their educational plans by providing

shorter courses and non-certificate programs to meet the expectations of future students, the government and the society.

Most of faculty members (90%), regardless of their seniority and academic titles, believe that COVID-19 pandemic has changed the way educators view education. In this regard, some of the faculty members stated that those who cannot keep up with the change will have to retire, the educators will have to improve themselves in digital competencies, and online education demands will arise in terms of training of trainers. Another result is that the view on the necessity of developing digital competencies in education is mostly defended by faculty members who work in the field of Life Sciences. As Rashid and Yadav (2020) pointed out, educational institutions faced the challenge of adapting to this change due to COVID-19 and they had to select the most appropriate technologies and methods to teach and engage their students in the online learning environments. Therefore, in the wake of the pandemic, it could pave the way for greater partnerships or cooperation between institutions, online education companies and technology suppliers.

Universities have to train and equip instructors with digital technologies to ensure that the teaching-learning process runs well. Governments should also take steps to improve the teaching skills of educators and commit to long-term professional development initiatives. Moreover, the pandemic has revealed the weaknesses and inadequacies of existing educational institutions and the need to acquire digital literacy skills, which are especially important at such emergency, for both developed and developing countries. In this context, it can be stated that the views of the faculty members are mostly at individual level. In other words, considering the statements written by some faculty members using the "Other" option, it can be said that there are very few suggestions on how governments will respond to this change. In this regard, faculty members focus on changes at the individual and institutional level.

Another finding is that faculty members believe the inequality of opportunity in education will deepen if decentralization is adopted. Because they think that those with good economic opportunities can more easily access the education offered in the online environment. In this study, it was found that faculty members with less seniority think that education would not suffer from equal opportunity, and this expectation increased relatively with the increase in seniority. A similar situation was observed in research assistants. This shows that the belief that equal opportunity does not harm is relatively less for those new to the profession. Some thinkers on a global scale have expressed similar concerns in terms of equality of opportunity in education. They stated that e-learning caused a great disadvantages for the families who have limited or no access to the internet (Nganga, Waruru & Nakweya, 2020). Similarly, Rashid and Yadav (2020) pointed out that the students who have limited access to e-learning are from poor backgrounds. In this context, Rashid and Yadav (2020) stated that the impact of accessibility and affordability in higher education system can lead to serious consequences unless student-friendly government policies are implemented.

5. Conclusions

The faculty members who participated in this study expect great changes in education in the post-pandemic world in terms of instructional methodology, financial plans, technology and digitalization and learning opportunities. However, they do not think that decentralization will be possible in the short term. Furthermore, the main reason for faculty members' hesitations towards decentralization is related to inequality of opportunity in education. The results made it clear that governments, educational institutions and educators as individuals need to prepare themselves for the future digital change. For this reason, to ensure this change both at system level and at the institutional level, necessary infrastructure changes should be made, and in-service and public education should be given importance. Governments should create new opportunities considering potential inequalities in access to education opportunities. Future research can be conducted with different sample size and groups from different professions, classes and demographic levels.

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References

Apple, M. W. (1990). Ideology and curriculum. New York: Routledge.

Ay, N. (2012). Osmanlı Devletinde merkeziyetçilik prensibi ve hukuk sistemine etkileri. *Selçuk Üniversitesi Hukuk Fakültesi Dergisi, 10*(1-2), 131-163.

Carl, A. (2005). The "voice of the teacher" in curriculum development: A voice crying in the wilderness. *South African Journal of Education, 25*(4), 223-228.

Christensen, L. B., Johnson, R. B. & Turner, L. A. (2014). Research methods, design, and analysis. The USA: Pearson Education

Croucher, G., &Locke, W. (2020). A post-coronavirus pandemic world: some possible trends and their implications for Australian higher education, MELBOURNE CSHE Discussion Paper, https://melbourne-cshe.unimelb.edu.au/__data/assets/pdf_file/0010/3371941/a-post-coronavirus-world-for-higher-education_final.pdf accessed 03.08.2021

Demir, K. A. (2014). Merkeziyetçi Yönetim Kıskacında Sivil Toplum Çıkmazı. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi, 41*, 61-70.

Demir, K. A. (2019). Avrupa Birliği içerisinde merkeziyetçi devletin sonu: yerel devlet. *Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 37*(2), 295-324.

Hoang, A. D., Pham, H. H., Nguyen, Y. C., Vuong, Q. H., Dam, M. Q., Tran, T., & Nguyen, T. T. (2020). Introducing a tool to gauge curriculum quality under Sustainable Development Goal 4: The case of primary schools in Vietnam. *International Review of Education, 66*(4), 457-485.

Igoe, M., & Chadwick, V. (2020). After the pandemic: How will COVID-19 transform global health and development? https://www.devex.com/news/after-the-pandemic-how-will-covid-19-transform-global-health-and-development-96936 accessed 03.08.2021 accessed 03.08.2021

Krippendorff, K. (2004). Content analysis an introduction to its methodology. USA: Sage Publications.

McMillan, J., & Schumacher, S. (2014). Research in education evidence based inquiry. The UK: Pearson Education.

Muftahu, M (2020). Higher Education and Covid-19 Pandemic: Matters Arising and the Challenges of Sustaining Academic Programs in Developing African Universities, *International Journal of Educational Research Review, 5*(4),417-423.

Nganga, G., Waruru, M., & Nakweya, G. (2020). Universities face multiple challenges in wake of COVID-19 closures. https://www.universityworldnews.com/post.php?story=20200407162549396, accessed 03.08.2021

Özdemir, S. M. (2011). Toplumsal değişme ve küreselleşme bağlaminda eğitim ve eğitim programlari: kavramsal bir çözümleme. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 12*(1), 85-110.

Parveen, R., & Bone, J. (2017). Developing curriculum for the early years: A perspective from Bangladesh. *New Zealand International Research in Early Childhood Education, 20*(1), 34-45.

Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (2004). Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourses. Peter Lang.

Rashid, S., & Yadav, S. (2020). Impact of Covid-19 Pandemic on Higher Education and Research. Indian Journal of Human Development. 14. doi: **097370302094670. 10.1177/0973703020946700.**

Rawling, E. (2020). How and why national curriculum frameworks are failing geography. *Geography, 105*(2), 69-77.

Rossi, T., & Kirk, D. (2020). The pedagogisation of health knowledge and outsourcing of curriculum development: the case of the Stephanie Alexander Kitchen Garden initiative. *Discourse: Studies in the Cultural Politics of Education, 41*(2), 281-298.

Smalley, A. (2020). Higher education responses to Coronavirus (COVID-19). https://www.ncsl.org/research/education/higher-education-responses-to-coronavirus-covid-19.aspx , accessed 03.08.2021

Strike, K. A., & Posner, G. J. (1976). 3: Epistemological Perspectives on Conceptions of Curriculum Organization and Learning. *Review of Research in Education, 4*(1), 106-141.

Şişman, M., & Turan, S. (2003). Eğitimde yerelleşme ve demokratikleşme çabaları. *Kuram ve Uygulamada Eğitim Yönetimi, 34*(34), 300-315.

Yetiş, M. (2006). Tocqueville ve Merkeziyetçilik Sorunu. *Ankara Üniversitesi Siyasal Bilgiler Fakültesi Dergisi, 61*(3), 279-308.

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