Original Article / Orijinal Makale

Pedagogical agility in Turkey: Teachers agility in educational change and uncertainty days based on parents' views

Türkiye'de pedagojik çeviklik: Değişim ve belirsizlik günlerinde öğretmen çevikliğine ilişkin veli görüşleri

Mustafa FİDAN[1]

[1]*Özel Acar İlkokulu, Ankara, Öğretmen*

[1]*Acar College, Ankara, School Teacher*

ABSTRACT

The new normal that emerged after COVID-19 required rethinking the basic elements of education. Major changes and uncertainties have emerged in education during and after CO-VİD-19. The phenomenon of agility for change and uncertainty situations is discussed in the literature. In this study, teachers' pedagogical agility was questioned based on parents' views. Pedagogical agility is considered important in the context of strengthening the struggle against COVID-19 and possible future pandemics. In this framework, the research method was determined as a qualitative phenomenology study. The study group consists of eleven parents determined by the purposeful sampling method. Participants are parents whose children attend public school in Ankara in the 2020-2021 academic year. The data collected by the interview technique were analysed through content analysis. According to the results of the research, teachers' pedagogical agility is explained in the themes of change, technology, cooperation, and leadership. Parents have positive views on teachers' pedagogical agility.

ÖZ

COVID-19 sonrası ortaya çıkan yeni normal, eğitimin temel unsurlarını yeniden düşünmeyi ve teknolojiyi daha fazla kullanmayı öne çıkardı. Böylece eğitim bağlamında büyük değişimler ve belirsizlikler ortaya çıktı. Bu çalışma, değişim ve belirsizlik karşısında çeviklik olgusunu tartışmaktadır. Öğretmenlerin pedagojik çevikliği veli görüşlerine dayalı olarak sorgulanmıştır. Pedagojik çeviklik, şimdi COVID-19 ve gelecekte farklı pandemilerle mücadeleyi güçlendirme bağlamında önemli görülmektedir. Bu çerçevede araştırma yöntemi nitel fenomenoloji çalışması olarak belirlenmiştir. Çalışma grubu amaçlı örnekleme yöntemi ile belirlenen on bir ebeveynden oluşmaktadır. Katılımcılar 2020-2021 eğitim öğretim yılında çocukları Ankara'da devlet okuluna devam eden ebeveynlerdir. Görüşme tekniği ile toplanan veriler içerik analizi yoluyla çözümlenmiştir. Araştırma sonuçlarına göre öğretmenlerin pedagojik çevikliği değişim, teknoloji, işbirliği ve liderlik temalarında açıklanmaktadır. Ebeveynler, öğretmenlerin pedagojik çevikliğine ilişkin olumlu görüşlere sahiptirler.

*Corresponding author / Sorumlu yazar
*E-mail address: gfidanmustafa@gmail.com

INTRODUCTION

The sudden closure of schools due to COVID-19 has made education uncertain worldwide. Turkey was also affected by this sudden change and uncertainty as many countries. Schools were closed across the country in March 2020. The changes and uncertainties caused by the closure of schools have reached unmanageable levels. All schools transformed into the online form in the cloud of change and uncertainty (Bozkurt, 2020; Dwivedi et al., 2020). Schools were naturally caught unprepared for the realization of the unimaginable.

The dimensions of change and uncertainty manifested themselves in the decisions taken. Education was suspended for 15 days on 16 March by the Ministry of National Education (MEB). The cloud of uncertainty was so intense that schools were expected to open 15 days later. So much so that in the announcement dated March 19, the content of remote teaching, which was planned for only one week, was shared with the public (MEB, 2020a).

School closures continued for an unexpectedly long time. Although not like the first week, the change and uncertainty continued in the following period. The academic year started with distance education on 31 August (MEB, 2020b). The magnitude of the uncertainty is directly proportional to the sudden and rapid change. Schools opened their doors "progressively and diluted" one day a week on September 21st. The schools, which are expected to be fully opened gradually in the following days, have been closed again after the break of 13 November (MEB, 2020c). Uncertainty and change reigned as a result of the mismatch of expectations with reality. In the following days, uncertainties such as exams and report cards were experienced. All uncertainties determined the education agenda for a certain period.

Scientific studies have emerged in the educational literature since the first period of the pandemic. There are studies in the literature that warns against the pandemic during the period when schools around the world are not closed yet. For example, one study emphasized that there may be a need for educational institutions that can produce solutions for learning needs beyond traditional classrooms (Toquero, 2020). There has been a closure of schools around the world in a short time (Reimers & Schleicher, 2020). It is stated in international studies that educational institutions produce very fast responses to the pandemic and are rapidly transformed into new forms online (Crawford et al., 2020). Studies on the results of the emergency remote education (ERE) forms have also started to appear rapidly in the literature (Bozkurt, 2020).

In Fidan's study (2020a) emphasizing the uncertainty of the process, he examined the experiences of teachers in the uncertain environment in the first month of the pandemic. Those study results contain a lot of negative aspects. The most frequently expressed positive aspect of the research is that "education continues despite everything". Focusing on the urgency of the process and an agile transformation, Nissim and Simon (2020) stated that such a rapid transformation, carried out with maximum flexibility, could not be planned correctly and was far from perfect. Focusing on the social and psychological aspects of the pandemic education crisis, Bozkurt and Saharma (2020) emphasize that the feelings of students in such crisis periods are more important than content teaching. For this reason, education planners, researchers, and practitioner teachers struggled with the multidimensional aspects of the process as well as the content teaching aspect.

The role of the teacher struggling with the multifaceted problems of pandemic uncertainty has been emphasized in many studies. Articles on empowering teachers, supporting them in the face of change, as well as providing support to students and parents in the role of change agent, both helped and witnessed the process. In the studies carried out, the support needs of the teachers were determined under three headings as flexibility, instructional and technological, and suggestions were given in these subjects (Beteille et al, 2020; Fidan, 2021c). In another study, it was stated that online classrooms are a very different reality from traditional classrooms and that teachers need to develop managerial innovations for these new classrooms (Fidan, 2021d).

There are also studies in the literature focusing on the positive aspects of the pandemic process. For example, in one study it is stated that children of this age start their lives with technologies (Iivari et al., 2020). Therefore, it is thought that these children can easily adapt to remote teaching. In another study, it was stated that the interest of students will determine the quality of remote teaching (Norkulov et al., 2020). Students who start their lives with technology and are one step ahead in terms of technological agility are expected to be interested in distance lessons (Fidan, 2021b). In another study, it is stated that the pandemic produces an emergency managerial innovation and in this context, it is necessary to focus on discovering the positive aspects of online classes (Fidan, 2021d).

It has been reported that teachers who show pedagogical agility as well as students' agility, as well as students' agility, have positive contributions during the pandemic process (Kidd & Murray, 2020; Fidan, 2021c). In emergency

remote teaching, solving the problem of qualified teachers is vital (Norkulov et al., 2020). In this context, the focus is on teacher agility to act as leaders in the digital transformation of education (Iivari et al., 2020). Teacher agility can offer support in the face of change and uncertainty.

Agility is simply defined as the ability to change direction quickly and accurately (Sheppard & Young, 2006). The technological competence of teachers has an important effect on the agility of a school (Crocitto & Youssef, 2003). Agility is one of the most important factors in the survival and development of schools in a changing world. Existing schools must develop pedagogical agility to succeed in the current environment of change and uncertainty (Worley & Lawler, 2010).

Pedagogical agility can be defined as the application of strategies, principles, and values brought by agile thinking to information communication technologies in the context of the school. The application of agile thinking to the educational context will provide a quality and contemporary education for agile schools, agile teachers, and agile students (Galés & Gallon, 2019). In short, pedagogical agility emphasizes an agile learning teaching approach (Morien, 2018).

It is recommended that schools invest in pedagogical agility for effective performance. In addition, it is recommended to schools nurture and adopt the agility culture and technology (Ghos et al., 2020). Eight components that can increase agility in schools have been identified. These are the ability to perceive the environment, organizational structure, adoption of information and communication technologies, organizational learning, human resources strategies, leadership, readiness for change, and collaboration with stakeholders (Menon & Suresh, 2020).

The agility of schools facilitates education as in the example of a pandemic. Technological tools have played an important role as learning content and learning platform to increase access to education and the quality of learning. Pre-pandemic feasibility studies were conducted to adopt digital media (text, image, sound, and video combination) to the school curriculum (Mesfin et al., 2018); After the pandemic, it adapted the school to digital media. It has been experienced by living after the post-pandemic that transforming traditional learning environments requires talent, endurance, and agility (Why et al., 2020). Agile teachers who make this transformation have higher fluency in technological tools and are not only consumers of web resources but also creating them (Galés & Gallon, 2019).

In this study, the phenomenon of pedagogical agility in teachers was examined. In the new normal of post-pandemic education, new cases were wanted to be discussed. One of these new phenomena is the parents involved in education. In this study, teachers' pedagogical agility was determined according to the opinions of the parents. In the current studies in the literature, it is stated that parents are at the center of education with their increasing roles (Fidan, 2020a, 2021a 2021b; Michaela & Sabine, 2020). For this purpose, answers to the following question are sought:

What is the pedagogical agility of teachers based on parents' views?

METHOD

Research Design

Phenomenology design was used in this qualitative study. This study, it is aimed to reveal the pedagogical agility of teachers with the phenomenology research strategy (Creswell & Poth, 2016).

Study Group

To collect data on the pedagogical agility of primary school teachers, parents were identified using the purposeful sampling method (Creswell & Poth, 2016). The research was carried out with a total of 11 parents, 7 women and 4 men and the average age of parents are 36. These parents experienced emergency remote teaching in the fall semester of the 2020-2021 academic year. The students of these parents attend a private school in the Ankara Yenimahalle district. Each of the parents gave an opinion about a different teacher. In other words, each student is in a different class.

Data Collection Tools

In this study, to collect the qualitative data a semi-structured interview form was used. Developing a scientific semi-structured interview guide contributes to the trustworthiness of the semi-structured interview as a qualitative research method. According to our research problem, the inter-related phases of the development of the semi-structured interview process were: identifying the prerequisites for semi-structured interviews and retrieving and using previous literature; formulating the preliminary semi-structured interview guide and pilot testing the interview guide; finalizing the complete semi-structured interview form. The Semi-Structured Interview Form included 5 questions in line with the limits of pedagogical agility. The questions in this form are stated below:

1. What is your view of your teacher's perception of the online classroom environment?
2. What is your view on your teacher's adoption of information and communication technologies?
3. What is your view on your teacher's readiness and adaptation to change?
4. What is your view about your teacher collaborating with you and your students?
5. What is your opinion about your teacher leading change?

Process

Research data were collected by online data collection method (video conference). There is an increasing trend

in online data collection due to the social distance rule involved in living with the pandemic (Lobe, Morgan, & Hoffman, 2020).

Data Analysis

Data analysis is very important for qualitative research. While trying to generate meanings from raw data, a circular process consisting of describing, classifying, and the connection was followed. This qualitative data analysis consists of related processes of describing phenomena, classifying them, and seeing how our concepts interconnect (Dey, 1993).

In the analysis of this study, the data consists of words. The analysis was made in words rather than quantifiable numbers and numbers. The views of the participants are not limited to numbers only. In this way, it is predicted that the "meaning" desired to be expressed will not disappear (Dey, 1993). The data consisting of words were organized with content analysis. Deciphering, coding, and creating categories steps were followed in the process of data processing. First of all, all interviews were written. The codes were determined as a result of the written data set and literature readings. Similar codes were combined in themes as a result of the analysis made on the coding. As a result of rereading, the themes and codes were finalized and findings emerged.

Validity and Reliability

To increase the validity and reliability of the research; Internal validity (credibility), external validity (transferability), internal reliability (consistency), and external reliability (verifiability) were carefully checked. Qualitative analysis was carried out in a cyclical process consisting of the triangle describing, connecting, classifying given in figure 1. To enable the participants to reflect on their true thoughts; It is assured that the information obtained from the research will only be used for academic purposes. The interviews conducted were recorded. After the interview records were transcribed, they were reviewed with the participants. To control the stages performed by the researcher (coding, creating themes from codes, and identifying and interpreting the findings), a faculty member working in educational sciences who had previously done qualitative studies was helped and checked. Thanks to these controls, the themes have been merged and corrected. Thus, it was aimed to increase the reliability of the research. To determine the external validity of the research, the research process has been explained in detail. Finally, the findings obtained from the research are associated with the literature.

RESULTS

In this study, the questions determined as a result of the literature review were asked to the parents. In this framework, the data obtained from all participants were analyzed and listed with content analysis.

Pedagogical agility of teachers

Parents' opinions were analyzed with content analysis. Accordingly, themes and codes related to teachers' pedagogical agility were determined. The results of the parents' opinions are given in Table 1.

Based on Table 1 above, teachers' pedagogical agility is explained in the themes of change, technology, cooperation, and leadership. Parents are generally satisfied with the pedagogical agility of the teachers. In the theme of change, parents stated that teachers are ready and adaptable to change. On the other hand, some teachers resist change, albeit a small number. Examples of parent views on the theme of change are as follows.

Our teacher is very careful. He guided us through the smoke of change. Maybe he wasn't prepared either but never showed. He somehow managed to continue teaching with the children P2.

It was a tiring adventure for all of us. It continues. But now we have more or less discovered what could happen. My son manages the changing conditions better than I. I want to
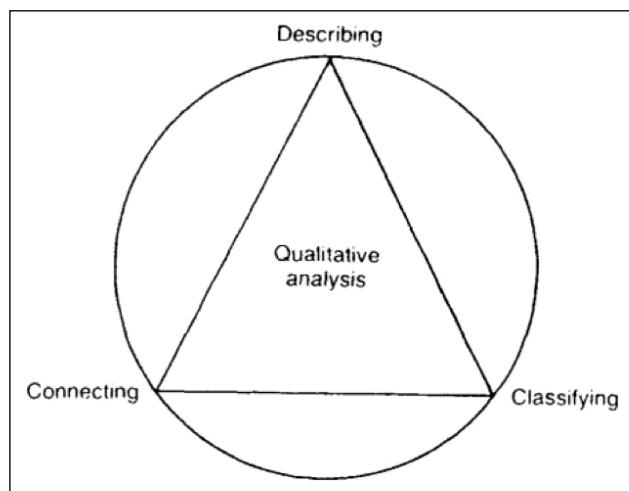

Figure 1. Qualitative analysis is a circular process (Dey, 1993, 32).

Table 1. Pedagogical agility of teachers according to parents

Theme	Code	Frequency
Change	Preparing for change	15
	Adapting to change	18
	Resistance to change	2
Technology	Using technology	13
	Creating content	8
Cooperation	Collaboration with students	12
	Cooperation with parents	8
	Collaboration with digital tools	9
	One-way communication	3
Leadership	Self-leadership	7
	Agile leadership	6

appreciate our teacher. He can cope with the new generation of children from afar P7.

Our teacher is retired. She has been working in a private school for five years. Three years was very successful face to face. At first, there was confusion. So I was watching carefully, too. By the way, since I work from home, I have observed the process very well. For almost a month she had a hard time following the kids. But she did not give up. They will graduate this year. I think my child has no shortage academically. Thank you for our teacher's work P5.

After the change theme in parents' opinions, the most frequently expressed opinion was gathered under the technology theme. The pedagogical agility of teachers consists of the codes of using technology and creating content in the technology theme. Examples of parent views on the theme of technology are as follows.

What is possible to prevent information communication technologies from advancing at a frightening pace. I think that our teacher quickly adopts information and communication technologies and uses the materials effectively in this process. Couldn't it be even better? Of course, we can think better of this as well as everything else. As I said, our teacher managed the process well. She adapted to technology P9.

In our house, technological devices were removed and put in a box during the school year. However, during this period, the whole school was on the screen of technological devices. Frankly, I had a hard time. All the rooms of the house were filled with technological equipment. My two kids and I are always online. Our teacher is also like this. It was easy to empathize. We were already seeing the efforts of our teacher P1.

Another theme in parents' views was collaboration. On the collaboration theme, teachers' relationships with parents, students, and digital tools are positive. On the other hand, teachers continue the communication process in one direction. One-way communication is perceived negatively, although it is understandable in parents' views. Examples of parent views on the theme of collaboration are as follows.

When you say cooperation, it was one of the words that summarize the process. We were constantly intertwined. There was more collaboration between me and our teacher than ever before. I even helped the teacher in many stages. Our teacher was trying to manage the student through their parents' P3.

While I was struggling with my children, I was also cooperating with the teacher. Homework was coming to us. Announcements were coming to our phones. We always had the lesson plan, absenteeism situations, etc. Our teacher was struggling with all parents' P1.

Finally, the theme in which parents' opinions were gathered was leadership. In the context of leadership, it is stated that the teacher is effective in self-transformation and shows agile leadership in managing change. According to parents' views, the leadership theme consists of self-leader-ship and agile leadership codes. Examples of parent views on the theme of collaboration are as follows.

To me, our teacher leads himself. He transformed himself first. It quickly adapted to the new normal. I can say that the children who saw this leadership became more successful P2.

I accept that our teacher is leading the change. Yeah, that's the right word. He was a complete leader. Our teacher quickly adapted to the change. He convinced us to change. He emphasized that the process is not temporary. If it was up to us, we would have waited for the pandemic to end. But our teacher changed our perspective. We are convinced that teaching can be done online. It is a year now. What would we be like if we waited? P4

DISCUSSION

In this study, teachers 'pedagogical agility was questioned based on parents' opinions. According to the results of the study, teachers 'pedagogical agility is positive in parents' opinions. Parents had the opportunity to get to know the teachers and the classroom more closely during the pandemic process. In other words, parents have been a part of the classroom in the emergency distance learning process. Therefore, parents' positive opinions are important. These positive results are consistent with the literature. For example, according to the study results of Garbe et al. (2020), parents are satisfied with the teachers' performance. In Fidan's (2020a) study results, it is emphasized that parents empathize with teachers. Accordingly, parents who have closely witnessed teachers' efforts appreciate teachers.

Teachers' perception of change and their adaptation to change are seen as positive by parents. In other words, teachers are aware of the change and adapt to change. This finding is compatible with the literature. For example, according to the study results of Alea et al. (2020), teachers' awareness of COVID 19 and their adaptation to change is an important determinant of the process. Bubb and Jones (2020) stated in their study that adaptation took place very quickly and parents were satisfied with the process. In another study, teachers' adaptation to digital technologies and online teaching was emphasized (König et al., 2020). On the other hand, there is resistance to change. There are also results in the literature in terms of resisting change. For example, Dong et al. (2020) stated that many parents and teachers suffer from the pandemic and that these are the main source of resistance.

Teachers' use of technology and producing content is mostly positive according to parents. Teachers use technology in parents' opinions. Relatively fewer teachers produce content for virtual classrooms. Similar results are available in the literature. One study emphasized the need for a comprehensive online education pedagogy that integrates technology into teaching (Carrillo & Flores, 2020). In another study, it is emphasized that the use of technology and new solutions produced by technological tools are important

(Supriyanto et al., 2020). Another study focused on the digital competencies of teachers. Accordingly, the technological competencies of teachers are determinants of the effectiveness of the emergency remote teaching process (König et al., 2020). In a similar study (Fidan, 2020a), teachers' use of technology and producing content is the positive aspect of emergency remote teaching.

Teachers' cooperation with parents, students, and technological tools is positive in parents' views. Parents are satisfied with the cooperation performance of the teachers. Only very few views are negative due to one-way communication. These findings are consistent with the literature. It is stated in the studies conducted that the pandemic reveals the importance of cooperation. (Kim & Asbury, 2020). In another study, it is stated that the cooperation between parents and teachers affects the process positively (Fidan, 2020a,2021a). According to the results of another study, parents have adopted cooperation with teachers (Garbe et al., 2020). There are studies in the literature that reveal the effect of parent-teacher cooperation on student achievement (Çelenk, 2003; Fidan, 2021b). On the other hand, few opinions indicate the negative effect of one-way communication on cooperation. The negative effects of one-way communication were emphasized in the studies (Graham-Clay, 2005).

Teachers' leadership qualities are also liked by parents. Based on parents' views, it can be said that teachers exhibit agile leadership. Similar results are available in the literature. For example, a research result indicates that teachers transform their initial experience to improve teaching rapidly. (Kim & Asbury, 2020). In another study, the agility of teacher education during the pandemic period was examined. Accordingly, the importance of teacher agility in the pandemic is emphasized. (Nissim & Simon, 2020). In another study, the positive effects of teachers' pedagogical agility in the pandemic were emphasized (Crawford et al., 2020). Also, according to parents, teachers transformed themselves rapidly. This finding is available in the literature. It is stated that teachers with high self-leadership skills reduce the effects of the pandemic (Fidan, 2020b). On the other hand, there is a finding that parents who observe the classroom transparently in online education are happy with their teachers (Fidan, 2021a). In another study in the literature (Fidan, 2021c), it was discussed that teachers have developed considerably in the context of transforming themselves and their needs for empowerment.

RECOMMENDATIONS

Based on the results of the study, some suggestions can be given in the context of pedagogical agility. Parents' opinions must be positive. Pedagogical agility in Turkey was not a topic frequently studied. It may be suggested that such a phenomenon, which can make important contributions to pandemic conditions, should be examined more. Studies examining teachers' pedagogical agility in different samples can be conducted. In addition, pedagogical agility can be studied in the context of schools, students, and different components.

Ethics: There are no ethical issues with the publication of this manuscript.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Financial Disclosure: The authors declared that this study has received no financial support.

Etik: Bu makalenin yayınlanmasıyla ilgili herhangi bir etik sorun bulunmamaktadır.

Hakem Değerlendirmesi: Dış bağımsız.

Çıkar Çatışması: Yazarlar, bu makalenin araştırılması, yazarlığı ve/veya yayınlanması ile ilgili olarak herhangi bir potansiyel çıkar çatışması beyan etmemiştir.

Finansal Destek: Yazarlar bu çalışma için finansal destek almadığını beyan etmiştir.

REFERENCES

Alea, L. A., Fabrea, M. F., Roldan, R. D. A., & Farooqi, A. Z. (2020). Teachers' Covid-19 awareness, distance learning education experiences, and perceptions towards institutional readiness and challenges. *International Journal of Learning, Teaching and Educational Research, 19*(6), 127–144. [CrossRef]

Beteille, T., Ding, E., Molina, E., Pushparatnam, A., & Wilichowski, T. (2020). *Three Principles to Support Teacher Effectiveness During COVID-19.* 07. Economic and Sec-tor Work (ESW) Studies.[CrossRef]

Bozkurt, A. (2020). Koronavirüs (Covid-19) pandemi süreci ve pandemi sonrası dünyada eğitime yönelik değerlendirmeler: Yeni normal ve yeni eğitim paradigması. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 6*(3), 112–142. [Turkish] [CrossRef]

Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to the Corona-Virus pandemic. *Asian Journal of Distance Education, 15*(1), i-vi.

Bubb, S., & Jones, M.-A. (2020). Learning from the COVID-19 home-schooling experience: Listening to pupils, parents/carers, and teachers. *Improving Schools, 23*(3), 209–222. [CrossRef]

Carmen Carrillo & Maria Assunção Flores (2020) COVID-19 and teacher education: a literature review of online teaching and learning practices. *European Journal of Teacher Education, 43*(4), 466–487. [CrossRef]

Çelenk, S. (2003). The prerequisite for school success: home-school cooperation. *Elementary Education Online, 2*(2), 28–34

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P. A., & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Ap-

plied Learning & Teaching, 3(1), 1–20. [CrossRef]

Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches. Sage publications

Crocitto, M. and Youssef, M. (2003). The human side of organizational agility. *Industrial Management & Data Systems, 103*(6), 388–397. [CrossRef]

Dey, I. (1993). *Qualitative data analysis: A user-friendly guide for social scientists*. New York: Routledge. [CrossRef]

Dong, C., Cao, S., & Li, H. (2020). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, 118, Article 105440. [CrossRef]

Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantinou, I., Duan, Y., Edwards, J. S., Gupta, B., Lal, B., Misra, S., Prashant, P., Raman, R., Rana, N. P., Sharmak, S. K., & Upadhyay, N. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work, and life. *International Journal of Information Management, 55*, Article 102211. [CrossRef]

Fidan, M. (2020a). Education in the uncertainty of COVID 19: Teachers' views on emergency remote teaching in primary school. *Uşak University Journal of Educational Research, 6*(2), 24–43.

Fidan, M. (2020b). An examining the relationship between self-leadership and happiness based on the perceptions of teachers. *IZU Journal of Education, 2*(4), 222–235.

Fidan, M. (2021a). Mutlu cevrimici okul. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 7*(2), 149–171. [CrossRef]

Fidan, M. (2021b), COVID-19 and primary school 1st grade in turkey: starting primary school in the pandemic based on teachers' views. *Journal of Primary Education, 3*(1), 15–24. [CrossRef]

Fidan, M. (2021c). Teaching profession during the covid-19 pandemic. *Maarif Mektepleri International Journal of Educational Sciences, 4*(2).1–14.

Fidan, M. (2021d). Remote Teaching's managerial innovation in the pandemic: Plasma metaphor for online classrooms. *International Journal of Leadership Training, 1*(1), 1–9.

Galés, N. L., & Gallon, R. (2019). *Educational Agility. Teacher Education for the 21st Century*, In Kowalczuk-Waledizak, M., Korzainecka-Bomdar, A., Danilewecz, W., & Lauwers, G. (Eds.). Rethinking Teacher Education for the 21st Century. (pp. 98–110.) Verlag Barbara Budrich. [CrossRef]

Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). Parents' Experiences with Remote Education during COVID-19 School Closures. *American Journal of Qualitative Research, 4*(3), 45–65. [CrossRef]

Ghos, S., Muduli, A., & Pingle, S. (2020). Role of e-learning technology and culture on learning agility: An empirical evidence. *Human Systems Management, 40*(2), 235–248. [CrossRef]

Graham-Clay, S. (2005). Communicating with parents: Strategies for teachers. *School Community Journal, 15*(1), 117–129.

Kidd, W. & Murray, J. (2020). The Covid-19 pandemic and its effects on teacher education in England: how teacher educators moved practicum learning online. *European Journal of Teacher Education, 43*(4), 542–558. [CrossRef]

Kim, L. E., & Asbury, K. (2020). "Like a rug had been pulled from under you": The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. *British Journal of Educational Psychology, 90*(4), 1062–1083. [CrossRef]

König, J., Jäger-Biela, D. J. & Glutsch, N. (2020) Adapting to online teaching during COVID-19 school closure: teacher education and teacher competence effects among early career teachers in Germany. *European Jour-nal of Teacher Education, 43*(4), 608–622. [CrossRef]

MEB, (2020a). *Ministry of National Education News Archive*. http://www.meb.gov.tr/bakan-selcuk-23-martta-baslayacak-uzaktan-egitime-iliskin-detaylari-anlatti/haber/20554/tr

MEB, (2020b). *The roadmap of the distance education period will last until September 18.* http://www.meb.gov.tr/18-eylule-kadar-surecek-uzaktan-egitim-doneminin-yol-haritasi/haber/21499/tr

MEB, (2020, 08 September). *Face-to-face education begins in schools*. http://www.meb.gov.tr/okullarda-yuz-yuze-egitim-basliyor/haber/21601/tr

Menon, S. & Suresh, M. (2020), "Factors influencing organizational agility in higher education", Benchmarking: *An International Journal, 28*(1), 307–332.

Mesfin, G., Ghinea, G., Grønli, T., & Hwang, W. (2018). Enhanced agility of e-learning adoption in high schools. *Journal of Educational Technology & Society, 21*(4), 157–170.

Michaela, K & Sabine, Z. (2020). Coronavirus & care: How the coronavirus crisis-affected fathers' involvement in Germany, *SOE Papers on Multidisciplinary Panel Data Research*, No. 1096, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin.

Morien, R. I. (2018). Pedagogical agility and agile methodologies in computer system development education. *International Journal of Advanced Intelligence Paradigms, 11*(1-2), 19–32. [CrossRef]

Neden, J., Cleak, H., Thomson, S., (2020). Towards agility: Scaffolding anticipative education in social work. *The British Journal of Social Work, 50*(4), 1258–1276. [CrossRef]

Nissim, Y., & Simon, E. (2020). Agility in Teacher Training: Distance Learning During the Covid-19 Pandemic. *International Education Studies, 13*(12), 11–26. [CrossRef]

Norkulov, D., Zikirova, N., Niyozova, N., Makhkamov, U., & Sattarov, I. (2020). basics of online teaching, usage, and implementation process. *Systematic Reviews in Pharmacy, 11*(11), 953–955.

Reimers, F. M., & Schleicher, A. (2020). *A framework to guide an education response to the COVID-19 Pandemic of 2020*. OECD.

Sheppard, J. M., & Young, W. B. (2006). Agility literature review: Classifications, training, and testing. *Journal of Sports Sciences, 24*(9), 919–932. [CrossRef]

Supriyanto, A., Hartini, S., Irdasari, W. N., Miftahul, A., Oktapiana, S., & Mumpuni, S. D. (2020). Teacher profes-sional quality: Counselling services with technology in Pandemic Covid-19. *Counsellia: Jurnal Bimbingan dan Konseling, 10*(2), 176–189. [CrossRef]

Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 Pandemic: The Philippine context. *Pedagogical Research, 5*(4), em0063. [CrossRef]

Worley, C. G., & Lawler, E. E. (2010). Agility and organization design: A diagnostic framework. *Organizational Dynamics, 39*(2), 194–204. [CrossRef]