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Rethinking Education in the Digital Age: Readiness for the Professions of the Future

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Duygu Şallı*

Abstract

Education is a complex system that is affected by social, cultural and economic factors and needs to be integrated with different actors. For this reason, the current state of education in the digital age and its possible future perspective should be evaluated from more than one context.As the context of schooling changes when digital technologies are integrated into the education system, the future position of professions as well as programs and practices are affected by this change. The aim of this research is to reveal the views of faculty members on the reflections of the digital age on education and what needs to be done to adapt to the professions of the future. In this study, phenomenology method, one of the qualitative research methods, was used. The sample of the research consists of 10 lecturers. The data obtained as a result of the interviews were analyzed with descriptive analysis technique and content analysis technique. According to the findings of the research, the common skills that students and teachers need to acquire in order to adapt to the professions of the future are determined as digital literacy, digital citizenship and teamwork.

Keywords: Digital age, education, future of professions, artificial intelligence, lecturer.

* *Corresponding Author:* Dr., Marmara University, Atatürk Faculty of Education, Department of Educational Science, Istanbul, Turkey. E-mail: duygu.salli@marmara.edu.tr, https://orcid.org/0000-0002-8126-7131

Dijital Çağda Eğitimi Yeniden Düşünmek: Geleceğin Mesleklerine Hazır Oluş

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Duygu Şallı*

Öz

Eğitim sosyal, kültürel ve ekonomik faktörlerden etkilenen, farklı aktörlerle bütünleştirilmesi gereken karmaşık bir sistemdir. Bu nedenle dijital çağda eğitimin mevcut durumu ve olası gelecek perspektifi birden fazla açıdan değerlendirilmelidir. Programlar ve uygulamalar bu değişimden etkilenmektedir. Bu araştırmanın amacı dijital çağın eğitime yansımaları ve geleceğin mesleklerine uyum için yapılması gerekenler konusunda öğretim üyelerinin görüşlerini ortaya koymaktır. Bu çalışmada nitel araştırma yöntemlerinden biri olan fenemenoloji deseni kullanılmıştır. Araştırmanın örneklemini 10 öğretim görevlisi oluşturmaktadır. Görüşmeler sonucunda elde edilen veriler betimsel analiz tekniği ve içerik analizi tekniği ile analiz edilmiştir. Araştırmadan elde edilen bulgulara göre öğrencilerin ve öğretmenlerin geleceğin mesleklerine uyum sağlamak için edinmeleri gereken ortak beceriler dijital okuryazarlık, dijital vatandaşlık ve takım çalışması olarak belirlenmiştir.

Anahtar Sözcükler: Dijital çağ, eğitim, mesleklerin geleceği, yapay zeka, öğretim görevlisi.

* *Sorumlu Yazar:* Dr., Marmara Üniversitesi, Atatürk Eğitim Fakültesi, Eğitim Bilimleri Bölümü, İstanbul, Türkiye. E-posta: duygu.salli@marmara.edu.tr, https://orcid.org/0000-0002-8126-7131

Introduction

Today, it is known that education is constantly changing with rapidly evolving technology, cultural dynamics, and social needs. The direction of this change has gained a new dimension, combined with the opportunities brought by the digital age, and has turned into a structure that constantly interacts with one another (Vargas & Romani, 2020). As with every changing structure, educational institutions must ensure a certain level of cultural structuring in order for the digitalized education structure to be effectively included in the education process (Braun, März, Mertens & Nisse, 2020). Today, this change gains meaning with different concepts. For example, the concept of "global competence" is considered a dominant component of futuristic and applicable education. For today's education systems, "global competence" has become a reality that cannot be ignored (Khan, 2022). This situation has brought to the agenda the necessity of creating the education structure of the future within the framework of global competence. Preparing students to fully participate in the world of tomorrow requires the development of global competencies, defined as the capacity to understand and act on issues of global importance. To explain the concept of global competence, it is necessary to focus on students' capacities and competencies beyond their academic education. In this sense, the ideal is for every student to be curious about the global problems of the world, to create a productive information process by nurturing this curiosity, to adapt to different perspectives, and to interact with diverse cultures (Mansilla & Jackson, 2013).

In order for the concept of global competence to be effectively implemented within the education system, individuals must first be equipped with the skills necessary to meet the demands of the current era and the professions of the future. Thus, it will be possible for students to position their careers in a qualified manner in the long term (Sakulprasertsri, 2017). However, we should not forget the possibility of a dysfunctional group emerging because they do not have the skills to meet the needs of the 21st century and cannot maintain their psychological resilience.

For this reason, Harari (2018) suggests that with the emergence of new professions, a long and concerted effort must be made to train individuals suitable for these professions. In this process, there are numerous responsibilities that need to be addressed at the individual, institutional, and societal levels. Organizations should provide ongoing education programs for the development of their employees and establish a supportive work environment. In this sense, lifelong learning is of critical importance in terms of ensuring flexibility and maintaining healthy working conditions in the workplace, as well as protecting the psychological and physical health of employees. For this, the basic motivational conditions of employees must first be met (Popovska, Topuzovska, Popovski, 2012). It is evident that in order to address the challenges of the information age at both conceptual and methodological levels in future management, it is necessary to recognize that learning is the most potent tool for change (Mallik & Mallik, 2019).

The starting point for evaluating education in the digital age in terms of the professions of the future should undoubtedly be 21st century skills. Binkley et al. (2011) categorized these skills as ways of thinking in the 21st century, ways of working in the 21st century, and ways of living in the 21st century, and classified these categories as creativity, innovation, critical thinking, problem solving, decision making, learning to learn, metacognition, communication, and collaboration, ıt has become clear with the concepts of information and communication literacy, citizenship, life and career skills, personal and social responsibility skills, cultural awareness and competence. In this context, it is thought that it is necessary to focus on 21st century skills in order to understand what has changed in the education process with the digital age and to revise digital education accordingly. It is thought that this research, which provides data about the state of education and the future of professions in the digital age with the framework created from these skills, will contribute to the literature. In line with this information, the aim of the research is to reveal the opinions of faculty members about the reflections of the digital age on education and what needs to be done for the professions of the future. In line with this information, "What are teachers views on education in the digital age and the professions of the future?" constitutes the problem statement of the research. Within the framework of this problem, answers were sought to the following sub-problems:

• What skills do students need to obtain for the professions of the future?

• What skills do teachers need to obtain to prepare students for the professions of the future?

• What are the to prepare of educational institutions in preparing students for the professions of the future?

• What are the possible advantages of using artificial intelligence in education and the possible concerns felt about this issue?

• What are the solution suggestions for the use of artificial intelligence in education?

• What is the readiness of our educational institutions for the professions of the future?

Method

Research Design

This research includes a detailed evaluation of the professions of the future, taking consideration the dimensions of the educational institution, teacher and student, based on the reflection of the digital age on educational institutions. In the research conducted for this purpose, the phenomenology design, one of the qualitative research methods, was used. The phenomenology design is based on phenomena that we are aware of but do not have detailed information (Yıldırım & Şimşek, 2016). In this type of research, people's experiences with the phenomena are examined in depth (Patton, 2014).

Working group

The data of the research was obtained from lecturers working at different universities in the 2022-2023 academic year. Purposive sampling method was used to determine the study group. Purposeful sampling allows the in-depth study of situations that are thought to have rich information (Tarhan, 2015). In order to ensure the diversity of the study group, 10 lecturers selected from different universities through easily accessible case sampling were included in the research. Demographic information about the participants is shown in Table 1.

Table 1. *Demographic information of participating lecturers*

Participating	University	Gender
1	Okan University	Male
2	Marmara University	Woman
3	İstanbul Galata University	Male
4	İstanbul Teknik University	Woman
5	Mimar Sinan University	Male
6	Bahçeşehir University	Woman
7	Marmara University	Male
8	Marmara University	Woman
9	Yeditepe University	Male
10	Marmara University	Woman

As seen in Table 1, the lecturers participating in the research work at Okan University, Marmara University, Istanbul Galata University, Istanbul Technical University, Bahçeşehir University, Mimar Sinan Fine Arts University and Yeditepe University. As seen in Table 1, 6 of the lecturers participating in the research are women and 4 are men.

Data Collection Tools

An interview form consisting of open-ended and semi-structured interview questions was prepared to obtain the participants' opinions about the research. The preparation of these questions, which constitute the interview form, was carried out by examining in detail the literature on education in the digital age, professions of the future and the application of artificial intelligence in education. While developing the data collection tool, the opinions of a faculty member who specialized in qualitative research and faculty members teach courses such as innovation, entrepreneurship, and future management were taken into consideration. In line with the information obtained from the literature and

the opinions of faculty members teaching courses such as future management, innovation and entrepreneurship, 6 main open-ended questions and additional questions representing these questions were prepared. An expert in the field of educational sciences is Dr. has the title, the other one is Dr. a pilot application was carried out with two lecturers with the title of Lecturer.

Collection of Data

Research data was collected using a semi-structured interview form (Creswell, 2015), which is the main data collection method in qualitative research. Interviews were held with 10 lecturers who volunteered to participate in the research. The interviews were conducted face to face with 7 lecturers, using audio and video call programs over the internet with 3 lecturers. The duration of the interviews varies between 65 minutes and 80 minutes. The interviews were recorded with the permission of the participants and notes were taken by the researcher.

Validity and Reliability Study

In qualitative research credibility, transferability,dependability and confirmability methods are preferred to achieve validity and reliability (Yıldırım & Şimşek, 2016). The studies carried out to ensure validity and reliability in this research are presented in detail below

Credibility

The data obtained from the research were first examined by the researcher and expressed in codes, then coding was done on the same data by a different researcher who has studies on qualitative research. The codes obtained were compared and after consensus was reached, the data analysis was finalized and the consistency of the research was ensured. A pilot application was conducted before collecting the data of the study. For this application, one person with the title of doctor and one with the title of doctor lecturer were interviewed.

Transferability

The statements of faculty members regarding the codes obtained as a result of data analysis are presented in the form of direct quotations, clearly stated as P1, P2, and with frequencies.

Dependability

While developing the data collection tool, the opinions of faculty members teaching courses such as future management, innovation and entrepreneurship were taken. In addition, participant confirmations were obtained regarding the answers given by the participants.

Confirmability

All data obtained from the beginning to the end of the research are stored for review when necessary.

Analysis of Data

The data of the research were analyzed using inductive content analysis techniques. In inductive content analysis, similar concepts in the data set are brought together and analyzed (Creswell, 2015). In this research, codes were determined based on the opinions of the faculty members who made up the participant group. With video recording in meetings held via Zoom; the recordings obtained with a voice recorder during the face-to-face interviews were transferred to the computer environment, the data obtained were read and clearly described with quotations from the participants' opinions under the themes previously created in accordance with the research questions.

Results

In this section, the findings that emerged by analyzing the opinions of faculty members about the educational skills of the future and the future of professions, based on the reflections of the digital age on education, are included.

Themes and codes regarding faculty members opinions about the skills that students should acquire for the professions of the future are given in Table 2.

Table 2. *Faculty member opinions on the skills students need to optain for the professions of the future*

Theme	Code	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	F
	Digital literacy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	**10**
	Team work	✓	✓	✓	✓		✓	✓		✓	✓	**8**
	Digital citizenship	✓	✓	✓	✓				✓	✓	✓	**7**
	Higher order thinking	✓	✓	✓	✓	✓	✓		✓			**7**
	Economic awareness	✓	✓		✓		✓	✓			✓	**6**
Student	Social awareness	✓			✓			✓	✓	✓		**5**
	Psychological resilience	✓					✓	✓	✓	✓		**5**
	Cultural awareness			✓	✓		✓		✓	✓		**5**
	Time management	✓	✓	✓				✓	✓			**5**
	Health awareness			✓	✓			✓			✓	**4**

As seen in Table 2, regarding the theme of skills that students should acquire for the professions of the future; 10 codes were determined. The determined codes are, respectively, digital literacy, team work, digital citizenship, higher order thinking skills, economic awareness, social awareness, psychological resilience, cultural awareness, time management, health awareness.

> *P 8: Analytical thinking, critical thinking and problem solving are among the most basic skills. In addition to these, of course, the use of every device should be aware of ethical rules, that is, it should have digital literacy, first of all.*

Themes and codes regarding faculty members opinions about the skills that teachers should acquire in order to prepare students for the professions of the future are given in Table 3.

Table 3. *Faculty member opinions on the skills teachers need to optain in order to prepare students for the professions of the future*

Theme	Code	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	F
	Digital literacy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	**10**
	Lifelong learning	✓	✓	✓	✓			✓	✓	✓	✓	**8**
	Team work	✓	✓	✓			✓	✓	✓		✓	**7**
	Leadership	✓	✓	✓			✓		✓	✓	✓	**7**
	Digital citizenship		✓	✓	✓		✓	✓	✓			**6**
Teacher	Work-life balance	✓	✓					✓	✓	✓	✓	**6**
	Analytical thinking			✓	✓	✓		✓	✓	✓		**6**
	Adaption	✓	✓	✓		✓		✓		✓		**6**
	Self-sufficiency				✓	✓			✓	✓	✓	**5**
	Flexibility	✓				✓		✓			✓	**4**

As seen in Table 3, regarding the theme of skills that teachers need to acquire in order to prepare students for the professions of the future; 10 codes were determined. The determined codes are, respectively, digital literacy, lifelong learning, team work, leadership, digital citizenship, work-life balance, analytical thinking, adaptation, self-ufficiency, flexibility.

> *P 7: First of all, whatever we want to teach the students, we need to check whether the teacher has these characteristics, because who is teaching the students in this process? What will happen if the teachers do not have these skills? The target we set for the students will be a meaningless.*

Themes and codes regarding faculty members opinions regarding the to prepare of educational institutions in preparing students for the professions of the future are given in Table 4.

As seen in Table 4, regarding the theme of to prepare of educational institutions to prepare students for the professions of the future; 17 codes were identified. The determined codes are technological infrastructure, positive organizational culture, self-management, adaptation to change, creativity and technology integration, shared vision, interdisciplinary culture, awareness training, digital responsibility awareness, intellectual capital, current program sets, proactivity, transparency, sustainable vision, communities of practice, early start to digital education and merit.

Table 4. *Faculty member opinions on the to prepare of educational institutions to prepare students for the professions of the future*

Theme	Code	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	F
Organisation	Infrastructure		✓	✓		✓	✓	✓	✓	✓	✓	**8**
	Positive organization	✓	✓	✓		✓		✓		✓	✓	**7**
	Self management	✓	✓	✓		✓	✓		✓	✓		**7**
	Adaptation to change	✓	✓	✓	✓	✓				✓	✓	**7**
	Creativity- technology	✓	✓	✓			✓	✓		✓	✓	**7**
	Shared vision	✓	✓		✓			✓		✓	✓	**6**
	Interdisciplinary	✓		✓	✓	✓	✓				✓	**6**
	Awareness raising	✓		✓	✓	✓		✓		✓		**6**
	Digital responsibility		✓	✓	✓	✓			✓			**5**
	Intellectual capital	✓		✓			✓			✓	✓	**5**
	Current program	✓	✓	✓	✓				✓			**5**
	Proactivity			✓		✓				✓	✓	**4**
	Transparency	✓	✓			✓					✓	**4**
	Sustainable vision	✓	✓								✓	**3**
	Communities of practice				✓			✓	✓			**3**
	Early digital education	✓								✓		**2**
	Merit	✓	✓									**2**

P3: Educational institutions should have sufficient technological infrastructure to provide students with training on technology use and digital citizenship.

Table 5.*Faculty member opinions on concerns created by the use of artificial intelligence in education*

Theme	Code	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	F
Anxiety	Miscommunication	✓	✓	✓	✓			✓	✓	✓	✓	**8**
	Uncertainties	✓	✓	✓	✓					✓	✓	**6**
	Ineffective human resources	✓	✓	✓			✓	✓	✓			**6**
	Mass unemployment	✓	✓				✓	✓		✓		**5**
	Technology addiction	✓	✓	✓			✓	✓				**5**
	Financial source				✓	✓	✓	✓				**4**
	Ethical violation	✓	✓	✓			✓					**4**
	Organizational blindness	✓				✓	✓				✓	**4**
	Resistance to change	✓	✓	✓							✓	**4**
	Inequality of opportunity	✓		✓								**2**

As seen in Table 5, regarding the theme of possible concerns in the use of artificial intelligence in education; 10 codes were determined. Specified codes; miscommunication, uncertainties, ineffective human resources, mass unemployment, technology addiction, financial resources, ethical violation, organizational blindness, resistance to change, inequality of opportunity.

P6: When students receive support from artificial intelligence applications in every subject, their creative thinking, critical approach and analytical thinking skills may decline due to technology addiction.

Themes and codes regarding faculty members opinions about the advantages of using artificial intelligence in education are given in Table 6.

Table 6. *Faculty member opinions about the advantages of using artificial intelligence in education*

Theme	Code	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	F
Advantage	Saving time	✓	✓	✓			✓	✓	✓	✓	✓	**8**
	Personal training		✓	✓		✓	✓	✓	✓	✓	✓	**8**
	Reduced workload	✓	✓	✓			✓	✓	✓	✓	✓	**8**
	Career development	✓	✓	✓		✓		✓	✓	✓	✓	**8**
	Reduced bureaucracy	✓	✓	✓	✓		✓	✓		✓		**7**
	Interdisciplinary learning		✓	✓	✓	✓			✓	✓	✓	**7**
	Measurement evaluation		✓	✓	✓		✓		✓	✓	✓	**7**
	Applıed learnıng	✓	✓			✓	✓		✓	✓		**6**
	Human capital		✓	✓	✓	✓				✓	✓	**6**
	Control	✓	✓				✓	✓				**4**
	Digital productivity	✓							✓	✓	✓	**4**

As seen in Table 6, regarding the possible advantages of using artificial intelligence in education; 11 codes were identified. Specified codes; these are saving time, personal training, reduction in people's workload, career development opportunities, reduction in bureaucratic burden, interdisciplinary learning, measurement-evaluation, applied learning, human capital increase and control and digital productivity.

> *P 9: Artificial intelligence can be used to discover, generate, analyze and apply new learning models and materials*

Themes and codes regarding faculty members opinions regarding solution suggestions for improving the use of artificial intelligence in education are given in Table 7.

Table 7. *Faculty member opinions on solution suggestions for improving the use of artificial intelligence in education*

Theme	Code	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	F
Solution	Financial source	✓	✓		✓		✓	✓	✓	✓	✓	**8**
	Special software	✓	✓		✓	✓				✓	✓	**6**
	Current research		✓	✓	✓		✓	✓			✓	**6**
	Human trait	✓	✓				✓		✓	✓		**5**
	Interdisciplinary groups	✓			✓			✓	✓		✓	**5**
	Human resource			✓	✓		✓	✓		✓		**5**
	Augmented intelligence	✓	✓		✓		✓		✓			**5**
	Control			✓	✓	✓				✓		**4**

As seen in Table 7, regarding the theme of solution suggestions for improving the use of artificial intelligence in education; 8 codes were determined. Specified codes; increasing financial resources, developing special software, current research, human trait, interdisciplinary learning/working groups, strengthening human resources, augmented intelligence, and strengthening the control mechanism.

> *P 10:Financial resources are also needed for applications such as customized courses, interactive lessons, gamified classes for skill acquisition, and smart classes.*

Themes and codes regarding faculty members opinions (metaphors) regarding the readiness of our educational institutions for the professions of the future are given in Table 8.

As seen in Table 8; regarding the metaphor theme of the readiness of educational institutions for the professions of the future; 10 codes were determined. Specified codes; calculator,hourglass,half-full glass, runner, chicken-and-egg dilemma, bag of information, foggy sky, iceberg, footprint, ocean. The opinions of all participants in the research are included in the table.

Table 8. *Faculty member opinions on the readiness of our educational institutions for the professions of the future (metaphor)*

Theme	P	Code	Category
Metaphor	**1**	Calculator	In our education system, certain aspects are system-oriented, yet there's a lack of transition to implementation. In other words, transaction results may appear on the screen, but there's a lack of follow-up, resulting in these outcomes remaining stagnant without being translated into action. Consequently, we find ourselves merely presenting the situation without advancing beyond that stage.
	2	Hourglass	Just like grains of sand slowly pass through a narrow cylinder and accumulate, educational institutions, too, require time to prepare for the professions of the future.
	3	Half full glass	Some schools and educational institutions have created special programs to teach digital skills and are working to equip students with digital skills, but the other half of the glass is still empty
	4	Runner	The race is long and continuous. That's why educational institutions are actually training marathon runners to be ready for the professions of the future, but if not managed well, the runner may be left stranded.
	5	Chicken and egg dilemma	I think it is a process that has turned into a dilemma because the education system has difficulty in keeping up with the digital technologies introduced by educators.
	6	Bag of information	I would like to use the metaphors of knowledge worker and knowledge producer, but we only carry knowledge and it becomes a burden. For this reason, the information crate
	7	Foggy sky	The professions of the future are foggy because they are full of uncertainties, but if these uncertainties are overcome, the sky represents our freedom.
	8	Iceberg	We remain at the level of theoretical awareness about the future, which leaves us at the tip of the iceberg.
	9	Footprint	There are a lot of footprints we leave in the digital environment. This footprint is passive and consists of the traces we leave unconsciously.
	10	Ocean	There is so much to learn, so much is uncertain and full of risks.

Discussion, Conclusion and Recommendations

Contemporary education should not only provide students with knowledge on various subjects and disciplines, but also equip them with the necessary skills and digital competencies to thrive in the digital world (Braun et al., 2020). The findings from the research support this perspective. When examining the skills that students and teachers need to acquire to be prepared for future professions, digital literacy, digital citizenship, and teamwork emerged as common themes. The results indicate that future professions are closely aligned with the concepts of digitalization. According to Braun et al. (2020), it is extremely important to consider students' learning tendencies alongside technological opportunities, as students are the primary beneficiaries of digital education.

On the other hand, in the rapid changes experienced, it is vital that educators, like students, adapt to educational transformations, especially technology-related (Labbas & El Shaban, 2013). According to Selwyn (2011), the use of digital technologies in schools should be seen as a process that aligns with the teaching profession, suggesting that the role of being a teacher should evolve to meet the demands of digital technology.

According to the research findings, in addition to skills such as digital literacy, digital citizenship, and teamwork, students need to acquire other skills for future professions. These include high-level thinking skills, economic awareness, social awareness, health awareness, cultural awareness, time management, and psychological resilience. In the research conducted by Abrosimova (2020), issues with students' skills such as motivation and critical thinking were identified. This indicates that the conditions are not entirely conducive to the transition to digital education. Based on this information and in line with research findings, it can be concluded that students should undergo training to enhance their higher-order thinking skills and critical thinking abilities.

Similar to the concept of lifelong learning highlighted in the research, Polz (2020) discussed the professionalization of teachers, emphasizing lifelong learning skills in his study that introduced the professionalization process in teaching. According to Allabauer (2011), learning and education encompass more than acquiring competence, and lifelong learning primarily necessitates skills such as learning abilities and innovation (as cited in Polz, 2020).

According to Fadli, Astuti & Rukiyati (2020), there is a significant need for teacher resilience to effectively adapt to technological advancements. These findings from Fadli and his colleagues complement the data obtained from the research. While the response of teachers to evolving technology necessitates the ability to adapt to innovations, the fact that teachers who respond slowly to technological advancements may eventually abandon the use of technology due to stress suggests a lack of self-efficacy. Based on this information and the research findings, it can be concluded that teachers should possess the capability to adapt to emerging technologies in the digital age and have self-efficacy in this regard.

According to another finding from the research, certain codes were identified regarding what educational institutions should undertake to prepare students for future professions. These include adaptation to change, shared vision, digital responsibility awareness, intellectual capital, transparency, technological infrastructure, positive organizational culture, creativity, and technology integration within current program sets. Sustaining and enhancing the institutional framework in education is a crucial task for public policies. However, it is important to recognize that public authorities, along with numerous other stakeholders, bear the responsibility of structuring education to offer high-quality and equitable learning opportunities, while also being cost-effective and conducive to innovation (OECD, 2021).

This result coincides with the 'proactive' code obtained in the research on what institutions should do for the professions of the future. According to AlNajdi (2014), the way to combine traditional learning in institutions with new technologies is through the hybrid learning model, which facilitates access to information resources that best reflect teacher and student interaction through independent learning. At this point, in order to implement the necessary changes regarding digital education, a governance structure must be established to achieve sustainable and inclusive results.

According to results obtained from the research regarding possible concerns about the use of artificial intelligence in education, the following codes were identified: uncertainty, ineffective human resources, mass unemployment, lack of communication/emotion, ethical violations, inequality of opportunity, need for financial resources, resistance to change, organizational blindness, and technology addiction. A research conducted by Tao, Diaz, and Guerra (2019) found that artificial intelligence is insufficient in terms of motivation and emotions, which greatly affect people's decision-making processes. Other results from the same study also highlight various negative aspects of using artificial intelligence. Specifically, the use of artificial intelligence in educational processes leads to a lack of leadership, weakens critical thinking skills, and causes students to become passive in the classroom.

According to the results of the research conducted by Bhbosale, Pujari & Multani (2020), artificial intelligence technologies provide many advantages. According to this; similar to the research results, since artificial intelligence can be reprogrammed to work for a long time without getting bored or tired, the human burden can be reduced, thus benefiting from people in different areas, and also saving time. Similarly, in a study conducted by Arslan (2020), criteria such as gaining a new dimension in the measurement and evaluation system, providing individualized learning opportunities, and using artificial intelligence to meet the needs of students are considered important for developing artificial intelligence in education.

Looking at the results regarding the potential advantages and concerns about the use of artificial intelligence in education, it is evident that participants perceive artificial intelligence in two distinct ways:

1. Viewing artificial intelligence as a computer program that poses a threat to humans and reduces or even eliminates interaction between people.
2. Perceiving it as a computer program that simplifies certain tasks for people, creates administrative efficiency for institutions, and provides a new perspective on students learning.

Artificial intelligence, while assisting humans in various aspects, also introduces elements that may pose threats. Therefore, it is crucial for artificial intelligence to be positioned for human benefit while simultaneously being free from risks and dangers. Consequently, the significance of conducting ongoing research on artificial intelligence, as highlighted in the research findings, becomes apparent. Similar to the findings of the research, Göçen & Aydemir (2020) provided several suggestions for the advancement of artificial intelligence. These suggestions include conducting infrastructure development, establishing control mechanisms, considering human psychology, and developing preventive and supportive software.

According to the research findings, academics have articulated various metaphors regarding the preparedness of our educational institutions for future professions. Analysis of these metaphors reveals that faculty members perceive educational institutions as not fully prepared for the demands of the future professions. In elucidating these metaphors, it was noted that they often emphasized the need for educational institutions to internalize artificial intelligence over time and highlighted that current studies on artificial intelligence are superficial.

When these results are examined, it is seen that faculty members are aware of the productive but challenging nature of the process, which is characterized by competition and includes significant uncertainties regarding the professions of the future, considering the constantly changing student profile. However, their inability to foresee whether they are ready to overcome this challenge implies various underlying reasons.

The financial evaluation of the perception of faculty members, as revealed in the research, that educational institutions are not adequately prepared for the demands of future professions is of great importance. The rapid, and uncontrollable pace of change brought about by globalization also increases the demand for financial resources. However, it is observed that institutions lack the capacity to meet this level of financial investment. Moreover, the failure to increase education budgets in parallel with technological developments further exacerbates the increasing need for financing.

When evaluated from an institutional perspective; although there is a conceptual awareness about the professions of the future in terms of educational institutions, it is thought that a mental structuring has not yet taken place. It is thought that the reason for this situation is due to the incompatibility of the skills put forward for the professions of the future and the content offered in educational institutions. This incompatibility between theory and practice requires educational institutions to undergo more radical structural and mental transformations in order to be ready for the professions of the future.

In line with the findings of the research, the following suggestions can be made:

- It is recommended that academic studies on the digital age and artificial intelligence be shared with all educators in educational institutions and collaborations are encouraged based on the results obtained.
- It is recommended that the skills expected to be acquired in future professions are included in training programs and evaluations are made regarding the quality of the application results.
- It is recommended that the outcomes of the skill sets integrated into training programs for future professions be regularly evaluated, and that revisions be made based on the results obtained.
- It is recommended to monitor the sustainability of practices deemed effective in future skills training programs.
- It is recommended to organize trainings that will facilitate teachers' adaptation to the digital age, to evaluate these trainings within the scope of adult education and lifelong learning, and to develop comprehensive policies in this field.

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