

AN INVESTIGATION OF ENGLISH LANGUAGE INSTRUCTORS' PERCEPTIONS AND EXPERIENCES OF DIGITALIZATION AND DATAFICATION OF HIGHER EDUCATION

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**I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.**

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## ABSTRACT

### AN INVESTIGATION OF ENGLISH LANGUAGE INSTRUCTORS' PERCEPTIONS AND EXPERIENCES OF DIGITALIZATION AND DATAFICATION OF HIGHER EDUCATION

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This interpretative phenomenological analysis study explores English language instructors' perceptions and experiences of digitalization and datafication in higher education. The data was collected through in-depth, semi-structured interviews with three participants, selected using criterion sampling and a snowballing approach. The participants were English teachers with 5 to 15 years of experience who worked at a specific higher education institution in Türkiye. Thematic coding was applied using a social constructivist interpretive framework in MAXQDA 24. The findings revealed mixed perceptions: Participants viewed digitalization and datafication as beneficial for themselves, students, accountability, and professional development, offering valuable insights. However, they also expressed concerns about privacy, corporate influence, and the need for cautious implementation. Participants had limited experience with datafication, while their experience with digitalization was voluntary and had various purposes. They also noted that digital tools were underutilized at their institution, suggesting that better policies could be implemented. In their experience, digital tools sometimes decreased their workload, and sometimes increased it. Resistance from students to digital tools was also noted, with instructors emphasizing

the importance of addressing student concerns. Participants recognized the inevitability of the transformations in the ELT profession and higher education, stressing the need for teachers to be innovative and adaptable. Despite these shifts, they underscored the importance of maintaining the human touch in teaching. Finally, they highlighted concerns that these changes might negatively affect the public perception of teachers, further emphasizing the need for adaptability.

**Keywords:** digitalization, datafication, higher education, ELT, ELT instructors



## ÖZ

### İNGİLİZCE ÖĞRETMENLERİNİN YÜKSEKÖĞRETİMİN DİJİTALLEŞMESİ VE VERİLEŞMESİNE İLİŞKİN ALGILARI VE DENEYİMLERİNİN ARAŞTIRILMASI

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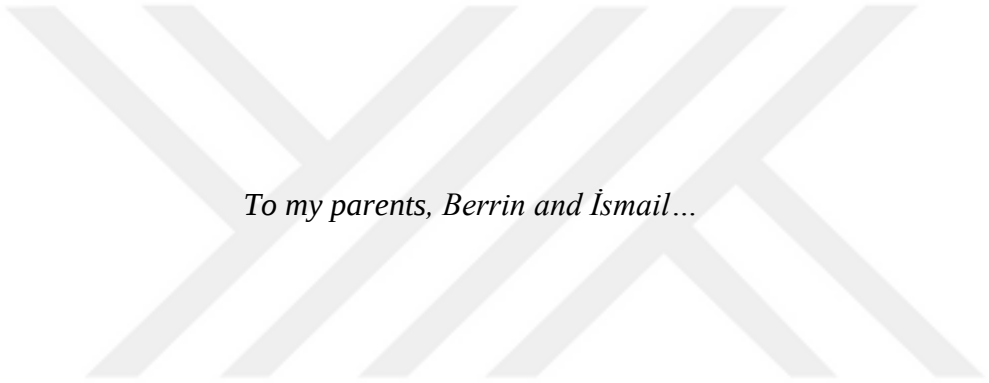
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Bu yorumlayıcı fenomenolojik analiz çalışması, yükseköğretimde dijitalleşme ve verileşme ile ilgili İngilizce öğretmenlerinin algı ve deneyimlerini incelemektedir. Veriler, üç katılımcıyla yapılan derinlemesine, yarı yapılandırılmış görüşmeler yoluyla toplanmıştır. Katılımcılar, Türkiye'de belirli bir yükseköğretim kurumunda çalışan, 5 ila 15 yıllık deneyime sahip İngilizce öğretmenleridir ve kriter örnekleme ve kartopu yöntemi kullanılarak seçilmişlerdir. Veriler, MAXQDA 24'te sosyal inşacı yorumlayıcı bir çerçeve ile tematik kodlama yöntemi kullanılarak analiz edilmiştir. Bulgular, katılımcıların dijitalleşme ve verileşmeyi kendileri, öğrenciler, hesap verebilirlik, mesleki gelişim ve önemli içgörüler sunma açısından faydalı bulduklarını ortaya koymuştur. Ancak, katılımcılar gizlilik, ticari etkiler ve dikkatli uygulamanın gerekliliği konusunda endişelerini de dile getirmiştir. Katılımcılar, verileşme konusunda sınırlı deneyime sahipken, dijitalleşme ile ilgili deneyimleri gönüllü olup çeşitli amaçlar taşımaktadır. Ayrıca dijital araçların kurumlarında yeterince kullanılmadığını belirterek, daha iyi politikaların uygulanabileceğini öne sürmüşlerdir. Deneyimlerine göre, dijital araçlar bazen iş yüklerini azaltmış, bazen

de artırmıştır. Öğrencilerin dijital araçlara direnç gösterdiği durumlar da not edilmiş, öğretmenler ise öğrenci endişelerinin dikkate alınmasının önemini vurgulamıştır. Katılımcılar, İngilizce Öğretmenliği mesleği ve yükseköğretimdeki dönüşümlerin kaçınılmaz olduğunu kabul ederek, öğretmenlerin yenilikçi ve uyumlu olması gerektiğinin altını çizmiştir. Bu değişimlere rağmen, öğretmenliğin insani yönünün korunmasının önemine dikkat çekmişlerdir. Son olarak, bu değişimlerin öğretmenlerin toplumdaki imajını olumsuz etkileyebileceğine dair endişelerini vurgulayarak, uyum sağlama gerekliliğini bir kez daha belirtmişlerdir.

**Anahtar Kelimeler:** dijitalleşme, verileşme, yükseköğretim, İngilizce öğretmenleri, İngilizce dil eğitimi





*To my parents, Berrin and İsmail...*

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## LIST OF ABBREVIATIONS

|                |                                                            |
|----------------|------------------------------------------------------------|
| <b>AI</b>      | Artificial Intelligence                                    |
| <b>AIED</b>    | Artificial Intelligence in Education                       |
| <b>App</b>     | Application                                                |
| <b>CoHE</b>    | Council of Higher Education                                |
| <b>EdTech</b>  | Educational Technology                                     |
| <b>EFL</b>     | English as a Foreign Language                              |
| <b>ELT</b>     | English Language Teaching                                  |
| <b>HE</b>      | Higher Education                                           |
| <b>IPA</b>     | Interpretative Phenomenological Analysis                   |
| <b>IT</b>      | Information Technology                                     |
| <b>LMS</b>     | Learning Management System                                 |
| <b>MOOC</b>    | Massive Open Online Course                                 |
| <b>OECD</b>    | The Organization for Economic Co-operation and Development |
| <b>PDPL</b>    | Personal Data Protection Law                               |
| <b>TOEFL</b>   | Test of English as a Foreign Language                      |
| <b>TÜBİTAK</b> | Scientific and Technological Research Council of Türkiye   |
| <b>VR</b>      | Virtual Reality                                            |

## CHAPTER 1

### INTRODUCTION

This chapter is divided into five parts. In the first part, background information regarding the global and local shifts towards digitalization and datafication of higher education will be discussed. The second part will be explaining the need for the current study. Research purposes will be given in the third part, while research questions will be given in the fourth part. Lastly, key terms used in this study will be defined in the fifth part.

#### 1.1. Background to the Study

As evidenced by elements such as tragic geopolitical madness, growing fluctuation of weather dynamics, economic systems, and global disease, the world we live in appears to be growing more unpredictable and uncertain every day (Johnson et al., 2022). Directly related, Czerniewicz et al. (2023) argue that higher education (HE) is also going through a time of uncertainty, transition, and change. According to the authors, although the COVID-19 pandemic especially highlighted these issues, economic, technical, and social factors were already fueling this instability before then. Similarly, Williamson et al. (2020, p. 356) maintain that “the combined forces of neoliberal metric power, political reform and the global education industry” all play a part in the transformation of higher education operations. Saltman (2022) makes a similar point and states that, following decades of systematic defunding and privatization, combined with the anti-intellectual, anti-critical, and punishing exam and accountability regimes, education was facing a crisis of credibility long before the pandemic.

Accelerated and propelled by the pandemic, education and learning spaces have been reconceptualized and redesigned with an increasing focus on digitization (Hillman &

Esquivel, 2024; Lamb et al., 2021). Digitization, in this regard, describes the process of converting various teaching methods into computer code, which is most evident in the manner in which some elements of teaching and learning are converted into e-learning software packages (Williamson, 2017). As educators and learners have gained more proficiency in navigating learning environments outside of traditional campus settings, this increase in digitization has resulted in a decentering of the physical classroom (Jandrić et al., 2020). Moreover, Hillman and Esquivel (2024) claim that this digitization has also led to morphing the teaching profession into “a race for data collection, managing leader- and score-boards, juggling software applications (apps) and platforms, charging, and repairing devices,” also turning the teacher into a “line operator of apps and platforms in the classroom” (p. 517). Similarly, Czerniewicz et al.’s (2023) study with South African and English academics reveals that the increased digitization of higher education leads to a collective feeling that their institutional contexts and the foundational construction of HE are being de-routinized across different sites, disciplines, and teaching levels.

Building upon the discussions surrounding digitization, Alenezi (2021) states that digitalization is another concept that plays an important role in the current transformation of the higher education context. According to Alenezi (2021), digitization focuses on converting analog data or tools into digital versions, whereas digitalization refers to developing and changing workflows to improve existing systems with the help of digital tools. Many sources use these two terms interchangeably or synonymously despite their differences. This study takes this fact into account and uses digitalization in the definition given in this paragraph. However, the sources cited in this study may use these terms interchangeably as well.

Although digitalization has long been changing roles and procedures in higher education (Teräs et al., 2022), more and more attention has been given to digital tools as potential improvements. This is because digital technology is often associated with the idea that it will change education for the better and that education needs to ‘catch up’ and ‘keep up’ with the rising demands for digitalization elsewhere (Selwyn, 2022). Advocates for digitalization support that digital tools enable “learning to take place within collaborative and supportive social contexts, as well as increasing indi-

viduals' control over the nature and form of learning processes" (Selwyn, 2022, pp. 27-28). In addition to these points, it is also claimed that digital tools support professional development and classroom management, provide access to sources and materials, and improve organizational structures within educational institutions and the delivery of education (Luckin et al., 2016; Selwyn, 2022).

On the other hand, some scholars and teachers argue that increased digitalization can bring about certain issues that we need to be mindful of (Selwyn et al., 2017). As they explain, the problem with digitalization is not the increased use of educational technology (EdTech) itself, but rather how it is being driven by the marketization of HE, undermining the agency of teachers, 'datafication' of education, the actors that push for such technology, as well as the surveillance that comes with it. For example, Williamson (2017) points out that we need to be cautious, even skeptical, and resistant to these developments and claims as "seriously powerful organizations are at work in this space, organizations with a forceful and influential shared imagination concerning the future of education" (p. 8). Additionally, Hillman and Esquivel (2024) state that:

This is not all there is about the capacity of these technologies in public education. Their greater scope is manifesting in a much larger orchestration. They begin to form part of something like a techno-solutionist 'stacking' or layering of complex functions once data becomes available and continuously generated. This stacking builds into an apparatus, an engine that becomes a powerful economic tool in a neoliberal political economy, which demands speed, efficiency, and workers to power it. Data and EdTech systems present the opportunities both for utilising efficiency and linking economic needs for labour with education. (pp. 517-518)

Moreover, it is worth mentioning that while EdTech and artificial intelligence (AI) are assumed to be free of bias, that is actually not the case. Even though these digital tools are promoted as neutral things that will help make education more accessible and equal, they are still artefacts that carry pre-existing social, cultural, and political practices and values (Eynon, 2023). This is because all these tools rely on data, and data cannot be impartial or objective as it carries the information provided by its producer (Kitchin, 2014).

Adding to the discussion, another important conceptualization that becomes relevant is datafication. Datafication, which Williamson et al. (2020) define as “the rendering of social and natural worlds in machine readable digital format” (p. 351), has influenced education long before EdTech. However, digitalization and datafication of education have had a rise because of the spread of metric power throughout social, cultural, economic, and political systems. Moreover, because of major efforts by political centers and supporting businesses, think tanks, consultancies, and sector agencies, higher education specifically has witnessed a dramatic expansion and mutation in datafication (Williamson, 2018). Raffaghelli and Sangrà (2023, p. 6) state that collecting “large amounts of data to answer algorithmic decision-making and automated services” may have dreadful consequences, and some are explored in studies that examine concepts such as ‘dataveillance’ (van Dijck, 2014) and ‘surveillance capitalism’ (Zuboff, 2019).

Gourlay (2020, 2022) claims that increased digitalization and datafication may threaten academic freedom due to its context of increased surveillance, regulation, and performativity, and that students are becoming more and more datafied as human subjects as a result of the growing usage of digital technological data to watch and monitor their behavior. Additionally, the tendency towards datafication may also stem from thinking of “academics and students as somewhat abstract, disembodied human subjects, removed from their social and material settings” (Gourlay, 2022, para. 2). Suoranta et al., (2022) agree with this point and state that data-driven education practices and visions may reduce higher education instructors and students to “mere objects of digitalization, rather than seeing them as active subjects participating in the shaping of digital futures” (p. 225).

Datafication, along with the issues and instabilities mentioned in the previous paragraphs, is directly connected to neoliberalism as higher education “has been made to resemble a market in which institutions, staff and students are all positioned competitively” where their performances are continuously evaluated, compared and ranked with measurement techniques (Williamson et al., 2020, p. 354). According to Williamson et al. (2020), more and more operations and processes in higher education are becoming ‘unbundled’ or divided into separate services and tasks that are then

frequently contracted out to third parties. These components and tasks are then ‘re-bundled’ into new parts and models, many of which may be made profitable by for-profit businesses in the competitive higher education sector. Fontaine (2016) argues:

Teaching and learning are increasingly being measured and quantified to enable analysis of the relationship between inputs (e.g., funding) and outputs (e.g., student performance) with the goal of maximizing economic growth and productivity and increasing human capital. (p. 2)

According to Stewart et al. (2023), many higher education instructors find themselves in a new professional landscape due to the ramifications of this widespread adoption of tracking and surveillance capabilities for pedagogy, academic governance, and student and teacher data privacy. Moreover, the authors state that there is also a shift in the process and paradigm of higher education as the academic tradition of science operates on the foundation that correlation does not equal causation; yet datafication does not work to explain, only to identify and correlate patterns, which is a stark contrast to higher education and scientific research principles.

Furthermore, critical scholars are concerned about how digital education policies start to look like “a ‘network governance’ influenced strongly by decentralized, flexible partnerships between public/private cross-sector organizations” (Player-Koro et al., 2018, p. 683). Hartong (2016) remarks that these novel technologies and global and local mediating actors all play pivotal parts “in the emergence of a new mode of digitalized governmentality in education,” and that it may have “the potential to reach far beyond policy, into educational administration, school practice and individual learning activities ... by exercising disciplinary power” (p. 525). Lastly, Ramiel and Dishon (2023) explain that AI integration into education is made possible by policy rationalities that center governance, accountability, and transparency; therefore, data-led governance has started to take the shape of “anticipatory forms of AI enhanced governance” (p. 143).

While these points are discussed and debated on a global scale, local developments and discussions also play a vital role. Türkiye’s education and higher education systems are not exempt from the aforementioned shifts and challenges. According to

Nuroğlu and Nuroğlu (2018), the ‘Fourth Industrial Revolution’ officially became a part of Türkiye’s agenda in 2016. While this was related to foreign trade policies, it was far from the only initiative. Since 2018, the Scientific and Technological Research Council of Türkiye (TÜBİTAK) has been offering funding to projects under the “High Technology Platforms Call” with the aim to specialize the research and development (R&D) units of higher education institutions in collaboration with commercial and public R&D units and turn them into ‘excellence centers’ (The Scientific and Technological Research Council of Türkiye, 2018). To achieve this aim, this program supports domestically conducted, traceable, scientifically qualified, and commercially viable research programs in priority areas determined within the scope of national goals and policies. Around the same time, for example, Yeditepe University in Türkiye launched a new master’s program in “Information Technologies and Social Media Education,” which offered courses on social network analysis, AI applications in education, social media literacy, and social media management, emphasizing the shift from “Industry 4.0” to “Society 5.0” (Yılmaz et al., 2023, p. 8635).

In 2019, the Turkish Council of Higher Education (CoHE) announced their new project titled “Digital Transformation Project in Higher Education” (The Council of Higher Education, 2019). In this announcement, CoHE declared that they were adopting a new motto of ‘Digitalizing CoHE’ and highlighted the importance of this project by saying that universities were now globally competitive environments for both students and academics, and that digital capacity was one of the most important elements to stay ahead in this competition. Details of this project included conducting lessons on learning management systems (LMS), providing digital class materials such as interactive videos, tutorials and extra resources, and offering courses on digital literacy.

Later on, in 2022, CoHE published a document on a follow-up project titled “The Council of Higher Education’s Big Data Project” (The Council of Higher Education, 2022). In this document, it was stated that CoHE decided to undertake this project to study the innovative aspects of Big Data in Turkish higher education, focusing on data collection and analysis, as well as the crucial component of “Value” associated with Big Data (p. 5). It was clarified that the project would start with eight pilot uni-

versities. The project documentation defined Big Data as “a sufficient amount of valuable and reliable processed or raw dataset that can be collected from different sources and in different formats at any time for a specific purpose” (p. 17). Many different sources and forms of data were suggested, including but not limited to students’ web search histories, clicked contents, location histories, shopping preferences, camera and voice data, social media contents, physical appearances, and clothing preferences. While these two projects capture the current meso view towards digitalization and datafication of higher education in Türkiye, universities in Türkiye also conduct their own research and carry out their own projects; therefore, different institutions may have different applications and views.

With global and national increases in digitalization and datafication, research is needed to understand the impacts of policy and change on the involved actors. As for research conducted in Türkiye’s education and higher education contexts regarding digitalization and datafication, one study by Uğur (2021) investigated the effects of mandatory distance education during the COVID-19 pandemic period from teachers’ and parents’ perspectives. The study calculated parents’ and teachers’ satisfaction with remote education on a scale of 1-10 and found that the majority of the participants were happy with online education, and teachers had positive attitudes toward digital media. It was also revealed that parents and teachers mostly referred to technical issues (i.e., lack of digital devices, internet connection problems) as obstacles to digital education. Another study by Arısoy (2022) interviewed 20 expert managers in the private education sector and explored what they regarded as challenges, what they did to adopt digitalization, the impacts of digitalization on education, the negative effects of digitalization, and their definitions of digitalization. The study showed that the participants mostly viewed challenges from technical perspectives, made use of digital platforms and tools in their companies, regarded digitalization’s impact as positive, and considered its negative impacts in terms of concentration problems, digital literacy, lack of training, and increased cheating risks; thus, from more technical domains as well.

Other studies conducted in Türkiye include Gökkaya’s (2019) inquiry into the digitalization levels of the teaching staff at Kocaeli University’s vocational school,

Kaya's (2022) exploration of private school teachers' perceptions regarding digital teachers, Bayındır and Kahraman's (2023) research into the issues experienced in the mandatory online education in 2020, Çam's (2022) research into the digitalization of higher education management, Ağırtaş and Çavuş's (2022) examination of the digitalization levels of teaching staff in higher education in emergency remote education, Talan's (2021) editorial on digitalization of education and new approaches, Parlak's (2017) analysis on opportunities and applications of digital education, Korkutan et al.'s (2023) examination of teachers' digitalization tendencies in education, and Şahin and Kalkan's (2022) investigation of pre-school teacher candidates' digital literacy levels. While these studies differ in methods and design, the findings often reveal findings from more practical and non-critical perspectives.

## **1.2. Need for the Study**

Although there are many studies about digitalization and datafication of education, most of these studies focus on instrumental or technical aspects and how to integrate digital technologies into education and the digital competencies of teachers (Selwyn et al., 2017). Raffaghelli and Stewart (2020), in a systematic literature review, establish that the majority of articles have an instrumental framing with a focus on the development of technical skills and framing of knowledge in quantifiable and mechanical ways. A significant gap in research lies in the overemphasis on empirical, quantifiable data at the expense of more intangible aspects of human experience (Kitchin, 2014). Moreover, exploring how teachers mediate between different educational logics and innovative practices within the framework of growing datafication can shed light on the complexities of teaching in data-driven environments (Ali, 2022). As higher education undergoes significant changes due to digitalization and datafication, understanding how teachers perceive and adapt to these transformations is essential for informing professional development initiatives and support structures (Selwyn et al., 2017). In addition to the points above, qualitative inquiries into English language instructors' perspectives and experiences in higher education, especially in the Turkish higher education context, are understudied. As such, this study was born out of the necessity to look into the affective domains of higher education ELT instructors regarding digitalization and datafication trends.

### 1.3. Purpose of the Study

This research study aims to investigate the perceptions and experiences of English language instructors regarding digitalization and datafication of higher education. This study contributes to the field by exploring under-researched but highly relevant phenomena from the perspective of actors that are directly affected. These subjects are even more under-researched in Türkiye, making this study more significant. The findings of this research may provide benefit to ELT field, English teachers, higher education institutions, professional development units, administrators, and policy-makers.

### 1.4. Research Questions

With the points made in the previous sections, this study aims to answer the following research questions:

1. How do English language instructors perceive the digitalization and datafication of higher education?
2. How do English language instructors experience the digitalization and datafication of higher education?
3. How do English language instructors conceive the shifts in the language teaching profession in relation to digitalization and datafication of higher education?

### 1.5. Definitions of Key Terms and Concepts

**Digitalization:** Developing and changing workflows to improve existing systems with the help of digital tools (Alenezi, 2021).

**Datafication:** “Transformation of many aspects of education into quantifiable information that can be inserted into databases for the purposes of enacting different techniques of measurement and calculation” (Williamson, 2017, p. 9).

**Artificial Intelligence (AI):** “Computer systems that have been designed to interact with the world through capabilities and intelligent behaviours that we would think of as essentially human” (Luckin et al., 2016, p. 14).

**Big Data:** “High-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation” (Gartner, n.d.).



## CHAPTER 2

### REVIEW OF THE LITERATURE

In this chapter, a review of the relevant literature will be provided under two key sections. In the first section, digitalization in education will be discussed with regard to its history, supportive claims, and criticism. Under a sub-heading, digitalization in the higher education context will be examined. In the second section, datafication in education will be reviewed, whereas another sub-heading will refer to datafication in higher education.

#### 2.1. Digitalization in Education

Technology has been playing a huge part in education for over a century, and each development typically comes with expectations of revolutionizing teaching and learning (Howard & Mozejko, 2015). According to Howard and Mozejko (2015), education has witnessed three ages of technology integration, which they list as pre-digital, personal computer, and the internet. While the pre-digital age saw the introduction of film, radio, and television into schools, the personal computer era brought about the use of desktop computers in education departments. Yet, Cuban (2001) explains that this would lead to what is referred to as the ‘digital divide’ as not every school or country would have the same access to same resources and hardware. Additionally, this would prompt a change in the way people viewed education, shifting it from a teacher-centered standpoint to a student-centered one (Cuban, 2001).

Howard and Mozejko (2015) state that the third age of technology saw the use of the Internet in educational settings, first in a static, then in a dynamic and interactive form. As technological development began to accelerate rapidly, new areas of expertise began to gain traction, putting pressure on schools to include these skills, often referred to as 21st-century skills. According to Bellanca and Brandt (2010), 21st-

century skills today include learning and innovation skills, digital literacy skills, and career and life skills, with sub-skills included in each.

Over the years, as digital technologies increased in number and kind, education landscape has witnessed examples of massive open online courses (MOOCs), virtual reality (VR), LMS, AI, gamification, and much more (Alenezi, 2021; Saltman, 2020; UNESCO, 2023). Supporters of such digital technologies propose that these tools will improve education by providing adaptive, flexible, individualized, interactive, authentic, and inclusive learning environments while freeing teachers from time-consuming tasks and allowing them to focus on the affective domains of teaching that will take teaching and learning to the next level (Alshumaimeri & Alshememry, 2024; Luckin et al., 2016). Argued benefits in foreign language education in particular include personalized feedback, advanced tutoring systems, adjustable educational routes, and tools for natural language processing (Alshumaimeri & Alshememry, 2024).

As aforementioned, such new developments often come with the assumption that they will fix the problems in and improve educational systems while eliminating inequality and bias; however, reality often does not match these assumptions (Selwyn, 2024; Thompson & Prinsloo, 2023). In fact, Selwyn (2022) argues that educational technology is stuck in a “cycle of hype, hope and disappointment” (p. 31). Being that digital tools are “complex artefacts that embody social, cultural and political practices and values, which will be used and have different implications in different contexts” (Eynon, 2023, p. 246), digital technologies may end up widening educational inequalities instead of eliminating them as suggested (Selwyn, 2024). Indeed, Romanova et al. (2020, p. 1) claim that the fast pace of digitalization combined with the starting advantages of digital world leaders results in “accumulated advantage” where the unequal distribution of opportunity continues in the same direction – with the initial party with the power growing stronger while the disadvantaged party becomes even more deprived and has a lower chance for success.

Likewise, Eynon (2023) refers to previous ethnographic studies to explain that schools in wealthier communities tend to use technology differently than schools in

poorer communities, which perpetuates forms of social sorting in which different student groups are supported on specific educational paths that lead to different life trajectories. The author also points out that open educational resources, intended to increase access to education and social opportunities, instead tend to support specific modes of knowledge and are mostly utilized by people with already the greatest access to education.

Both advocates and critics agree that digital tools and technologies in education require more research, and that teachers should be involved in the decision-making processes (Emejulu & McGregor, 2019; Luckin et al., 2016; Miao & Holmes, 2023; Ramiel & Dishon, 2023; Selwyn et al., 2017; UNESCO, 2023; Williamson, 2017). Although much research is carried out from an instrumental and technical perspective, not a lot of attention is paid to the impact of digitalization on teachers, or to their experiences and perspectives (Selwyn et al., 2017; Teräs et al., 2022). Ball and Savin-Baden (2022) explain that, in the current context, as education switches from analog to more digital means of knowledge and information delivery, all the involved actors tend to find themselves in a new and uncharted territory where they can feel insecure, threatened, and lost in epistemological, conceptual, and ontological domains.

Moreover, the push to increase and intensify digitalization does not always come from a place of caring about improving the educational system – there are different agendas and interests at play from commercial companies such as Microsoft, Meta, Google, Amazon, and much more (Ramiel & Dishon, 2023; Williamson, 2017). With this in mind, critics suggest that we be mindful of such imperatives and question the legitimacy of claims made by such parties, as well as identify the overt and covert ideologies ingrained in the digitalization policies (Ljungqvist & Sonesson, 2022; Williamson, 2017).

Emejulu and McGregor (2019) also remark that, when technology is viewed as neutral or innocent, we fail to recognize its social interactions and the actual tangible effects it has on our society. According to the authors, much of the discussion around digitalization and “digital citizenship” occurs separately from collective struggles for

civil, political, social, and economic rights and their ideas of citizenship. Building on this, the authors explain that the field of education asks the wrong questions as it focuses on ‘what is new?’ rather than ‘who has power?’ (p. 133). In fact, the authors assert:

For us, digital education must move away from its apolitical and/or politically naïve posture. If the field of digital education wants to be more than just a convenient tool for the neoliberal reshaping of education and citizenship, it must take seriously the radical potential of education in digital spaces and digital technologies. What that means is that digital education, as an academic field of practice, is not just about investigating the educational experiences of being online. (Emejulu & McGregor, 2019, p. 143)

### **2.1.1. Digitalization in Higher Education**

Higher education is not exempt from the shifts and transformations occurring in the rest of the world and other education levels. Czerniewicz et al. (2023) argue that higher education is also going through a time of uncertainty, transition, and change. Similarly, Foster (2001) reports that higher education is undergoing a transition brought on by societal transformations and expectations, stating that:

These transformations, in great part, include the need of higher education institutions to: (a) respond to the educational needs of large numbers of nontraditional learners in the information age; (b) conform to the emerging profile of students as life-long learners; (c) compete effectively for students with other distance education providers; and (d) offer cost-effective programs that continue the traditional mission of higher education institutions amid public calls and legislative mandates for restructuring and outsourcing. (p. 116)

Additionally, higher education experiences considerable difficulties in relation to digitalization (Alenezi, 2021). These challenges include not only implementing digital tools and technology into the teaching and learning process, but also incorporating these technologies into the institution's operations to change and modify its current systems, procedures, communication channels, and other academic and administrative activities.

Although policies and processes may differ between different institutions, it is suggested that there has been a global shift in higher education away from funding and

regulations based on the ‘social compact’ between society, the state, and higher education, leading to the commodification of academic labor all around the world (Page, 2020). Digitalization in higher education is directly related to the increased commodification of academic labor as “the use of digital technology in higher education is now a multi-billion dollar business which sees global technology corporations exerting increasing influence on the affairs of local universities” (Castañeda & Selwyn, 2018, p. 6). Castañeda and Selwyn (2018) explain that there are certain ‘commercializations’ of higher education brought about by the widespread digitalization of universities, which require better acknowledgement. Likewise, universities are made to resemble corporations more as they are continuously managed using systems built for businesses and industries, such as content management systems, workload management systems, and performance analytics.

Further, Castañeda and Selwyn (2018) note that teaching and learning practices in higher education are becoming increasingly shaped by the commercial design of educational software and systems. This is because the digital tools utilized decide what can and cannot be done in the classroom, no matter the teachers’ pedagogic intent. Furthermore, digitalization also increases the influence the information technology (IT) industry has on professional thinking and policy around higher education. Williamson (2017) agrees with this point:

Seriously powerful organizations are at work in this space, organizations with a forceful and influential shared imagination concerning the future of education. It is easy to be dismissive of the claims-making, hype and hubris that surround emerging developments like learning analytics and computer-based cognitive tutors. But it’s less easy to dismiss these developments and the claims that support them when you can see that some of the world’s richest and most powerful companies are dedicating extraordinary research and development resources to them; when you can read reports advocating and sponsoring them by influential think tanks; when you hear that politicians are backing them; when you discover that enormous sums of venture capital and philanthropic funding are being invested to make them a reality. (p. 8)

Indeed, Castañeda and Selwyn (2018, p. 6) point out that even “seemingly innocuous” practices and notions like digital badges, flipped classroom, 21st century skills, and personalized learning have all been backed and maintained by companies like

Mozilla and Gates Foundations, Pearson, Cisco, Intel, Microsoft, Apple, and a number of smaller businesses. Other scholars also affirm, expressing that institutional decision-making and operations are informed by the integration of digital academic tools, which are acquired through brokers and corporate entities and make up a complicated, disjointed architecture that increasingly controls academic institutions' activities (Decuypere & Williamson, 2021; Stewart et al., 2023; Williamson, 2015). In addition, more specifically on artificial intelligence in education (AIED), Ramiel and Dishon (2023) remark that governments are turning to commercial companies like Microsoft, Meta, Google, and Amazon to contribute to the advancement and dissemination of AIED in response to the growing technological and national challenge. Consequently, such technologies are developed, marketed, and maybe implemented into global education contexts by enterprises, then frequently repeated in elite policy discourses such as those of McKinsey, The Organization for Economic Co-operation and Development (OECD), and the World Economic Forum (Means, 2021; Ramiel & Dishon, 2023; Williamson & Eynon, 2020).

With ongoing and increasing digitalization, the teaching profession as a whole and instructors in higher education are faced with new requirements (Roumbanis Viberg et al., 2020). Teräs et al. (2022) agree with this point and remark that instructors in higher education are undergoing a renegotiation of their roles due to digitalization. This renegotiation is also characterized by “learnification,” defined by Biesta (2019) as “the redefinition of all things educational in terms of learning—such as calling students learners, calling schools learning environments or places for learning, referring to adult education as lifelong learning, and seeing teachers as facilitators of learning” (p. 550). According to Teräs et al. (2022), the learnification discourse has a problem in that it may easily reify both teachers and students as objects, and it runs the risk of transforming instructors into formal technicians who provide digital learning resources and maintain digital platforms only. Hillman and Esquivel (2024) liken this change of role to becoming a line-operator of applications and platforms in the classroom instead of teaching.

Similarly, Suoranta et al. (2022) explain that the current educational landscape reduces “teachers and the students in higher education to mere objects of digitalization,

rather than seeing them as active subjects participating in the shaping of digital futures” (p. 225). Developing their argument further, the authors refer to Marx’s (1973) equating workers to automation’s conscious linkages and express that teachers in higher education are increasingly fitting this description as “questions, such as shall or should ‘the automatic system of machinery’ (in our case, digitalization) replace the teacher, have become relevant” (Suoranta et al., 2022, p. 225).

One study by Czerniewicz et al. (2023) reports that teachers in higher education agree with the notion that their institutional surroundings, as well as the basic foundation of higher education are going through a process of ‘de-routinization.’ Czerniewicz et al. (2023) explain these results as follows:

On a structural level, these changes are the result of the reformulated narrative of HE and even its purpose, inevitably involving digital technology, increasingly including private companies, and deepening inequalities among students. On a professional level these changes are producing emergent forms of teaching and learning and also question academic roles with regard to who has ownership and control over the teaching and learning process. These changes are affecting and are affected by academics and their agentic action. (p. 1306)

One study by Roumbanis Viberg et al. (2020) investigated teacher educators’ perceptions regarding the digitalization of society. Their research establishes that teacher educators in higher education are caught between meeting the demands of contemporary society and having professional autonomy in a setting devoid of targeted policy, strategy, and support to provide the required conditions. The study also identifies discrepancies between their true professional practices and the instructions they receive about their work. According to the authors, university lecturers feel isolated, and breaking this perceived isolation is essential for their professional development and moving away from being in practice to acting in practice (Roumbanis Viberg et al., 2020).

## **2.2. Datafication in Education**

The term ‘datafication’ was first coined by Mayer-Schönberger and Cukier (2013) to refer to transformation of phenomena into quantifiable format in order to be tabulat-

ed analyzed. Similarly, Williamson et al. (2020) define datafication as “the rendering of social and natural worlds in machine readable digital format” (p. 351) whereas Mejjas and Couldry (2019) explain that “datafication combines two processes: the transformation of human life into data through processes of quantification, and the generation of different kinds of value from data” (p. 3).

Concepts such as “dataveillance” (Clarke, 1988, p. 499) and “surveillance capitalism” (Zuboff, 2019, Part I, Chapter Two) also come up in discussions related to datafication. According to Clarke (1988), dataveillance can be defined as “the systematic use of personal data systems in the investigation or monitoring of the actions or communications of one or more persons” (p. 499). On the other hand, Zuboff (2019) depicts surveillance capitalism as a concept that describes how companies extract and utilize personal data for profit while viewing individuals not just as consumers, but as raw material for revenue generation.

It is important to recognize that education is influenced by the same forces that are changing society as a whole, even while arguing the idea that education is the setting where awareness, criticality, and resistance can be developed (Atenas et al., 2023). Hence, in line with the rest of contemporary society, education is one of the main areas where algorithmic data mining and analysis methods using software are becoming more common and credible (Williamson, 2017). Digital data and software are becoming more prevalent in education as a result of significant financial and political investment in educational technologies, as well as substantial rises in data collection and analysis in policy development habits, the use of performance measurement technologies in educational institution management, and the quick development of digital methodologies in educational research (Williamson, 2017).

Big data, defined by Gartner (n.d.) as “high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation,” along with increased digitalization has expanded the range of monitoring throughout education systems, as well as the credibility of data analyses and the consumption and utilization of data for all kinds of audit, inspection, evaluation, and

decision-making (Williamson et al., 2020). Williamson et al. (2020) argue that education is an especially significant field to consider the impact of data as datafication in education takes numerous forms due to the size and diversity of educational systems and practices, and it has the potential to have a significant impact on millions of people's lives.

While datafication has long been a part of education, there is a significant intensification and expansion occurring in the assessment, quantification, measurement, and comparison of the performance of institutions, staff, students, and the sector at large (Williamson et al., 2020). The management of educational institutions, the conduct of educators' practices, the creation of educational policies, the experience of teaching and learning, and the administration of educational research are all becoming increasingly dependent on software and digital data (Williamson, 2017).

It is also impossible to comprehend the function and implications of digital data in education without also understanding how these elements relate to other fundamental aspects of the field, such as professional practice, commercial imperatives, regulations, accountability systems, and scientific knowledge (Williamson, 2017). Adding to the discussion, Swist (2023) explains that “datafied practices produce ‘educational data journeys’ (Howard et al., 2022) which inform decision making across multiple sites of practice (classroom, school, region, national sector and global system)” (p. 277). Similarly, Saltman (2020) explains that “data is capital, and digital technology producers aim to capture as much data as possible for potential future use through big data applications” (p. 204).

According to some positive accounts, datafication is a step in the right direction, where data and automated technologies are essential to how institutions run on a daily basis and play major roles in student feedback, curriculum organization, pedagogy, and assessment (Lane & Finsel, 2014). Likewise, Zeide (2017) explains that platforms that collect student data can help teachers make informed decisions about students' progress and needs. Also, they can automatically personalize students' learning journeys by using cognitive models that track and evaluate their data constantly. In addition to this, Beneito-Montagut (2017) claims that in order to increase

students' achievement, learning analytics offers new ways to create individualized learning experiences and promptly address learners' requirements.

On the other hand, critics argue that the process of datafication cannot be described as impartial or as merely progress-oriented (Stewart, 2023) as “data-driven systems are not neutral machines that operate in a vacuum; they are socio-technical systems” (Atenas et al., 2023, p. 294). Using the word ‘data’ to refer to information and knowledge upholds a perennial positivist perspective of education, which has played a significant part in education’s contribution to the social and cultural reproduction of capital (Saltman, 2020).

Moreover, the absolute trust in the objectivity of quantification and datafication continues to increase, leading to a dataist paradigm (van Dijck, 2014). Willimson et al. (2020) describe dataism as follows:

Integrally connected to processes of neoliberalization, as competitive logics and the desire to compare the performance of entities against each other, as if they are competing in markets, have been incorporated into various forms and technologies of measurement. (p. 352)

Likewise, Saltman (2021) argues that increased digitalization encourages blind trust in data and truth as quantification of decontextualized fact instead of encouraging methods of interpretation where students learn to examine the values, presumptions, ideologies, and material and symbolic contests that underlie the formation of data and that give data meaning in a specific context.

Another common and significant worry regarding datafication in education is the notion that data-based and automation-focused systems may feature certain biases and values that may end up discriminating against particular groups (Eynon, 2023; Stewart, 2023). The growing prevalence of stereotyping, exploitation, elisions, and extremely selective rememberings in datafication techniques, particularly for historically oppressed groups, is concerning due to the serious inequalities and risks it carries (Thompson & Prinsloo, 2023; Wernimont, 2019). Moreover, certain students may have a limited learning experience and fewer possibilities for further education

as a result of systems that predict future trajectories or suggest specific learning directions, which might reinforce or worsen inequality based on class, race, and gender (Baker & Hawn, 2022; Eynon, 2023; Stewart, 2023).

Lastly, there are concerns that a new kind of educational governance is established through datafication (Raffaghelli & Stewart, 2020), and that “educational governance today increasingly needs to be understood as digital educational governance” (Williamson, 2016, p. 5). According to Williamson (2017), the term ‘digital education governance’ not only recognizes the movement of educational governance to new digital hubs for data collection and analysis, but it also recognizes the influence of digital software, code, and algorithms in directing and governing the behavior of various educational actors and institutions.

Teachers themselves are becoming increasingly recognized as datafied as they are assessed, known, and appraised by data (Williamson et al., 2020). This datafication signals a potentially dramatic shift in the way both teachers and students view themselves, as well as how they are perceived and treated. In this ‘audit’ culture (Power, 1994), in an effort to be perceived as a good teacher who does not require supervision, teachers find themselves having to continually control their behavior (Bergel, 2024).

### **2.2.1. Datafication in Higher Education**

Higher education, in particular, has witnessed a drastic increase and shift in the collection and use of university data due to the major initiatives by policymakers and affiliated corporations, think tanks, consultancies, and sector organizations (Williamson et al., 2020). As part of larger socio-techno imaginaries and machinations, higher education has not only grown more digitalized and datafied, but it also actively promotes and takes part in the deepening and growth of the data gaze (Thompson & Prinsloo, 2023). Beer (2019) refers to the data gaze as “a concept that targets an understanding of the connections, structures and performances of power within analytics” and “suggestive of how lives are viewed differently through data – in ever more forensic, strategic, predictive and knowing ways” (p. 7). Moreover, Beer (2019) ex-

plains that how “data are seen is crucial to the power that they afford and the possibilities that are available for the expansion of data-led thinking, judgement, ordering and governance” (p. 6).

Research indicates that analytic systems in higher education are becoming more and more hungry for different types and sources of data, such as multimodal data, facial expressions, and affective analytics in classroom settings, and tracking students both on and off campus as well as in residence halls, cafeterias, and social gathering places (Thompson & Prinsloo, 2023). This increasing focus on gathering and analyzing data in higher education is transforming it into a data frontier, which Beer (2019) refers to as the "edges, the thresholds and limits of data-led processes" (p. 19), where new authoritative insights are uncovered, 'truths' about education, teachers and students are established, and new data-based ideas and practices are implemented within organizational structures (Thompson & Prinsloo, 2023; Williamson et al., 2020).

Williamson et al. (2020) explain that higher education is complicit in furthering neoliberal forms of metric power as various data-based measurement and evaluation technologies impose constraints on what is observable and knowable. These technologies sort individuals and outcomes into sometimes hierarchical categories, set specific quantifiable targets, expand into new domains, define what is considered true or valuable, introduce automated decision-making, and influence people's emotional, cognitive, and behavioral responses. Moreover, Williamson et al. (2020) add:

Research metrics are used to audit, compare, and assess the quality of research outputs and impact (Wilsdon et al. 2015), and the rating of university teaching quality and the ‘value’ of academic labour has increased ‘quantified control’ and ‘metricization of the academy’ (Burrows 2012, 356). University rankings and league tables produce new kinds of reactive behaviours, as institutions and individuals seek out ways of maximizing their performance in terms of the measures they are scored on (Espeland and Sauder 2016). Digital technologies and interests in ‘big data’ have now enlarged the scope of measurement across education systems, increased the fidelity of data analyses, and enhanced the uptake and use of data for various forms of audit, inspection, evaluation and decision-making. (p. 354)

A certain set of beliefs about higher education in the digital age is one of the reasons for the propensity towards datafication (Gourlay, 2020, 2022). The idea that teach-

ers and students are somewhat abstract, disembodied human subjects who are separated from their social and material environments is at the center of these beliefs. Thompson and Prinsloo (2023) agree with this point, stating that “more-than-human perspectives” (p. 155) help make the links and co-constitutive relationships between data, bodies, and institutional behaviors more visible.

Moreover, datafication practices influence the way human beings are understood, treated, and acted upon (Williamson et al., 2020). Indeed, Williamson (2016) claims that such emphasis on data dashboards and architectures, as well as analytic software and computation, has given rise to a new class of quantified teachers. For many higher education instructors, the connotations of this widespread adoption of tracking and surveillance capabilities for pedagogy, academic governance, and student and teacher data privacy reflect a new professional environment (Stewart et al., 2023). In fact, critics claim that datafication is against the core principles of higher education as the “academic tradition of the scientific method relies on the principle that correlation does not equal causation, but the statistical associations that datafication enables at scale are correlational, based on identifiable patterns rather than explainers” (Stewart et al., 2023, p. 3).

As such changes continue to occur, it is argued that teachers are devalued, demoralized, and disappearing with increasing datafication (Daliri-Ngametua & Hardy, 2022, as cited in Gezgin, 2023). Further, teachers in higher education express worries about the transparency of datafied systems, data privacy, bias, dehumanization of education, and lack of institutional responsibility (Stewart et al., 2023). Williamson (2016) argues that such consequences are a result of the educational system being more controlled by technology, not a coincidence. Another critical perspective by Williamson et al. (2020) refers to “‘a pathological organizational dysfunction’ whereby corporate models of marketization, competition, audit culture, and datafication have combined to produce ‘the toxic university’” (p. 354).

Scholars argue that higher education instructors and their academic labor are becoming increasingly commodified as their focus shifts from producing and disseminating knowledge for the benefit of society to “becoming calculable, a commodity that can

be measured by research exercise activities and student evaluations of teaching and satisfaction” as well as “commodity to be consumed within the marketised education system, measured and weighed through the technologies of performativity” while experiencing “deep alienation in the experience of constantly living to perform” (Page, 2020, pp. 586-588).

While academic work and academics become commodities to be consumed, new conceptualizations and terms also emerge as relationships between teachers, students, and data are explored further. An example of this is as follows: educational institutions, teachers, and students pay money for digital platforms, which means that they are consumers of these platforms and services. However, while they already pay money to use those services, they also contribute to companies by providing them with data, which companies then use to make more money. Here, the term “prosumer” is created to refer to “educational subjects not only as non-stop consumers of software or data (visualizations), but also as (re-)producers of data who interact with data ‘co-creatively’” (Hartong, 2016, p. 531). This concept of prosumers highlights a significant issue as these platform users end up paying for services more than once, first by paying actual money, then with their data, which gets sold or used without their permission or knowledge. Concerns over the commercialization of student data are prompted as corporations continue to benefit from using teacher and student data (Perrotta & Selwyn, 2020).

One way to combat pervasive datafied tools and systems is to include critical discussions in digital and data literacy conversations. Raffaghelli and Stewart (2020) explain that education is a particularly important site for “critical and systemic explorations of digital and data infrastructures” as it is “where the perspectives of emerging generations are shaped and honed” (p. 435). Nevertheless, despite an increasingly critical viewpoint, discussions around datafication or data literacy are still dominantly technical. According to Raffaghelli (2018), higher education teachers need to acquire data literacy skills to deal with the shifting landscape of higher education and its ramifications, as well as to contribute to this shift. Thus, while data literacy is of utmost importance for higher education teachers, the definition of data literacy also plays a role that is just as important.

Raffaghelli and Stewart's (2020) systematic review of the literature establishes that the predominant approach to data literacy definitions observed in the articles tend to be instrumental in nature. By framing information in technical and quantifiable ways, these articles emphasize a strong focus on the development of technical skills such as appropriate interpretation and reporting, data extraction, visualization, and statistical analysis. Thus, it is argued that the definition of digital data literacy needs to involve a more critical and capacious understanding (Collin & Apple, 2010, as cited in Emejulu & McGregor, 2019). Furthermore, higher education instructors are not the only ones who need to have a more critical understanding of data literacy. As the influence of data on education continues to grow, educational researchers need to improve their skills to understand big data (Eynon, 2013).



## CHAPTER 3

### METHODS

In this chapter, the research methods used in this study will be discussed in detail. Information about the research approaches will be given in the first two sections. The third section will convey details about the research context and participants. Data collection and analysis procedures will be discussed in the fourth and fifth sections, respectively. The credibility of this research will be argued in the sixth section. Self-reflexivity and ethical considerations will also be provided.

#### 3.1. Qualitative Research

Denzin and Lincoln (2017) state that it is challenging to give a clear definition for qualitative research. Similarly, Nelson et al. (1992, p. 4, as cited in Denzin & Lincoln, 2017) explain that qualitative research is “interdisciplinary, transdisciplinary, and sometimes counterdisciplinary,” contributing to this complication. Although it is difficult to state a universal, single definition, there are some common points in different scholars’ explanations of qualitative research.

Erickson (2017) refers to the etymology of the word ‘qualitative’ and discloses that the Latin word, *qualitas*, specifies “a primary focus on the qualities, the features, of entities—to distinctions in kind” as opposed to *quantitas*, “a primary focus on differences in amount” (p. 87). Thus, it is understood that qualitative inquiry is about interpretation or understanding of the world (Strauss & Corbin, 1998). Moreover, qualitative research aims to investigate the human aspects of a specific subject and employs certain techniques to look at how people perceive and interact with the environment (Given, 2008). Such methods are often used to investigate new phenomena and to gather people's ideas, emotions, or interpretations of meaning and affairs. Studies in the humanities, social sciences, and health sciences fields depend heavily

on qualitative approaches, especially research in education, sociology, anthropology, information studies, and nursing.

With the above points in mind, it can be seen that qualitative inquiry is an appropriate research approach for this study as it aims to explore the lived experiences and perspectives of English language instructors regarding digitalization and datafication of higher education. Qualitative research in this context can help uncover the meanings the participants attach to their experiences, as well as their thoughts and feelings.

### **3.2. Interpretative Phenomenological Analysis**

Interpretative phenomenological analysis (IPA) is a qualitative research method dedicated to investigating how individuals interpret their key experiences in life (Smith et al., 2009). IPA studies focus on people's experiences, understandings, and perspectives regarding specific situations. Moreover, IPA derives from phenomenology, which has its roots dating back to the first half of the 20<sup>th</sup> century and was developed by philosopher Edmund Husserl to study lived human experiences (Moran, 2000; Smith et al., 2009). Phenomenology, hermeneutics, and idiography are the three main theoretical underpinnings of IPA (Smith et al., 2009).

First, "IPA is phenomenological in that it is concerned with exploring experience in its own terms" (Smith et al., 2009, p. 1). Although IPA derives from phenomenology as aforementioned, it also acknowledges that experience does not have a direct route and single definition (Smith, 2011). This complexity of experience is directly related to the second theoretical axis of IPA, hermeneutics, which refers to the interpretation, or meaning-making of the said experience.

Indeed, an IPA study requires both the participant and the researcher to interpret the investigated phenomenon (Smith et al., 2009). As the participant recounts their experience, they articulate how they make sense of this event, sharing their interpretation. At the same time, the researcher tries to interpret the participant's account of the experience. Taking this interpretation further, the researcher actually attempts to make

sense of the participant's own attempt to make sense, which Smith (2011) refers to as "engaging in a *double hermeneutic*" (p. 10).

Lastly, IPA is idiographic as it requires a detailed exploration of the investigated experience (Smith, 2011). A good IPA study necessitates not only the similarities and common themes between cases but also the differences in the ways that these patterns occur for participants. As IPA requires an in-depth analysis of each case, smaller sample sizes are recommended.

IPA comes with the assumption that data is capable of giving the researcher answers related to people's involvement in and orientation toward the world (Smith et al., 2009). In order to achieve this, Smith et al. (2009) suggest that researchers must first "identify, describe and understand two related aspects of a participant's account: the key 'objects of concern' in the participant's world, and the 'experiential claims' made by the participant in order to develop a phenomenological account" (Part 3, Choosing IPA section, para. 9).

Based on these explanations of IPA, it can be seen that IPA is the most appropriate research approach for this study as it is concerned with investigating participants' own lived experiences and perspectives regarding a specific phenomenon. Also, it is stated that the best way to explore educational processes or institutions is "through the experience of the individual people, the 'others' who make up the organization or carry out the process" (Seidman, 2006, p. 10). This is another reason why IPA was selected for the research method.

### **3.3. Research Context and Participants**

IPA studies tend to have a small number of participants as they aim to uncover the participants' lived experiences and perspectives (Smith et al., 2009). In fact, Smith et al. (2009) suggest between three to six participants, citing that this amount allows researchers to make sufficient and meaningful connections while not oversaturating the study. Often, IPA studies recruit participants via referrals from gatekeepers, opportunities that arise from the researcher's own contacts, or snowballing, which re-

fers to participants recruiting other participants. Also, IPA research usually features a homogeneous sample as it focuses on people's experiences and views regarding a specific phenomenon.

To recruit the right participants for the investigated phenomena, criterion sampling was utilized first. Criterion sampling is used to review and study cases that meet pre-determined criterion or criteria (Patton, 2014). For the purposes of this study, two criteria were established during the research design process. The first criterion was for the participants to have five to 15 years of experience. Such a selection was made so that participants would have experience and competency in both analog and digital teaching processes, allowing a clearer insight into their experiences and perspectives. The second criterion was for the participants to be working at a specific institution. This choice was made because the university in question is considered to be one of the leading higher education institutions in Türkiye in terms of both quality of education and willingness to stay up to date regarding advancements in technology and research. Thus, this institution was an ideal site for this study as teachers working there were likely to have experience in the inquired phenomena. Moreover, it was also convenient for the researcher as she had access to contacts that could serve as gatekeepers at this institution. Selecting a single institution was also in line with the IPA guidelines for creating a homogeneous sample.

At this institution, the preparatory school signals significance as English is the medium of instruction. On average, it has over 2500 students annually and over 190 instructors. It also offers various language and exam-related courses for non-students for a certain fee, which is not included in the number of students. The instructors' experiences range from one year to over 30 years, so it is understood that this institution hires both new graduates and instructors with more seniority. Both international and local instructors are employed. Every person who is hired has to undergo an intensive yearlong training program, regardless of their previous experience. This training program is held by the internal professional development unit and consists of several elements such as observations, workshops, written assignments, and input sessions. After the training, instructors get assigned to different classes. These classes are categorized based on the proficiency levels of students. However, the assign-

ment of instructors is not completely random as one of the participants stated that there is a hierarchy – levels that are considered ‘easier’ to teach (i.e., upper-intermediate and/or advanced) are only assigned to those who have the most seniority.

This university prepares and conducts its own proficiency exam. When students first enroll at this institution, they have the chance to take the proficiency exam and skip preparatory school. They are exempt from attending preparatory school if they get above a certain score. However, getting a score below that threshold means they must attend preparatory school for two semesters. Then, based on their scores, the students get assigned to different proficiency groups and have English lessons ranging from 15-30 hours per week. In order to pass the preparatory school, students must both fulfill their obligations in the education year and take the proficiency exam again at the end of the school year. If they fail this exam again, they are given a chance to attend summer school and retake the exam. Failure to pass the exam again at this point requires the students to either repeat the preparatory school or submit a satisfactory result from another accepted proficiency test like the Test of English as a Foreign Language (TOEFL). Since this university is considered to be one of the best in the country, students have to work very hard to get accepted into this institution. Since they cannot receive their education without passing the proficiency exam first, this may cause a lot of stress for students with low proficiency.

The participant recruitment process began with the researcher reaching out to a contact who had been working at the institution for many years and had administrative duties. This contact served as a gatekeeper and allowed access to potential participants. After potential participants were identified, the researcher reached out personally and explained the study. This is important as Seidman (2006) suggests that researchers make the first contact and explain the study personally as the rapport and relationship begin as soon as the participant learns about the study. During this initial contact, the concepts explored in the research were explained thoroughly, and examples were provided to the participants.

Snowball sampling, defined by Patton (2014) as “an approach for locating information-rich key informants or critical cases” (p. 451), was also used in this study.

According to Patton (2014), one's research sample can be built by asking participants to refer to other people who may have similar or contrasting views, who then get contacted by the researcher and go through the recruitment stages. In this study, all participants were asked about referrals and suggestions. While all participants agreed to this, only one participant could be recruited in this manner.

**Table 1.** Participant Information

| Pseudonym | Age | Overall Experience | Institutional Experience | Levels Taught                                              |
|-----------|-----|--------------------|--------------------------|------------------------------------------------------------|
| Alice     | 38  | 10-15 years        | 3                        | Beginner<br>Pre-Intermediate                               |
| Britney   | 37  | 10-15 years        | 10                       | Beginner<br>Elementary<br>Pre-Intermediate<br>Intermediate |
| Courtney  | 38  | 10-15 years        | 3                        | Beginner<br>Pre-Intermediate<br>Intermediate               |

In the end, the sampling for this study included three English language instructors working at this institution's preparatory school (Table 1). A fourth participant had volunteered to participate and completed the initial contact; however, she was unable to finish her interviews during the data collection period, citing personal issues. As such, any information she provided was discarded and could not be included. Two of the participants were recruited thanks to the gatekeeper's assistance, whereas one participant was recruited through snowballing, where she was referred by another participant.

All participants have experience ranging between 10-15 years. However, their experience at this specific institution differs. Aside from teaching and testing, they each have held various responsibilities at this institution under different sub-departments, ranging from material development, material proofreading, exam writing, curriculum analysis and feedback, administrative duties, and teaching public courses. The specifics of which participant took part in which responsibility will not be stated so as not to risk identifying the participants.

Alice has been working at this institution for three years. Prior to working here, she taught English at two other universities and has been an English teacher for 10-15 years. She also has experience of being a language assistant. She has a B.A. and an M.A., both in ELT. She usually teaches beginner or pre-intermediate classes and loves her job. She states that she is open to technology and likes following the new advancements in her field, albeit not without certain worries.

Britney, also a teacher with 10-15 years of experience, describes herself as a tech enthusiast. Having spent the last 10 years at this institution, she has a lot of experience with the inquired phenomena at this university. Before her work here, she worked at other universities as an English teacher or English language assistant. She has a B.A., an M.A. and a PhD, all in ELT. In her 10 years of experience here, she has taught beginner, elementary, pre-intermediate, or intermediate courses. She loves her job and wishes the betterment of her field.

Courtney, same as Alice, has been working at this institution for three years. She has 10-15 years of overall experience, and before here, she worked at another university as an English teacher. Like the other participants, she also has experience of being a language assistant. Additionally, she taught Turkish abroad under a program, so English is not the only language she has taught. At this university, she teaches beginner, pre-intermediate, or intermediate groups, and she explains that she also loves her job and is open to technology, albeit with certain concerns.

### **3.4. Data Collection**

Interviews, defined by Given (2008, p. 470) as “a conversational practice where knowledge is produced through the interaction between an interviewer and an interviewee or a group of interviewees,” is one of the most commonly used data collection strategies in qualitative research. According to Seidman (2006, p. 8), recounting their experiences “has been the major way throughout recorded history that humans have made sense of their experience.”

This study utilized up to two in-depth, semi-structured interviews to gather information about English language instructors’ experiences and perspectives regarding

digitalization and datafication in higher education. Semi-structured interviews were chosen because they allow the possibility of “obtaining descriptions of the life world of the interviewee in order to interpret the meaning of the described phenomena” (Brinkmann & Kvale, 2015, p. 6). Also, in-depth interviews are one of the recommended data collection strategies in IPA as they make it easier to evoke memories, ideas, and emotions related to the target phenomena (Smith et al., 2009).

Based on these points, open-ended questions that focused on the participants’ understandings and experiences were written down prior to the interviews to serve as an interview guide, which is recommended in these studies (Seidman, 2006; Smith et al., 2009). These questions can be found in Appendix D. Moreover, a distribution of the guiding questions with the interview focus is shown in Table 2.

**Table 2.** Interview Focus

| Interview Number | Focus                                                                                           | Length        |
|------------------|-------------------------------------------------------------------------------------------------|---------------|
| 1                | Perceptions regarding digitalization and datafication of higher education                       | 25-45 minutes |
|                  | Shifts in the ELT profession in relation to digitalization and datafication of higher education |               |
| 2                | Experiences with digitalization and datafication of higher education                            | 45-65 minutes |
|                  | Shifts in the ELT profession in relation to digitalization and datafication of higher education |               |

According to Seidman (2006), it is advised to have a series of three separate interviews with the participants in order to establish a rapport and better contextualize their experiences and perspectives, with 3 days to a week between each interview session. However, he also states that the number of interviews, as well as their length and spacing, may definitely be altered as long as a framework is kept in place that enables participants to rebuild and consider their experience within the context of their lives. In fact, he refers to occasions where their research team had to conduct all interviews in one day with success (Seidman, 2006).

As such, interviews in this study were arranged in accordance with the participants' availability, ability to contextualize their experiences and perspectives, and the rapport established between the researcher and participants. With this arrangement, the spacing between interviews ranged from one day to six days. The data collection period took place between early May and mid-June in 2024.

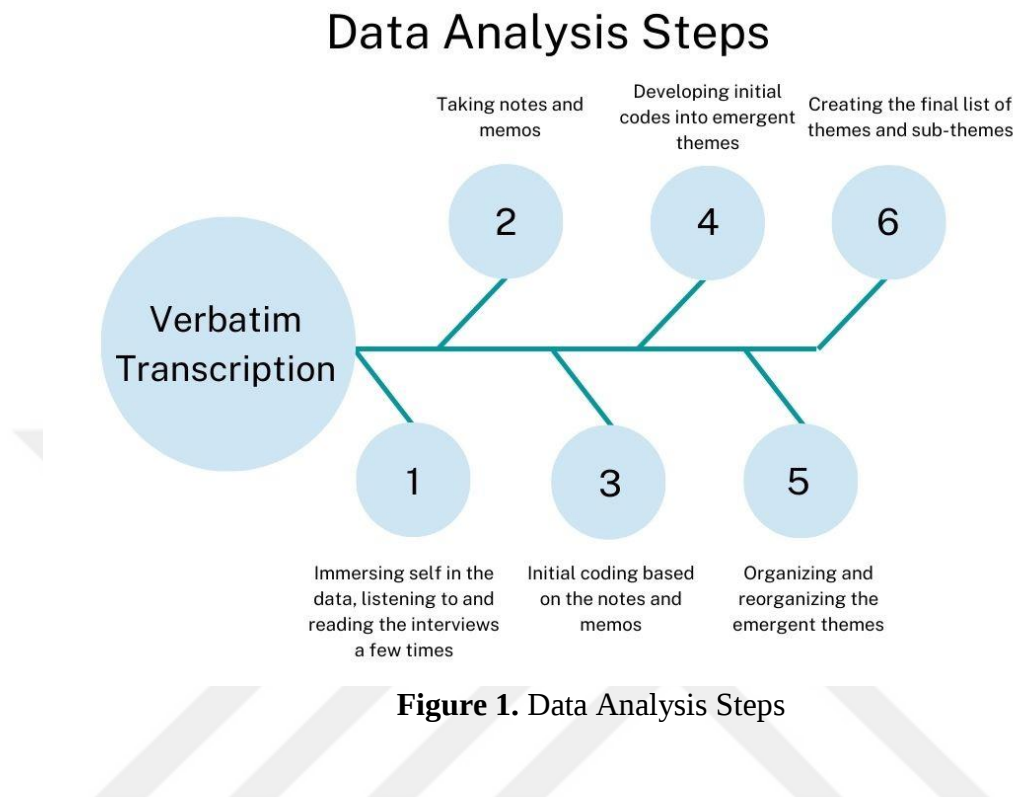
Prior to the interviews, the researcher called the participants on their personal phone numbers to begin establishing a rapport and explain the details of the study. On the day of the first interviews, all participants were given an informed consent form that explained the purpose of the study and the participation details. Interviews only began after the participants willingly signed the informed consent forms. After the interviews were complete, all participants were given a copy of the debriefing form.

All participants were asked to pick the site for the interview to ensure they were comfortable and safe. Moreover, interviews were conducted in the language the participants preferred. For example, one participant completed her interviews fully in English, whereas other participants switched between English and Turkish. Participants were given the option to pick the language in order to make sure they felt comfortable while expressing their experiences, thoughts, and feelings. All interviews were recorded via a voice recorder and transcribed verbatim by the researcher on the same day.

### **3.5. Data Analysis**

When working with verbatim transcriptions of people's lived experiences and narrations, the volume of data tends to be large and overwhelming (Patton, 2015). To be able to analyze large amounts of qualitative data, researchers must organize the data and become familiar with it (Creswell, 2013). Moreover, according to Smith et al. (2009), the first step to analyzing data in IPA is to immerse oneself in the original data. Thus, all interviews were transcribed verbatim on the same day as the interviews. During this transcription process, the researcher utilized a personal diary where she wrote down some notes that came to her mind while listening to and tran-

scribing the recordings. The notetaking and memoing continued throughout the entire analysis process.



After the transcription was complete, the files were uploaded to the qualitative analysis software MAXQDA 24. The researcher read the transcriptions multiple times during the data collection and analysis processes. This allowed the researcher to become more and more familiar with the data while giving way to data reduction and coding.

Seidman (2006) asserts that data reduction must be done inductively, not deductively. In reducing the data inductively based on notes and memos, the researcher began to work with the notes instead of the raw interview transcript, which led to the forming of the initial codes (Appendix E). In doing the data reduction based on the relationship between notes and raw data, common patterns and themes were identified and used in the coding process.

Thematic analysis is particularly appropriate for studies that investigate experiences and perceptions (Braun & Clarke, 2012). The process of thematic coding involves

identifying common elements across the data and assigning labels to those elements (Creswell, 2013). Following this, in the initial coding stage, the researcher made a list of the tentative codes, along with the excerpts they were assigned to. Then, the codes were reorganized through comparison and re-reading, as some were merged while some were renamed or removed. This process eventually led to the final themes, which reflect both the participants' narrations and the researcher's interpretation (Smith et al., 2009). After the analysis was complete, the participants were sent brief explanations of the results for a member-checking process. This further validated the interpretation and analysis. The final organization of themes and sub-themes can be found in Table 3, Table 4, and Table 5.

**Table 3.** Organization of Themes Related to RQ1

| Main Theme           | Sub-themes                      | Codes                                                                    |
|----------------------|---------------------------------|--------------------------------------------------------------------------|
| Positive perceptions | Supplementary tools             | Decreased workload<br>Accessibility<br>Efficiency                        |
| Positive perceptions | Student benefits                | Increased autonomy<br>Continuous learning<br>Extra practice and feedback |
| Positive perceptions | Accountability                  | Objectivity<br>Digital trail<br>Transparency                             |
| Positive perceptions | Professional development        | Professional development                                                 |
| Positive perceptions | Insight                         | Institutional analysis<br>Tracking progress                              |
| Negative perceptions | Anxiety                         | Misuse<br>Unpredictable<br>Pressure                                      |
| Negative perceptions | Corporate influence and control | Corporate influence and control                                          |
| Negative perceptions | Privacy                         | Lack of transparency<br>Lack of consent<br>Surveillance                  |
| Mindfulness          | Mindfulness                     | Mindfulness                                                              |

**Table 4.** Organization of Themes Related to RQ2

| Main Theme                      | Sub-themes      | Codes                                                           |
|---------------------------------|-----------------|-----------------------------------------------------------------|
| Purpose                         | Keeping track   | Institutional analysis<br>Absenteeism<br>Grades                 |
| Purpose                         | Proctoring      | Proctoring                                                      |
| Purpose                         | Pedagogical use | In-class use<br>Homework and extra practice<br>Improve learning |
| Decreased workload              |                 |                                                                 |
| Personal choice                 |                 |                                                                 |
| Underutilization                |                 |                                                                 |
| Increased workload and pressure |                 |                                                                 |
| Student pushback                |                 |                                                                 |
| Dehumanization                  |                 |                                                                 |

**Table 5.** Organization of Themes Related to RQ3

| Main Theme          | Sub-themes | Codes |
|---------------------|------------|-------|
| Inevitability       |            |       |
| Human touch         |            |       |
| Negative Reputation |            |       |

### 3.6. Credibility and Consistency of the Study

Yardley (2000, p. 219) suggests four broad principles in assessing qualitative research, namely i) sensitivity to context, ii) commitment and rigor, iii) transparency and coherence, and iv) impact and importance. First, according to Yardley (2000), qualitative research studies have numerous contexts of potentially equal importance, and researchers must demonstrate sensitivity to all. For example, qualitative studies must acknowledge the context of the theories developed by previous scholars, as well as the relevant literature. Moreover, qualitative researchers must recognize the socio-cultural context of the study as it is often central to the investigation, as well as the linguistic and dialogic context of the participants' answers. Lastly, a good qualitative study must pay attention to ethical considerations and power dynamics that it inevitably may include. This study demonstrates sensitivity to context in several ways, such as giving a detailed background, writing an organized literature review

that refers to crucial previous work and theories, acknowledging the context of the study in detail in relevant sections, and reflecting on the ethical considerations. In fact, it can be argued that even the selection of the IPA method stems from showing sensitivity to context, as IPA focuses on the lived experiences of participants in their particular context while they go through a shared phenomenon (Smith et al., 2009).

Second, Yardley (2000) asserts that good qualitative studies must show commitment and rigor. According to Yardley (2000), prolonged engagement with the inquired topic, being competent and skilled in the research methods, and immersing oneself in the data are examples of commitment. On the other hand, a qualitative inquiry must be “complete” in terms of data collection, analysis, and results (Yardley, 2000, p. 221). In other words, it must “transcend superficial” and “commonsense” understandings of the investigated topic and present a thorough analysis (Yardley, 2000, p. 221).

This study uses in-depth and semi-structured interviews to gather data from the participants. Due to the nature of such interviews, great attention was paid to the participants at every stage of data collection and analysis. Guiding questions (see Appendix D) were written over the course of several days to ensure they were fit for the purpose of this study. Both the advisor and the researcher discussed the guiding questions in meetings to achieve this purpose. Each step was repeated numerous times during the analysis process to reveal participants’ experiences and perspectives in great detail. The writing was also very thorough and detailed in order to present the results with no questions left in the readers’ minds.

Third, Yardley (2000) explains that transparency and coherence are of great significance in qualitative research. Transparency refers to how much of the research process is described in the write-up, while coherence is concerned with the flow of the research, as well as the harmony between the research purposes and methods. One can achieve transparency “by detailing every aspect of the data collection process and the rules used to code data,” and “by presenting excerpts of the textual data” so that the readers can make sense of the researcher’s interpretation (Yardley, 2000, p. 222). This study not only discloses the entire research process in detail but also refers

to key scholars in the field to justify every minor and major decision made in the research design process. This also contributes to the coherence of the study as it ensures a ‘good fit’ between the researched phenomena and the methods utilized to research them. In addition, numerous excerpts are presented in the results section, increasing the transparency of the analysis.

Lastly, Yardley (2000) states that qualitative research must have impact and importance. In addition to being well-conducted, a good qualitative study must have significance in its field and aim to reveal things that will make an impact. As mentioned in the earlier ‘need for the study’ section, this study is one of the first phenomenological explorations into digitalization and datafication in higher education from the perspective of English language teachers. Moreover, this is also under-researched in the Türkiye context, creating a large gap in the current literature. Thus, this study carries significance importance and aims to make an impact in the field.

Aside from Yardley’s (2000) broad principles, there are also suggestions to ensure the validity of qualitative studies in general, or IPA studies specifically. For example, Lincoln and Guba (1985, as cited in Creswell, 2013) consider member checking to be the most vital technique to establish credibility in qualitative research. As mentioned in the data analysis section, this study used member checking to validate the interpretations made by the researcher. In addition to this, Yin (1989, as cited in Smith et al., 2009) recommends categorizing all your data so meticulously that others can trace the evidence from the early documents to the final report easily. This study shows thorough documentation and presentation, as evidenced in the relevant sections, abiding by Yin’s suggestion. Lastly, it is advised to clarify researcher bias in the study by explicitly discussing the researcher’s role and position. This was also done in the relevant sections to give the readers a better perspective of the interpretations. Overall, it can be seen that this study took great care in ensuring its validity, credibility, and consistency.

### **3.7. The Role of the Researcher**

Qualitative research studies are inextricably linked to their authors, the way the readers interpret them, and their effects on research participants and locations (Creswell,

2013). There is no such thing as a sterile qualitative study, and all writing reflects its writer's positioning and interpretation. Thus, Creswell (2013) recommends that qualitative researchers utilize "self-reflexivity" (p. 216) and be conscious of their values, experiences, and biases that may play a role in their research.

As the researcher, I have had the pleasure of meeting and studying with many great English teachers working at this institution. Prior to the design of this study, I had many opportunities where I sat down and chatted with them. Therefore, I had a lot of contextual knowledge about the way this department was run and its policies. This made the basis for my decision to pick this institution as a criterion. However, besides this, I had no personal experience regarding this department – I had never worked professionally with these teachers or received education from them as a student. As for the participants specifically, I had never met or had any contact with any of them prior to the study.

As a woman in her late twenties, I have had a personal computer since I was six years old. I was very tech-savvy even as a kid, and people would always come to me for their IT problems. I was also a very curious child, so I spent a considerable amount of time searching for answers to countless questions online. Hence, growing up with easy and constant access to the internet definitely affected the trajectory of my life and education.

After graduating high school, I got accepted into Middle East Technical University (METU), where I received my bachelor's degree in Foreign Language Education. During my undergraduate studies, I took a few courses related to technology and teaching, such as Instructional Technology and Material Development, Introduction to Computer-Assisted Language Learning Tools, and Knowledge Management in Education and Research. These courses were very informative and insightful and helped me learn more about digital tools in education and foreign language education.

After receiving my bachelor's degree, I applied to METU's master's program in ELT. I took research design courses for both quantitative and qualitative research,

which really helped me become a more competent researcher. During my second semester, I had the opportunity to enroll in a particular graduate course on interculturality and intercultural education taught by my advisor. The discussions we had there helped me find my identity as a researcher and taught me incredible things. I have written six research papers during my graduate studies, all of which helped me write this current study.

As someone who has spent practically her whole life online, I am very familiar and up to date with the current digital trends both in my daily life and in educational settings. Moreover, my digital and data literacy does not only consist of technical and instrumental competencies. My ability to read between the lines, question and criticize data-hungry and predatory corporations, and my political positioning regarding neoliberal and capitalist education systems all contribute to my understanding of digital tools and data. This understanding led me to study digitalization and datafication of higher education in a local context.

### **3.8. Ethical Considerations**

To ensure compliance with ethical principles and guidelines, a detailed proposal for this study was written and submitted to Middle East Technical University's Human Research Ethics Committee before the study began. After receiving approval from the ethics committee, the research process officially began. Both the researcher and the advisor made sure the research process operated within the approved ethical framework.

All participants received informed consent forms before their interviews. Throughout the research process, the participants were fully informed about the purpose of the study, their rights, data collection and analysis plans, and any questions they had were answered. After their interviews were complete, the participants received debriefing forms, which highlighted this information again. Any and all materials related to the study, including audio recordings, transcripts, signed forms, and analyses, were kept on a password-protected personal computer only accessible by the researcher. Random pseudonyms were assigned to the participants to ensure their ano-

nymity. After the data analysis was complete, the participants were sent brief explanations of the results for member-checking purposes. This way, the participants could agree or disagree with the interpretations of the researcher and have more control over their results.



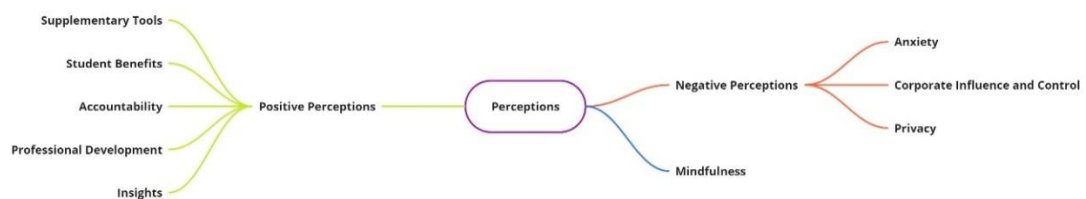
## CHAPTER 4

### FINDINGS

The purpose of this research study was to uncover English language instructors' perceptions and experiences regarding digitalization and datafication of higher education. This chapter will present the findings of the study in three key parts in accordance with the research questions. Each key part will present the answers to the research questions, respectively.

#### 4.1. How do English language instructors perceive the digitalization and datafication of higher education?

This research question aimed to uncover the participants' perceptions regarding digitalization and datafication of higher education. The interpretations of the participants' answers revealed three major themes, which are "Positive Perceptions," "Negative Perceptions," and "Mindfulness" (Figure 2), and will be discussed in separate sections.

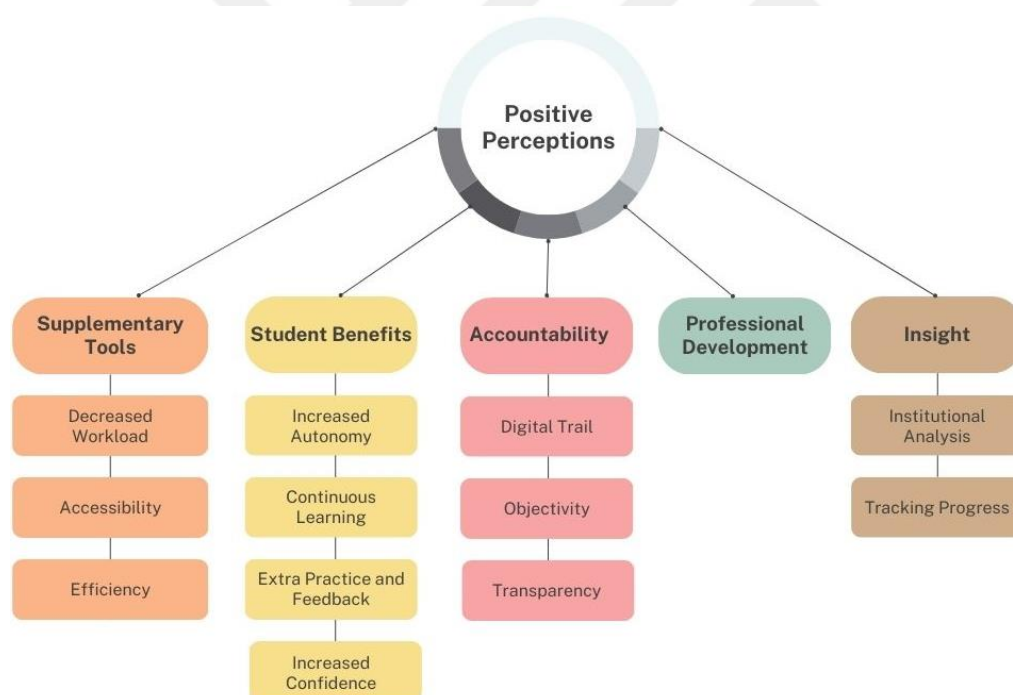


**Figure 2.** Participants' Perceptions Regarding Digitalization and Datafication of Higher Education

The answers provided by the participants revealed that, generally, participants perceive the increasing digitalization and datafication trends of higher education as both positive and negative in different scenarios and reiterate the importance of mindful use. These perceptions will be explored under their respective categories.

### 4.1.1. Positive Perceptions

The theme “Positive Perceptions” refers to the ways the participants view digitalization and datafication of higher education as beneficial or reasonable. While examining this theme, five sub-themes that further explain their perceptions were identified (Figure 3). These five sub-themes were “Supplementary Tools,” “Student Benefits,” “Accountability,” “Professional Development,” and “Insight.” These sub-themes were identified based on the participants’ specific examples and explanations of their views, which also led to some distinct codes, also shown in Figure 3. Overall, all participants explained that there are positive sides to digitalization and datafication of higher education, stating that they are helpful tools that benefit students, facilitate accountability, provide opportunities for professional development, and are capable of generating useful insights.

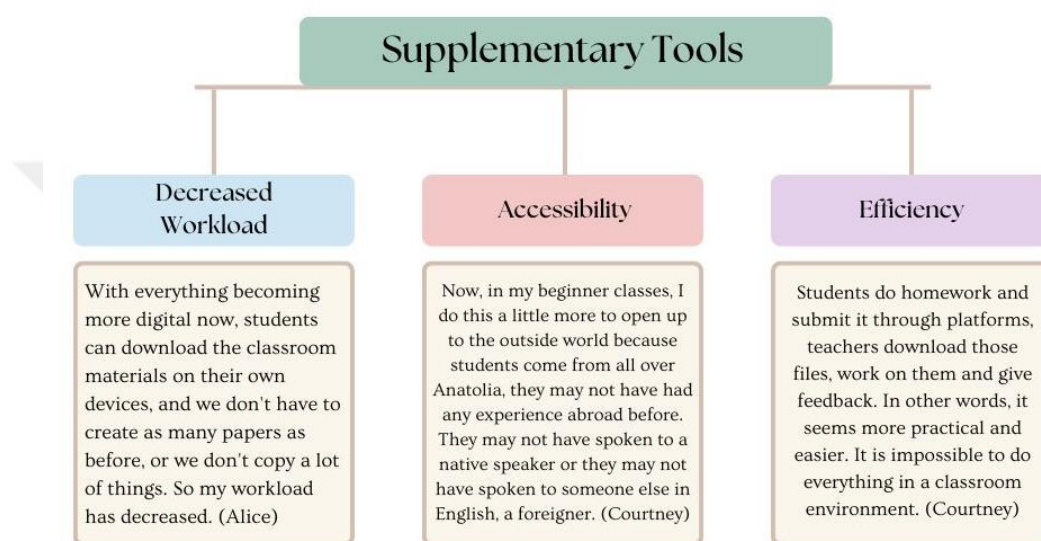


**Figure 3.** Sub-themes and Codes for Participants’ Positive Perceptions

#### 4.1.1.1. Supplementary Tools

Throughout their interviews, the participants revealed that they view digitalization and datafication of higher education as having the capacity to serve as instruments

that aid in their pedagogical practices in and outside the classroom, which was then identified as the “Supplementary Tools” sub-theme. While explaining why they saw digitalized and datafied tools and systems as supplementary and beneficial, the participants often referred to their experiences that shaped their perceptions. They also noted that these tools can help decrease the workload of teachers, make learning and teaching more accessible, and increase the efficiency of lessons. Figure 4 shows the codes and sample excerpts under the sub-theme “Supplementary Tools.”



**Figure 4.** Codes and Sample Excerpts for the Supplementary Tools Sub-theme

According to the participants, decreased workload is one of the main ways that digitalization and datafication of higher education can aid English language instructors. For Alice, one way this may happen is by eliminating the need to create or copy as many materials as before since what their students need is already available digitally on their own devices. While this example is pretty self-explanatory, it can also be interpreted as shifting the responsibility of providing materials from the instructor to the students. However, Alice is not the only one who expresses this view. Britney also shares similar ideas and says:

Digitalization of higher education? Actually, it makes, I mean, all digital platforms make my life a lot easier these days. ... These days, most of the researchers and instructors are really afraid of those technologies. I don't see them as a threat, to be honest. We should make use of them. Actually, we

should give an orientation for the students at the very beginning of the semester. I think they should be able to use them in their own learning space because we are not available all the time. And instead of asking teachers questions all the time, they can, I mean, they should be able to, you know, able to use those technologies by themselves.

Here, Britney states that she loves and frequently uses digital tools and platforms and views digitalization from a very positive standpoint. In her explanation, she centers the students and expresses that they should be given training in digital tools as teachers are not available all the time. Britney supports that students should be able to handle themselves instead of having to ask teachers questions all the time, which is made more possible by digital tools. Once again, this can be interpreted as shifting the majority of responsibility from the teacher to the students, same as Alice. As mentioned in the research context section, this preparatory school carries significance for both its instructors and students as English is the medium of instruction at this university. Moreover, it was also mentioned that this university is considered to be one of the leading higher education institutions in the country. Due to this, a lot is expected from the students, and they often have many responsibilities. It can be interpreted that this starts from the preparatory school and reflects the participants' views as well.

Furthermore, for Alice, another way digitalization and datafication may decrease English language instructors' workload is as follows:

If used correctly, I think they're very, very useful because you don't need proofreading, for example. You write something, and then you ask some digital tools to proofread them for you and correct them for you to make them more, in our case, native-like or more authentic; they're very useful in that sense.

Because English is not their first language, Alice feels as though English language instructors in Türkiye can benefit from the suggestions from digital tools to correct or alter their writings in accordance with the sound they want to achieve. Along the same lines, Britney also makes a specific reference to being a native speaker and says, "Let's be honest, we are not native speakers, so it's a great platform. And the internet offers enormous resources. Why not using them? I mean, let's just improve

our language. So students should be able to use those platforms as well.” Here, it can be seen that Britney is in agreement with Alice’s view that digital tools are especially beneficial for non-native teachers of English. While Alice and Britney do not make other references to nativity, it can be interpreted that they trust these tools to identify and correct the potential mistakes they may make regardless of their proficiency and see this as decreasing teachers’ workload. Once again, their perceptions may be influenced by their context of teaching at a high-stakes university where English is the medium of instruction.

Next, accessibility is another important point that the participants make. Here, Courtney refers to a website that she uses in her personal life. This website allows people to sign up and send postcards to people they do not know from all over the world, as well as receive postcards from them. To do this, it takes your home address and matches you with random people, after which you send each other postcards from your country or city. Courtney brings those postcards to class with her and uses them as examples in her lessons. When talking about this, she states:

Now, in my beginner classes, I do this a little more to open up to the outside world because students come from all over Anatolia. They may not have had any experience abroad before. They may not have spoken to a native speaker, or they may not have spoken to someone else in English, a foreigner.

According to Courtney, if this website did not exist, or if she did not use things she got through this website in her lessons, maybe her students would never have access to items or authentic writings that came from a different country or culture. Thus, she believes that such tools provide opportunities for students to have access to things that they otherwise may not be able to access, improving their learning journeys. Her example shows how much importance she attributes to her job as an English language instructor to people from all over the country with various experiences and backgrounds. In her mind, she has a responsibility to provide these extra materials to her students and help them gain more perspective and experience.

Lastly, increased efficiency comes up a few times in the participants’ narrations. Alice refers to physical relief from the burden of carrying CD players from classroom

to classroom, saying, “Before the software, we used to carry our CD players to the classroom. So, it was a huge burden from time to time. We used to carry speakers. And, so, I don't know. And now everything is one click away.”

Once again building up on her experiences, Alice reflects on how digital tools and systems have the capacity to relieve teachers from extra work that comes with traditional and analog systems. According to Alice, without having to waste time and energy on issues like locating, carrying, and taking care of multiple physical items like CD players and CDs, English language instructors can plan and conduct more efficient lessons, which furthers her perception that digitalized and datafied systems can serve as supplementary tools in this regard.

While Alice's example is more of a physical one, with other participants, this increased efficiency takes more abstract forms. For example, Courtney mentions learning management systems and educational platforms and explains that they supplement teaching as “students do homework and submit it through platforms, teachers download those files, work on them and give feedback. In other words, it seems more practical and easier. It is impossible to do everything in a classroom environment.” In this example, such platforms supplement teachers by hosting students' work and allowing teachers to access that work outside class hours, which means that not everything has to be done synchronously. In turn, this means class hours can be designed with more focus on other aspects that require interactive or synchronous work. For Courtney, this is an important positive side of digital platforms hosting and accessing their data.

Britney, on the other hand, refers to popular AI tools frequently these tools in her answers, which suggests that she makes use of these tools often. She remarks that everything people need is “in one application,” whereas before, various tools were needed to complete different tasks. In her view, as AI tools continue to offer solutions to multiple problems, they eliminate the need to visit various websites, thus increasing efficiency. This may translate to more efficiency while preparing for the lesson like in her case, or it may increase the efficiency during class hours in other ways. Once again, as discussed in the research context section, instructors employed

at this particular institution tend to be open to new research, developments, and technology. Thus, it is no surprise that the participants reflect this context and give importance to efficiency and keeping up to date.

Overall, it is understood that the participants view digitalized and datafied tools as supplementary to their teaching practices in various aspects such as decreasing teachers' workload, improving accessibility, and increasing efficiency.

#### 4.1.1.2. Student Benefits

Student benefits refer to another positive aspect perceived by the participants and are described as benefits to students' learning journeys offered by digitalized and datafied tools and systems. Four codes, which are "Increased Autonomy," "Increased Confidence," "Continuous Learning," and "Extra Practice and Feedback," can be found under this sub-theme. Sample excerpts for each code are shown in Table 6.

**Table 6.** Codes and Sample Excerpts for the Student Benefits Sub-theme

| Sub-theme        | Code                 | Excerpt                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Student Benefits | Increased Autonomy   | Like I said, as long as it's used reasonably, I don't see it as a threat. On the contrary, I think it increases students' autonomy. I think students take responsibility for their learning and improve their self-regulation skills. (Britney)                                                                                                                                                                                                                                     |
| Student Benefits | Increased Confidence | For example, on [digital education app], they can write sentences on the screen anonymously. ... Normally, we would listen to the volunteers first or call out names and ask them to do it. ... On [digital education app], the sentences are there anonymously. So when I project the screen on the board, the student knows that the sentence is theirs; but if the sentence is incorrect, they don't get embarrassed about their errors while still getting feedback. (Courtney) |

Table 6. (continued)

|                  |                             |                                                                                                                                                                                                                                          |
|------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Student Benefits | Continuous Learning         | I used to say when I started working as a teacher, language learning shouldn't stop in the classrooms or outside the class. Try finding as many materials as you can. Now, with the technological developments, it's quite easy. (Alice) |
| Student Benefits | Extra Practice and Feedback | I think it's [AI feedback] a great feature and a great opportunity right now. ... It can give them feedback as long as they write the correct prompt, and they can get very comprehensive feedback. (Britney)                            |

For Alice, she has always been the kind of teacher who wants her students to be autonomous learners. Indeed, she says, “I really want to encourage my learners to become more autonomous, and technology and all the digital information and all the tools they can use definitely helped my learners to become more autonomous.” According to her, digital tools and information available to the public have the ability to help students become autonomous learners, which is supported by her experience.

Britney expresses similar views, stating, “As long as it is used reasonably, I don't see it as a threat. On the contrary, I think it increases students' autonomy. I think students take responsibility for their learning and improve their self-regulation skills.” In Britney's explanation, she refers to ‘self-regulation skills’ as another potential benefit for students. According to both participants, students can become more autonomous learners with the help of digitalized and datafied tools and systems. This can be made possible by these tools and technologies shifting the control over to the students rather than having teachers as the sole responsible actors, which was also mentioned by both Alice and Britney in the previous section. Once again, this could be a reflection of their institution's culture.

Additionally, at another point, Courtney gives a specific example from her experience to point out how digitalization and datafication can help increase students' confidence. She illustrates:

For example, on [digital education app], they can write sentences on the screen anonymously. ... Normally, we would listen to the volunteers first or

call out names and ask them to do it. ... On [digital education app], the sentences are there anonymously. So when I project the screen on the board, the student knows that the sentence is theirs; but if the sentence is incorrect, they don't get embarrassed about their errors while still getting feedback.

According to Courtney, in a more traditional classroom setting, students may feel self-conscious and worry about making mistakes in front of their peers. This may discourage them from actively participating in the classroom activities. However, the platform that she exemplified allows students to submit their answers anonymously. Without any identifying detail attached, other students (and the teacher) have no idea whose input it is on the screen. This way, inaccurate answers can be corrected without anybody having to admit that they made a mistake. According to Courtney, this can increase students' confidence and not deter them from participating in the activities. This shows how much she cares about her students making the most of the activities and exercises they have in the classroom, as well as their psychological well-being.

Moreover, the participants agree that students can benefit from continuous learning through digitalization and datafication. Alice states, "I used to say when I started working as a teacher, language learning shouldn't stop in the classrooms or outside the class. Try finding as many materials as you can. Now, with technological developments, it's quite easy." According to Alice, students can follow up on the things they learned in the classroom whenever and wherever they want without having to be bound by spatial and temporal limitations. Similarly, Britney advocates that students should use digital platforms and tools more as "the Internet offers enormous sources, why not use them?" She states her viewpoint in such a simple yet efficient way by asking, "Why not use them?" Her answers to questions are quite consistent as she repeatedly emphasizes how students need to be in control of their learning rather than teachers teaching everything.

Lastly, all participants affirm that digital tools and datafied systems provide numerous opportunities for students to get extra practice and feedback. Alice and Britney both refer to generative AI tools to give feedback, and Britney explains that "I think it's a great feature and a great opportunity right now. ... It can give them feedback as

long as they write the correct prompt, and they can get very comprehensive feedback.” According to the participants, there is never enough time in the semester to give enough feedback on students’ paragraphs. Especially in lower proficiency groups, students need a lot of practice and feedback to improve their writing skills. It is not feasible to expect teachers to have enough time to provide the feedback that students need. In such cases, such AI tools come in handy to give that extra feedback, which just might be the extra push that students need.

Courtney also agrees with AI feedback; however, she also gives a different example about how students can submit voice recordings via different platforms where they can get feedback from the teacher later. She articulates:

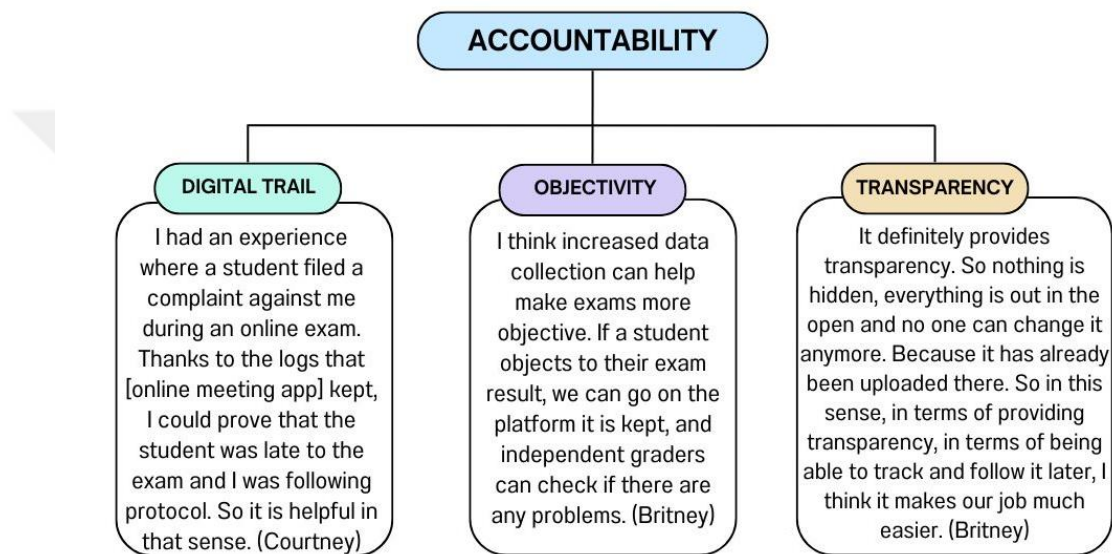
If you listen to the student there, you may not be able to take notes on everything. However, if I have this available on hand, I can play it again. When I’m listening to it again, I can take notes on stuff that I’ve missed before. So holding onto this student data can prove beneficial.

In this example, Courtney recognizes the voice recording as potential student data and explains how using it reasonably would be beneficial for the student because they would get more comprehensive and accurate feedback from their teacher. She mentions the limitations of conducting a traditional speaking exercise where the teacher would have to both listen to the student and take notes simultaneously. According to Courtney, if speaking exams were conducted like that, it would be impossible to provide accurate and comprehensive feedback on students’ speaking skills. Moreover, her example also illustrates the potential to have extra practice as the platforms she refers to enable students to submit voice recordings without the teacher and student being available in the same room at the same time together. This is similar to her view about increased efficiency thanks to learning management systems in the previous section.

Overall, it can be interpreted that the participants view various potential benefits of digitalized and datafied systems in terms of their students’ learning experiences, ranging from increasing their autonomy and confidence, facilitating continuous learning, and giving them extra practice and feedback.

#### 4.1.1.3. Accountability

According to the participants, increased accountability is one of the perceived positive outcomes of digitalization and datafication of higher education. Their statements showed that this accountability occurs at multiple levels, manifesting in students, educators, and administrators alike. “Objectivity,” “Digital Trail,” and “Transparency” appear as codes under this sub-theme, which is shown with sample excerpts in Figure 5.



**Figure 5.** Codes and Sample Excerpts for the Accountability Sub-theme

The role of digital trails in facilitating accountability can be seen in Courtney’s excerpt in Figure 5. Here, Courtney gives an example from her past where she had a sour interaction with a student. This student was late to an online exam, and as per the exam rules, Courtney could not let him in the online meeting. Later, this student filed an official complaint against Courtney, claiming that he was not late to the exam, but she denied him entry anyway. However, because this application automatically recorded meeting logs in the background (e.g., who joined at what time, who left at what time, who dropped off the meeting due to connection issues, who left willingly), Courtney was able to prove that she was following protocol and did not do anything wrong. Therefore, Courtney’s experience affirms her perception that digital data trails increase accountability. Thanks to that data trail, Courtney could

absolve herself from the accusations. She also states that, if things had happened the other way around and the student was right, this digital trail would benefit the student as he would have evidence that he was mistreated and misled. Thus, she supports that this digital trail is useful for all involved parties. This example also reflects how important the proficiency exam is for the students and how the administration takes it seriously in their institutional context.

In a similar vein, accountability in the form of objectivity can be seen in Britney's excerpt in Figure 5. In this example, it is understood that Britney perceives digital platforms as sites where the tracked information (e.g., submission times, grading details) can increase objectivity. Knowing that everything is recorded and available to be inspected can facilitate objectivity in all involved parties as it would be futile to do anything otherwise. In this context, it can be interpreted that this increases the instructors' confidence because they know that they have the necessary proof at all times if anything were to go wrong. This, in turn, can facilitate a stronger professional identity.

Lastly, accountability in the form of transparency can be found in the participants' answers. In Britney's excerpt in Figure 5, Britney refers to how once something is uploaded somewhere, it is out in the open and cannot be altered anymore. According to Britney, this increases transparency and reduces the risks of potential manipulation and errors by any actor or party. While some would find this detailed information-tracking worrying, for Britney, it is definitely a positive aspect, which further affirms her previous statement where she says, "These days, most of the researchers and instructors are really afraid of those technologies. I don't see them as a threat, to be honest."

While Britney's statements affirm objectivity and transparency as accountability manifestations, Courtney's experience reflects her perception of the potential benefits of digital trails. Although they all view accountability in different forms, all these statements by the participants reveal the ways they construct the accountability benefits of increasing digitalization and datafication.

#### 4.1.1.4. Professional Development

The interviews with the participants revealed that they perceive professional development as one of the positive sides of digitalization and datafication. Here, professional development refers to obtaining or enhancing career-related skills and competences. According to the participants, digitalized and datafied systems allow instructors and researchers to have access to more opportunities for professional development.

Now everything is quite easy to reach. Like, you can take courses from around the world. And based on your interest, you can look for some training opportunities and you can easily do them in your own time. So it's- digital tools have a great value for your personal, professional development. (Alice)

In the excerpt above, Alice mentions how everything is easy to access from all around the world, and since they are online, you can pick where and when you want to participate in such opportunities. Without having to be bound by temporal and spatial boundaries, teachers can consume any professional development material freely and improve themselves personally and professionally. While this example is quite straightforward, at another point, she refers to a different manner in which professional development may be facilitated. She says, “I’m the final decision maker, and it keeps my content knowledge- it kind of serves as a brush up.” According to her, such tools and systems can serve as a “brush up” that keeps her content knowledge up to date, helping her professional development; yet, in the end, she is still the final decision maker. Her being the final decision maker will be explored further in the upcoming sections related to experience; however, it can be seen how it plays an important part here too. For Alice, the fact that digital professional development opportunities are more accessible is not the sole point; that she can ask questions but still disagree with the responses is why her professional development is supported further. Thus, it can be argued that her autonomy is what promotes her professional development rather than the increased number of tools and systems.

On the other hand, while Courtney affirms that there is an increase in the professional development opportunities available to English instructors, she also mentions that an increased number is not the same as good quality, which is another common

theme that will be explored in the later sections. She builds up on her previous experiences again and states:

I once joined a webinar on creating cartoons. However, they sent me the certificate online, and then I've never even gone on the website to try it. I've never used it in class either. So, you see, there is an increase. There is an increase, and yet...

Here, Courtney trails off at the end of her sentence and does not finish it. However, based on the previous parts of her statement, it can be inferred that she meant quantity is not the same as quality. In her view, although there is an increase in numbers, it is debatable whether or not this increase is substantial in terms of actually providing quality training that leads to an increase in the quality of education. Even as someone who is quite interested in learning and trying new tools, she acknowledges that at least some of these new tools and materials are just for the sake of getting or offering a certificate.

In general, while it can be understood that the participants believe increased digitalization can lead to more opportunities for professional development for English language instructors, there are also mentions of quality over quantity.

#### 4.1.1.5. Insight

As the final sub-theme, generating insight is another perceived positive aspect by the participants. At different points, they referred to how digitalization and datafication of higher education may lead to providing better care to their students as new insights and connections would be discovered. The participants referred to institutional analysis and tracking process as potential insight, which were used as codes in this sub-theme. Sample excerpts for these codes can be found in Table 7.

**Table 7.** Codes and Sample Excerpts for the Insight Sub-theme

| Sub-theme | Code                   | Sample Excerpt                                                                                                                        |
|-----------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Insight   | Institutional Analysis | I think it's very good, especially when doing item analysis in multiple-choice exams, when looking at difficulty levels, etc. (Alice) |

Table 7. (continued)

|         |                   |                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Insight | Tracking Progress | Because, for example, when they do that textbook online digital exercise, you see who is doing it, who is not doing it, which topics are lacking, which topics are misunderstood. I see, for example, a lot of mistakes in the simple present tense. I can go back to that topic and explain it to the students again. In this sense, it is beneficial for us and for their education. (Britney) |
| Insight | Tracking Progress | Because on that digital platform, they were also registered in a classroom environment and who - I think if I remember correctly, who was logging in, who was opening the materials, who was doing what, I could check those things. (Courtney)                                                                                                                                                  |
| Insight | Tracking Progress | We can track both the data the students input, and how many they got wrong, so we can give appropriate feedback. I think it's useful in that sense. (Britney)                                                                                                                                                                                                                                    |

In Alice's excerpt in Table 7, she refers to a specific function of digitalized and datafied systems, stating that they facilitate important analyses that are required to provide quality education to students. Her perception is once again based on her experience at her institution. She believes that institutional analyses of exams and other related materials improve the quality of education for students by providing quality assessment, as evaluation is a vital part of education. As mentioned in the research context section, the proficiency exam is quite crucial for students at this institution as they cannot receive education at this university without passing this test first. Thus, it is no surprise that both the institution and Alice, as an employee, give great importance to analyzing this exam and ensuring its quality too.

At different points, Britney reflects on how generating insight and analytics could be useful in higher education on two separate occasions. In both examples in Table 7, she emphasizes that student data can show problematic topics that students struggle with, which can signal to the teacher which topics need more attention and repetition. According to Britney, if teachers make use of such student data, they can adjust their lessons in accordance with their students' needs, which can improve students' learning journeys. Keeping track of this progress and analyzing it manually would be dif-

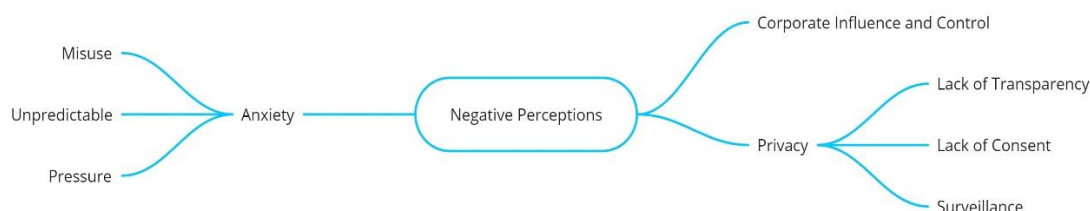
ficult for the instructors, so for Britney, this is definitely a plus to the digitalization and datafication of higher education.

Lastly, Courtney mentions a different type of insight. In her quote, she mentions that some digital platforms allow teachers (and other authorized users) to see interactional patterns. This way, instead of just seeing if students made mistakes, teachers can see if and which students clicked on materials, allowing teachers to deduct if students were paying attention. This paints a clearer picture for teachers and enables them to assess student needs on a deeper level. According to Courtney, this type of data is useful insight for teachers, and she perceives this as a positive feature of digitalization and datafication of higher education.

Overall, all three participants agree that certain types of institutional and student data are crucial for teachers in shaping their teaching practices, which is made possible by increased digitalization and datafication.

#### 4.1.2. Negative Perceptions

When analyzing the participants' responses, it was understood that they have certain concerns and negative feelings about the increased digitalization and datafication of higher education. These concerns were identified as the "Negative Perceptions" theme. Moreover, it was understood that the participants had some concerns in common, which led to the sub-themes "Anxiety," "Privacy," and "Corporate Influence and Control," shown in Figure 5. "Anxiety" and "Privacy" appeared in different forms, leading to the use of some distinct codes, also shown in Figure 6.

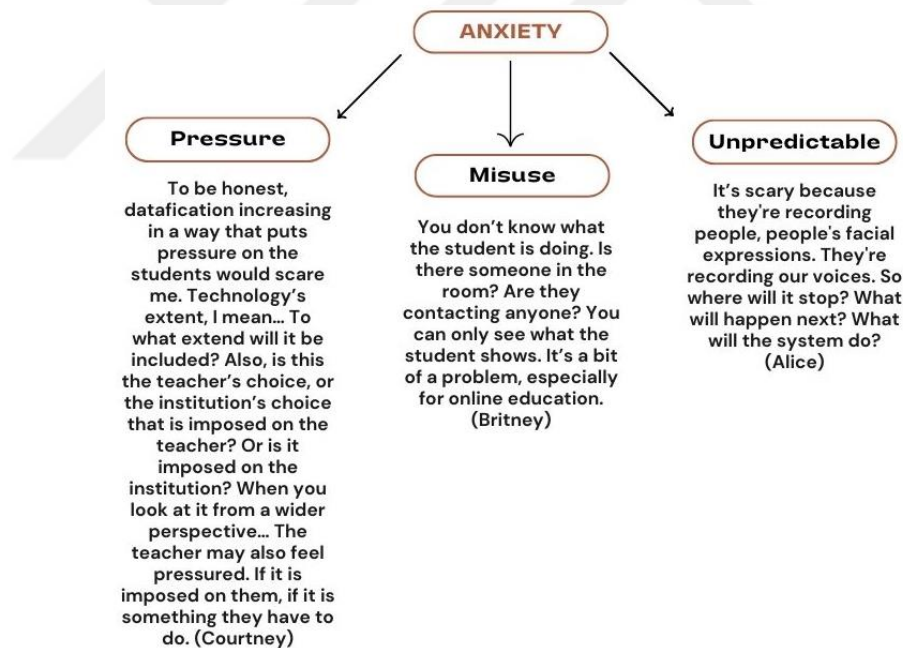


**Figure 6.** Sub-themes and Codes for Participants' Negative Perceptions

Generally, participants expressed that they are anxious about the unpredictability of digitalization and datafication, the pressure they put on instructors and students alike, and the potential misuse by all the involved parties. Moreover, they articulated that they have concerns over privacy issues, specifically over lack of consent and transparency and increased surveillance. Additionally, it was understood that the participants acknowledge the growing corporate influence and control in higher education brought on by digitalization and datafication trends.

#### 4.1.2.1. Anxiety

The sub-theme “Anxiety” referred to the participants' expressions of being anxious about certain aspects of digitalization and datafication of higher education, namely the unpredictability, increased pressure, and potential misuse. Codes and sample excerpts are presented in Figure 7.



**Figure 7.** Codes and Sample Excerpts for the Anxiety Sub-theme

Concerns about increased pressure appear a few times throughout the interviews. For example, Courtney's excerpt in Figure 7 shows that she worries about how increased datafication may put extra pressure on both the students and teachers. In fact, she

even mentions that institutions may face pressure from other involved actors to implement increasingly digitalized and datafied systems. At another point, she brings up the use of cameras in China classrooms to record and analyze students' facial expressions. She talks about who would potentially have access to that data and says, "If the parents get involved ... I mean, the parents can feel entitled. Here, they can get into arguments with teachers, like, 'Why is my child unhappy? Why didn't you include them more?'" Institutions putting pressure on instructors and students to increase digitalization and datafication may be one of the first examples that come to mind. However, Courtney views this from different perspectives and considers many other potential implications like pressure from being scrutinized and observed with no control.

While Courtney shows her anxiety about increased pressure, Alice and Britney express worries about potential misuse. For example, Alice states, "The recent developments, they may pose a big question mark about the originality of the production, especially writing, because we expect students to produce something." Especially with the rise of generative AI in recent years, plagiarism has been a rising concern among English language instructors. This can also be observed in Alice's answers. While Britney agrees with this point and acknowledges potential ways students can cheat in her quote in Figure 7, she also explains that she does not view this as catastrophic as others may:

This digitalization paved the way for increased cheating; it's not the student's own knowledge, it's something they got from the Internet. And no matter how ethically wrong it is, you can't really get ahead of it. At the very least, how can you turn it into an advantage? I think we need to proceed with this kind of mindset because I don't think we can get ahead of it.

In Britney's opinion, regardless of how wrong or unethical it is, such concerns are inevitable side effects of increased digitalization. Because they are inevitable, Britney supports the idea that we need to come up with ways to turn them into an advantage, as we cannot run from them. Moreover, she also believes that these situations should be assessed from a different angle. After explaining the potential ways students can cheat in both online and face-to-face exams thanks to increased digitalization, she goes on to say the following:

Personally, I don't think it's that big of a problem. Because, in the long run, the homework that I give to my students- if it's going to be helpful for them, they should look it up online. If it's going to improve their English- other teachers have concerns about this, especially in the form of cheating.

According to Britney, students making use of other resources and tools to complete their tests or homework is both inevitable and potentially helpful. She believes that, as long as her students still learn the topics and retain that information, it does not matter exactly how they got there. Her main goal is always teaching and educating her students. Her mindset showcases her ability to adapt and transform things into advantages rather than submitting to despair, as well as seeing the bright side even when the situation is considered to be a negative side effect.

Lastly, concerns over the unpredictability of digitalization and datafication of higher education appear several times. Alice, in addition to her excerpt in Figure 6, repeats how she is scared and worried a few times. She refers to a specific piece of news and says that “AI collects biometric data from students to increase their attention span or to stop when it's required.” When asked about how this news makes her feel, she states:

Well, if we want to grow up really, really academic individuals who can achieve their full potential? It might be- it might be useful, but... I don't think it's a good idea. I think it's- it's too personal. That shouldn't happen. And machines shouldn't decide... I don't know, I don't know. I find it kind of scary, and I'm worried about these kind of improvements.

In her excerpt in Figure 7, Alice asks, “Where will it stop?” This is an important question that highlights the complicated nature of digital developments because it is not just a rhetorical question. It is a real question that cannot be answered even by the parties most involved because nobody knows. Despite being someone who loves to include digital tools and systems in her personal and professional life, Alice is still scared and anxious about where things can go from here. The possibilities are endless, and some systems are already pervasive and stalking; thus, one can only try to imagine how far it can go, and Alice is worried because she knows it can go too far. Moreover, for Alice, this is not only applicable to education or higher education. She also talks about how this is something she is worried about in her daily life with her personal data and privacy, which is explored further in the next section.

All in all, it can be understood that anxiety manifests differently in the participants' narrations. They are worried about the unpredictable nature of digitalization and datafication, the amount of pressure they can impose on students and teachers, and potential misuse such as in the form of cheating or plagiarism. However, they may also have the tendency to try and turn these worries into advantages rather than keep being worried.

#### 4.1.2.2. Privacy

The sub-theme “Privacy” refers to some of the other concerns the participants have about digitalization and datafication of higher education. Specifically, participants mention lack of consent, lack of transparency, and increased surveillance while talking about their worries, which make up the codes of this sub-theme. Codes and sample excerpts can be found in Table 8.

**Table 8.** Codes and Sample Excerpts for the Privacy Sub-theme

| Sub-theme | Code                 | Sample Excerpt                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Privacy   | Lack of Consent      | Yeah, like, I don't know if the news is correct, but [a company] takes a screenshot of your- of our computers every 10 seconds so that they can provide data for their own artificial intelligence, and I don't know about it. I don't approve it, but they get it. (Alice)                                                                                                                                                                    |
| Privacy   | Lack of Transparency | I think, well, at the beginning, everything has a good purpose. Everybody wants to make something useful for their profession. But again, who are the third parties? What kind of data are we going to collect? Why are we going to analyze them, and why are we going to use them? So, these should be decided quite carefully, or else, it can have really, really bad results. (Alice)                                                      |
| Privacy   | Surveillance         | About increasing datafication? Yes. That thing... well... how much is it used? How much does technology interfere with students' privacy or feelings of comfort? We need to look at that. For example, in the Chinese example, as I read the article, having cameras in classrooms, something that records students' emotions, I thought, if I were a student, I would be bothered by this feeling of “big brother is watching me.” (Courtney) |

When talking about lack of consent, Alice refers to some news that she read about a company taking a screenshot of the user's screen every 10 seconds to feed their AI tool and states that, if the news is true, she does not consent to them gathering such private information, and yet they can still do it. She also mentions that she is worried about this practice being copied in the higher education landscape and how this might affect the students. Later on, she also adds:

Honestly speaking, I'm not quite sure if we're fully aware of the information that is taken from us, with our permission or without our permission. We have this PDPL [Personal Data Protection Law] system. However, how applicable or to what extent is it applied?

All of those examples show that Alice understands the pervasive nature of data collection and how companies still gather any type of data they want without requesting explicit consent. In fact, Alice gives another example of issues with consent and states:

Because, again, most of us use the search engines. [A popular search engine], right? And everything they ask for are set. So we either agree to their terms or we cannot choose their products. And so it's a big issue. .... There are some settings. However, I don't know- are they- are they abiding by their own rules? We can never be sure about it.

Here, Alice highlights the illusion of consent when it comes to digitalized and datafied tools. Using search engines as an example, she mentions that even if the companies ask for consent to gather data, it is more of an illusion as users often have to say yes in order to use those products. Often people have to use these products or websites because they need them. Therefore, even if companies ask them if they consent, people have to say yes because they do not have another choice. This means that companies legally cover themselves by stating they ask for permission, yet, in practice, it is not really accurate. Alice also talks about how she does not trust the data privacy practices and policies companies may have. Even if they claim they do not collect identifying data or share it with other parties, there would be no way to know for sure if they actually follow through. For Alice, although this is enough of a concern in her personal life, she is also worried about its potential implications for higher education and her students' data.

On another occasion, Alice talks about her concerns over the lack of transparency in digitalized and datafied systems. She explains that, even if they serve a good purpose, such systems are not open about their data policies and processes (Table 8). Expressing worries about the collection, analysis, and dissemination processes, Alice states that having a benevolent aim is not enough to make these systems safe or reliable. Courtney shares a similar sentiment as she also refers to the news of China's in-class AI camera use and questions, "And those camera records – who will examine them? Who will see them?" In both examples, the participants are concerned about who has access to the collected data and their intentions. Their questions are valid and highlight the importance of critical data discussions in not only the education field but their personal lives as well. Additionally, they are not just worried about their own data – they are more concerned about their students.

Finally, participants express their concerns over increased surveillance several times. In Table 8, Courtney reflects on feeling like being watched by the big brother and continues, "A camera tracking your every move, every emotion... This can cause so much stress, so much pressure." Moreover, she also refers to people's personal lives with increased surveillance and data breaches:

I mean, this is a problem that also occurs outside the classroom. Distributing our phone numbers, for instance, is the simplest example. I mean, you know, numbers we don't know, they call you, and you get like, "Where did they get my number?" I think that's always there. I mean, on a country basis. This must be something related to how solid the laws are and whether they are implemented or not. I mean, there is also this: Everything we click on is ultimately recorded on the internet. I mean, this can go to many, many different places, but it can be a good thing, it can be a bad thing, you know, when it comes to catching criminals, for example.

In her response, Courtney expresses that issues with data safety and surveillance are not limited to digitalization and datafication of higher education. On the contrary, there are many examples in our daily lives, ranging from getting spam calls to every single click leaving traces all over the Internet. However, according to Courtney, it is not as easy as saying "all surveillance is bad" as there are instances where tracking people's activities proves useful, such as catching people who distribute or access certain criminal materials. Her statements show that, while she views increased digi-

talization and datafication as a slippery slope, she can still see potential benefits, further showing how the participants had both positive and negative perceptions of the phenomena.

Based on the participants' reflections, it can be seen that increasing digitalization and datafication invoke privacy concerns in their personal and professional lives and influence the level of trust they have with different platforms or involved parties.

#### 4.1.2.3. Corporate Influence and Control

As the last sub-theme of the negative perceptions, "Corporate Influence and Control" refers to the concerns the participants have regarding the increased corporate influence and control over higher education. Sample excerpts can be found in Table 9.

**Table 9.** Sample Excerpts for the Corporate Influence and Control Sub-theme

| Sub-theme                       | Sample Excerpt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Corporate Influence and Control | And, unfortunately, I think corporate companies, they have a huge influence. Because it's a really big market. (Alice)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Corporate Influence and Control | There was an online textbook that we were using, and on that platform, the people in the corporate could see and observe students' activities, like which parts they completed, which parts they didn't complete. (Britney)                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Corporate Influence and Control | I mean, for example, we are starting a brand new book. Those who come to introduce the book, they are all like, "Our digital book is user-friendly; for example, you can do this, do that..." I mean, how are the speaking and listening exercises in the book? Are the transitions good? I don't know, is it topic-based or team-based? You know, these... Instead of explaining these first, "Oh, our digital platform is very good, very nice. You know, it's user-friendly, you can play the sound when you press here, you can play the video when you press here..." and these are gradually increasing as the new editions of the books are published. (Courtney) |

Alice articulates that higher education is a really big market, which means commercial actors try to exert their influence and control over this education site. This is an important point to consider as, even if the participants do not experience this push firsthand (detailed more in the experience section), they can still see evidence and traces of this phenomenon on different scales. This is also an important discussion for the increasing commercialization of higher education and which actors have the most at stake.

From a different angle, Britney refers to a specific example where a digital platform they were using had access to student data on their platform (Table 9). According to Britney, she was sure they used that data to conduct analyses for their business. While Britney does not go into detail about how this made her feel, it can be seen that educational platforms do not only charge for their services, but they also use user data to create more revenue for themselves via various analyses. Whether the institutions, instructors, and students are aware of how much of their data is being accessed, analyzed, used, and sold is unknown. This shows corporate control from a different point: while Alice's statement was explicitly about how much influence commercial actors had on higher education (i.e., a direct form of control), Britney's example highlights companies' control over the access, use, and dissemination of data, which is used as capital.

Further, Courtney remarks on the change in the marketing strategies employed by educational corporations, particularly book publishers. She explains that, for some time now, companies have been neglecting the actual pedagogical aspects of their books in favor of marketing their digital platforms. Instead of presenting and promoting the actual content, they only focus on how "user-friendly" their platform is or how to operate different commands and controls. She criticizes this and views it as trying to steer higher education in the particular direction they want it to go. Moreover, it also shows that educational companies are unaware or uncaring of what the instructors actually need from them or their materials. While instructors want to know about the pedagogical contents of these materials, the companies are only concerned about showing off their digitalized platforms.

In addition to her excerpt above (Table 9), Courtney views the increasing influence of corporate actors on the digitalization of higher education from a different perspective as well. She voices her concerns about how this may widen the existing inequality between her students and states:

There is also something like online workbooks instead of physical workbooks. Now, when students do not get the original book, they cannot access the online workbook exercises. If I, as an institution, as a teacher, include a certain percentage of online workbook exercises in the scoring, I will now put students who are economically disadvantaged even more at a disadvantage in terms of points, for example, because they could not get the original book.

While increasing digitalization and datafication may be marketed as providing equal opportunities in higher education, in Courtney's example, it can be seen that she does not consider this to be a hundred percent true. On the contrary, she argues that companies completely switching to digital textbooks and putting their exercises behind a paywall only serve to worsen the current conditions.

Overall, it can be seen that, while participants may have different examples about the influence and control exerted by commercial actors, they are in agreement that corporate influence and control is a present concern in the increasing digitalization and datafication of higher education.

#### **4.1.3. Mindfulness**

The last theme of this research question, "Mindfulness," refers to the participants' expressions of the need to be mindful when it comes to digitalization and datafication of higher education. Throughout their interviews, all participants used phrases such as "as long as it is used very sensibly," "as long as it is used appropriately within purpose," and "no good use without a knowledgeable person in charge."

For Britney, she structures her statement in this manner when talking about increased digitalization. She says, "Yes, we were about to lose our social skills, but I don't see it as a threat as long as it's used very sensibly. On the contrary, I think it increases student autonomy." Out of the three participants, Britney is by far the most optimis-

tic when it comes to digitalization and datafication of higher education. Even when she shares some concerns or narrates some past experiences where she had issues, she always turns it around and explains how she thinks they are still positive or necessary things. In line with this, even in this example where she reiterates the importance of mindfulness and sensible use, she continues to talk about the benefits of these phenomena for her and her students.

On the other hand, Courtney and Alice refer to mindfulness a lot more often in their interviews. At one point, Courtney says, “Of course, instead of using technology for the sake of using technology, I need to understand and integrate the pedagogical purpose it serves.” When discussing professional development opportunities, Courtney had similar remarks where she debated whether opportunities increasing in number meant an increase in quality. She also questioned if some of these new training workshops were actually substantial or “for the sake of getting a certificate.” Thus, it is understood that this is a view that she has not just for training but for every new development in general.

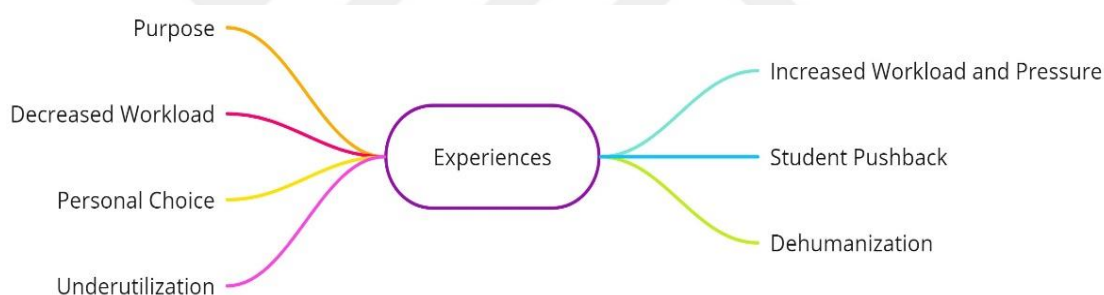
At another point, Courtney states, “I mean, as a teacher, I need to find out what it serves. For example, will I get to my intended outcome in a better way if I do or don’t use a technological tool? I need to make that decision.” This emphasizes her need to have professional agency when it comes to planning and conducting her lessons. For Courtney, any tool or system she chooses to use must serve a pedagogical purpose. Like Courtney, Alice shares a similar sentiment when she says, “When I co-work with AI and digital tools, I, again, look for some possible mistakes and other stuff. I can disagree with the AI. I am still the final decision maker.” For both participants, they are still the professionals in charge, showcasing their agency and control.

Furthermore, when talking about increasing datafication, Alice expresses, “It’s too personal. That shouldn’t happen. And machines shouldn’t decide.” This explicitly shows her views on the increasing algorithmic decisions made in classrooms and institutions. In agreement with her statement of being the final decision-maker, it can be understood that Alice values the role of instructors being at the center of relevant decisions in their classrooms and institutions.

Overall, even when praising the potential benefits of digital tools and data systems, participants often state conditions like ‘as long as it is used responsibly’ and such. This shows that digital and data tools are not simple artifacts in education but a part of the bigger picture.

#### 4.2. How do English language instructors experience the digitalization and datafication of higher education?

This research question aimed to uncover the participants’ experiences with digitalization and datafication of higher education. The interpretations of the participants’ answers revealed seven major themes, which are “Purpose,” “Decreased Workload,” “Personal Choice,” “Underutilized,” “Increased Workload and Pressure,” “Student Pushback,” and “Dehumanization” (Figure 8). These themes will be discussed in their respective parts.

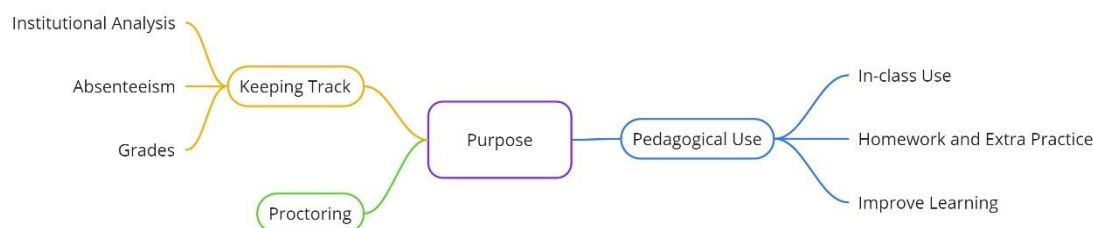


**Figure 8.** Participants' Experiences Regarding Digitalization and Datafication of Higher Education

The answers provided by the participants revealed that, generally, participants use digitalized and datafied tools and systems for different purposes. Their experiences as English language instructors in an increasingly digitalized and datafied higher education landscape show that i) their workload has both decreased and increased at different times, ii) they have full control over their lessons at their institution, iii) digital tools are underutilized at their institution, iv) they face resistance from students at times, and v) increased digitalization and datafication may lead to dehumanization of the teaching experience or the involved actors.

### 4.2.1 Purpose

The theme “Purpose” refers to the way the participants explain the reasoning behind using digital tools or collecting data. The analysis of this theme revealed three sub-themes, which are “Keeping Track,” “Proctoring,” and “Pedagogical Use.” Figure 9 shows the organization of the sub-themes and their distinct codes.



**Figure 9.** Sub-themes and Codes for the Purpose Theme

According to the participants, the data that they collect and use at their institution is minimal and common forms of data. At various points, Alice gives examples of their data collection procedures:

We experience datafication in a very basic manner. ... The way we collect data is quite traditional, like we have an absenteeism report card kind of stuff. But other than that, then we can collect the whole hours they have missed. ... because the data we collect and we prefer to store, they are not personal and we use them to make our education better, like to provide our students with a better learning environment and better learning experience. ... It’s especially useful for tracking students’ absenteeism and reports.

Alice’s statements are supported by the other participants as they also give the exact examples as her. This shows that English language instructors at this institution are not asked to collect or keep any more data than before, thus showing no increasing datafication in the local context. Also, the data they collect are often used within the institution rather than third-party sources. Alice gives the example of institutional analysis for their proficiency exam, and Courtney details how that analysis is conducted as she says, “Item analyses of questions are conducted. It’s item-based and done on every level. Instructors who know SPSS look into exam data for research purposes, like quizzes, midterms, how the institution is faring success-wise, etc.”

When asked about who can access the results and reports, both Alice and Courtney confirm that they are only available on a private and secure server, accessible only by authorized personnel. This process demonstrates how the data is kept strictly within the institution. The source of the data is their own proficiency exam, developed and used strictly by them. The analyses are done by qualified language instructors, and the results are only available within the institution. Except for the analysis software, everything they use is their own product. This shows how much this institution cares about privacy and data safety.

Moreover, the participants explain that they often use digital tools for pedagogical purposes in and out of the classroom, often with the aim of improving learning for their students. Britney gives the following example:

I prepare lots of materials with the help of [an AI tool] these days. For example, each and every week, we are given a word list by our coordinators. So, in the past, I used to find each and every word from the dictionary. But instead, these days, I just enter those words into the platform and the platform gives me, provides me with these definitions, with all examples.

Here, it can be seen that Britney makes use of a popular digital tool to fulfill her weekly obligations as an English language instructor. For her, this starts outside the classroom as she prepares for her lessons prior to the class. Moreover, she also talks about creating materials for her students and says, “Other than that, I use this technology to provide model paragraphs for students. So, for example, problem solution, you know, cause-effect paragraph types.” Learning to write academic paragraphs requires a lot of practice and samples, and here, it is understood that Britney uses digital tools to provide more examples for her students. However, this is not the only time she mentions using tools to help her students get more resources or feedback. At another point, she explains:

Our students need to get this proficient- they need to take this proficiency exam. And unfortunately, we just give feedback to a couple of writings. So I give them different topics, and then I encourage them to write as many writings as possible, paragraphs as possible. So I always tell them, “Please write your paragraph in [an AI tool]. I mean, that's their platform. They'll give you feedback as long as you write the correct prompt, you can get very comprehensive feedback.”

Using digital tools for proofreading and feedback purposes was mentioned in the previous sections, as well as wanting to encourage students to be more autonomous. Here, Britney shows how she is making use of certain digital tools to achieve these goals. As explained in the research context section, the proficiency exam can carry a lot of stress for students as it is their only way of studying at this high-profile university. However, especially for lower-proficiency students, this is not easy to accomplish and requires considerable practice and work. As explained by Britney, this is not always possible to do since instructors can only give so much practice and feedback. Thus, for Britney, digital tools provide an opportunity for her students to receive the help they need in their own time.

Another example of giving students extra practice and homework can be found in Courtney's statements. Different from Britney, Courtney refers to the benefits of being able to work asynchronously rather than other platforms giving feedback. She states:

I tell them to send me their voice recordings either on the LMS or via [a messaging app] so that I can give them oral feedback. I tell them it makes my job easier too, because if you listen to the student there, you may not be able to take notes on everything. However, if I have this available on hand, I can play it again. When I'm listening to it again, I can take notes on stuff that I've missed before. So holding onto this student data can prove beneficial.

Courtney's reasoning and explanation are in line with her previous statements about only using tools for pedagogical purposes. Here, she recognizes voice recordings as potential student data; however, she also recognizes that her having those recordings on an LMS or her chat application offers more benefits than potential data safety risks, once again highlighting the importance she gives to providing her students with extra practice and feedback. In addition, this can also serve as another example of the institution's data privacy as the participants explained that this institution has its own LMS hosted on its private servers and only accessible within the institution. Therefore, any material uploaded to this LMS is not visible to any third party.

Lastly, it can be seen that the participants made use of digital tools for proctoring purposes, although this practice was only done during the pandemic period. Courtney gives the following example:

During the period when lessons and exams were online, we used [an online meeting app] and [another online meeting app] before that. It was the teacher’s responsibility to uphold the exam rules, but we also explained to the students like, “You’ll be in the meeting at this time, your cameras will be on, what’s on your screen, what’s around you?”

This example showcases the rules institutions set during the pandemic period to ensure academic integrity. As pervasive as they may seem, there was still no way to be sure about students’ honesty, as expressed by Britney in the previous sections.

All in all, it is understood that this particular institution does not take part in extensive digitalization and datafication, and such practices are only performed in basic and common contexts. Based on the examples that the participants provide, aside from how the tools they use process and utilize their used data, participants do not have much experience in or contribution to increasing digitalization and datafication.

### 4.2.2. Personal Choice

The theme “Personal Choice” refers to the ways the participants describe their experiences in their institutional context. All participants agree that, in their local context, they have the freedom to choose whether and which tools to implement in their classes. Sample excerpts related to this theme can be found in Table 10. These excerpts reveal how the participants narrate their freedom to choose, as well as the situation in their local context.

**Table 10.** Sample Excerpts for the Personal Choice Theme

| Theme           | Excerpt                                                                                                                                                                                                                                                                                                                                        |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Choice | I mean, like, it's- it's completely up to the teacher. Although, I mean, in- in case of the university’s own learning management system, there are some things that we need to do weekly. But, other than that, whether we use the software of the book or if we use, I don't know, [an EdTech tool] or not, it's completely up to us. (Alice) |
| Personal Choice | I am in control here. I can use something, or choose not to use something. On the contrary, this makes me feel more relieved during the lesson planning stages. (Courtney)                                                                                                                                                                     |

Table 10. (continued)

|                 |                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Choice | I try to break this [traditional thinking] in my classrooms. I try to give them extra homework and tasks. I tell them ‘Go and prepare this, then bring it in and present it.’ I try to offer them a more personalized learning experience or be more task-based. I tell them about some digital tools and say go and prepare this, then present in class. (Britney) |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

In Alice’s example (Table 10), she mentions that while they have certain duties that they need to complete weekly on their institutional LMS, such as entering grades and absentee records, instructors are completely free to make their own decisions regarding their pedagogical practices. At another point in the interview, she goes on to add, “I don’t [feel like less of a teacher]. In fact, it’s the opposite. You feel more control.” With this quote, it can be understood that English language instructors in higher education have a stronger sense of professional identity when they are given the freedom to make their own decisions in their classrooms. Courtney’s example in Table 10 also supports this interpretation as she refers to her improved affective state while planning her lessons and knowing she has full control.

In a similar vein, Britney talks about how she does not just settle for using digital technology herself but also actively assigns tasks to her students to ensure they use them too. Here, she uses her freedom to give her students access to the tools that she believes will benefit them and their education. This aligns with her perception that digital tools can help students become more autonomous and confident, which was explored in the previous sections.

Overall, it can be understood that the institution in this study allows its English instructors to have free reign when it comes to designing and conducting their lessons, which, in turn, supports instructors’ professional identities and strengthens their sense of autonomy and agency.

#### 4.2.3. Underutilization

The theme “Underutilization” refers to the way the participants view their institution’s current practices in terms of digitalization and datafication. It can be observed

that the participants have a shared sense of certain tools and systems not being used enough in their local context.

Throughout the interviews, Britney expresses her frustrations with the national and local context of higher education. According to her, both Türkiye and her institution are falling behind in terms of digitalization and datafication, and authorities are not concerned enough with keeping up to date with global developments. At one point, she remarks:

To be fair, I don't think we've digitalized enough despite everything that we've been through. For example, everything was online before the pandemic ended; and now, after the pandemic, we returned to 25 hours of face-to-face education as if we would never experience something like this again. I condemn this. I don't think it's right at all. We went through this process. We taught online. At least we could've turned hybrid, or to flipped learning. We could've done something, something extra, because there's no guarantee that we won't experience this again.

After experiencing online education during the pandemic period, Britney is frustrated with the way things have gone back to the way they were, as if nothing had happened. For Britney, the pandemic gave them a chance to adapt to the necessities of a changing world, and her country and institution are turning that chance away:

Completely face-to-face... I think it's wrong to have 25-30 hours of face-to-face lessons. I think it's wrong that Türkiye has this idea like, 'Okay, the pandemic is over, everything is over, we can return to 100% face-to-face.' The world is evolving in a different direction. I think we need to adapt.

Moreover, Britney compares Türkiye to other continents and countries:

I think we're far behind Europe and the USA in terms of digitalization. They mostly... I have a friend who teaches language at Yale. They use less face-to-face and more online resources and say, 'My actual job is to prepare materials outside the classroom. I create interactive materials to spend the face-to-face hours as efficiently as possible, but students have a lot of responsibility outside the classroom.' They mention that they use a lot of digital tools. It's the opposite for us. We have 25-30 hours face-to-face, and the student practically has no responsibility outside the classroom. I think we are lacking in this sense. We don't include students actively. And I think we feel the effects of that. I think Türkiye is very far behind Europe.

Giving her friend's experience as an example, Britney conveys her resentment of the way the higher education landscape is constructed nationally. Türkiye's context in terms of digitalization and datafication of higher education was provided in the previous sections, and different initiatives by different organizations were explained. However, it can be interpreted that these initiatives, despite being planned by national authorities, are not carried out everywhere and differ from institution to institution. Although this particular institution is considered to be one of the leaders in terms of development and change, it seems as though the instructors still find it insufficient and call for a less traditional teaching paradigm. Another example by Britney illustrates how this manifests in their students:

When we returned to the classroom after the pandemic, I felt like nothing like that even happened, and we were back in that traditional classroom. Like the student keeps expecting things from the teacher. "You give me the feedback, you do everything, you prepare everything."

Alice also reflects on this and explains:

I think our educational system is, like, quite traditional. We love face-to-face communication, we love asking questions to our teacher. Although there are great dictionary apps, for example, instead of looking at the definition from their own device, they are like, "Teacher, what does this mean?" ... Sometimes students themselves don't like using the devices that much because they, they prefer the teacher to provide the response.

While Alice conveys her experience from a more neutral standpoint, it further supports Britney's experience and highlights that this underutilization appears at all levels of higher education, from national policy to the students themselves. Therefore, it can be interpreted that although the participants express how much freedom they have in designing and conducting their lessons, personally incorporating digital tools is not sufficient for them as they believe their institution and country could benefit from turning more digital than traditional. This belief is consistent with their positive perceptions and the fact that they are not forced to do anything. While they can identify the potential negative aspects like privacy issues, their positive experience with free will may be making them believe that increased digitalization could still follow their experience without turning into a predatory and pervasive system, thus arguing that their institution should follow the global trends and utilize the advancements.

All in all, it can be understood that the participants believe their national and institutional contexts should follow global trends of digitalization and datafication as they believe personally incorporating tools is not sufficient for their current educational system.

#### **4.2.4. Decreased Workload**

Decreased workload is a theme that appears in participants' perceptions and experiences at the same time. This is because the participants refer to their experiences while narrating their feelings and ideas about the inquired concepts. Thus, some aspects, such as this theme, overlap and repeat. The theme "Decreased Workload" in this section refers to the participants personally experiencing a decrease in the amount of work they have to do, both in and outside the classroom.

As explored in the previous sections, Alice compares their current practice to analog times and states, "With everything becoming more digital now, students can download the classroom materials on their own devices, and we don't have to create as many papers as before, or we don't copy a lot of things. So my workload has decreased." For Alice, this decrease takes both a physical and mental form, as seen in this example. Similarly, Britney often praises AI tools for decreasing her workload by saving her the trouble of visiting different platforms to plan and design her lessons. She explains:

For example, each and every week, we are given a word list by our coordinators. So, in the past, I used to find each and every word from the dictionary. But instead, these days, I just enter those words into the platform, and the platform gives me, provides me with these definitions, with all examples.

While Britney and Alice compare their current practices to their pasts, Courtney views this decreased workload from a different perspective. She expresses that the administrative department at their institution started a new practice during summer school:

For example, about [an AI tool], they gave the students this page - how can I describe it, like a page with explanations on how to get feedback from [AI

tool] and which prompts to write. They did this to decrease teachers' workload. This practice didn't exist last year, for example.

Here, Courtney compares the departmental actions from this year and last year. According to Courtney, the administrative department decided to create and disseminate a brochure to students that gives them instructions on how they can get feedback from a generative AI tool whereas before, the instructors had the sole responsibility to provide feedback to the students. Students getting extra feedback was a common topic across the participants' perceptions and experiences, and it plays a part here too. However, this time, it is not about instructors making use of digital or data tools to decrease their own workload; rather, it is about an administrative decision being made on their behalf. Courtney explains that this is an attempt to decrease the instructors' workload as now they do not have to give as much feedback, and students are free to practice on their own time because they are not bound by deadlines to receive feedback anymore. This can be interpreted as a sign of the institution's care for their instructors' well-being as well.

Overall, all of these examples show that the participants benefit from utilizing digitalized and datafied tools in that they have less workload on their plates and can focus on other, affective domains of teaching.

#### **4.2.5. Increased Workload and Pressure**

The theme "Increased Workload and Pressure" refers to the more challenging ways the participants experience digitalization and datafication of higher education. Although the previous section showcases how the participants experience decreased workload, there are also instances where the exact opposite encounter occurs. One particular example comes from Courtney as she recounts her experiences at her previous institution:

I was working at another university during the height of the pandemic. Students could record and download the online lectures, but for example, in an exam environment, it was different. It didn't matter if it was a speaking or written exam, we would have to record all exams and download them because our observations alone were not enough. And we would go to school on a cer-

tain day and hand in the recordings. If you recorded the exam not in a school environment but at home or in another environment, the teacher was fully responsible for the recordings. For example, if the computer crashed, the power went out, or something happened, the teacher was completely responsible. This made us nervous because there were so many things out of our control, but we were responsible for everything.

Although this is not the case at the current institution explored in this study, Courtney's previous experiences highlight how higher education instructors can struggle with an increase in their workload and feel under pressure when they are deemed responsible not only for their actions but also for technological problems that are beyond their control. This example also shows what happens in institutions where English instructors do not have the freedom and agency to design their teaching and assessment practices themselves. Lack of freedom and agency may lead to feeling under pressure and an increase in workload for higher education English teachers.

From a different viewpoint, at another point in the interview, Courtney recounts another occasion when she struggled with online education despite loving technology so much:

I was curious about technology because I also loved it, but of course, it was extremely tiring. Because there were a lot of tabs open on [the browser]... "Now, what to do on this one, what to do on that one? What were we following?" The steps and things to do are all spelled out in front of me. In other words, following them, applying them even if they were readily available... It was causing an excessive workload, you know, there were many studies on [an online meeting application] fatigue, it was talked about, having to constantly look at the screen, having to stare, it is a difficult thing, and this is also completely related to the energy of the class in front of you.

In this instance, it can be seen that having to perform all these extra tasks felt draining and confusing, even for someone who loves and always uses digital technologies. This example invokes a different feeling in Courtney because here, she did not have much choice and was forced to conduct her lessons this way. This shows how higher education English instructors feel when they cannot make their own decisions, as evidenced by Courtney's contrastive experiences. Utilizing digital and data tools as per her own personal choice does not feel draining for Courtney, but not having a choice does. Lastly, on another occasion, Courtney reflects on how teachers are like magicians:

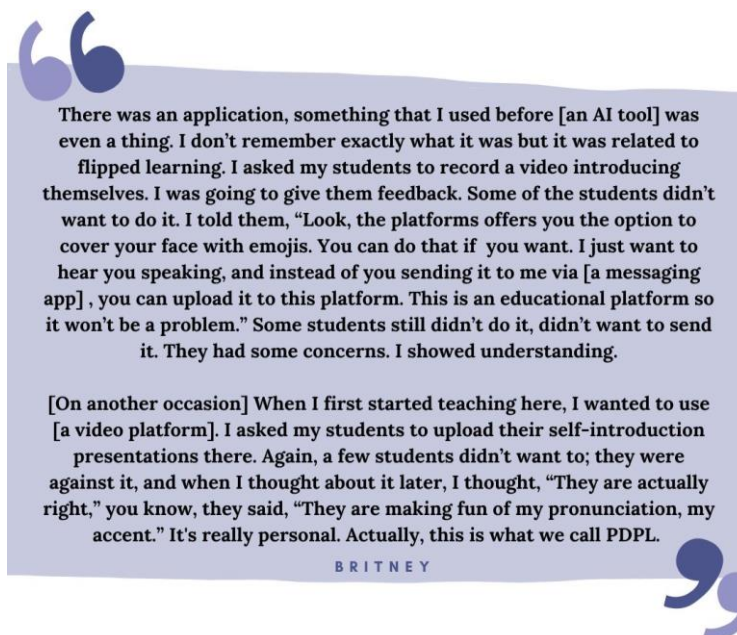
There, my actions are shaped depending on the audience, like they say “nabza göre şerbet” in Turkish. I mean, depending on the attitude of the students because these things are related to each other. I mean, the attitude, the attitude of the teacher... you know, switching to another tool or something healthier... Actually, teachers are a lot like magicians or jugglers. There, it's a bit like I said, pulling a rabbit out of a hat like a magician. Is that rabbit loved, does it make the crowd cheer? If it does, it can be used, if not, you need to switch to another tool. So you have to see every time.

While Courtney does not explicitly express feelings of increased workload and pressure in this instance, it can be inferred that having to continuously ruffle through potential tools and applications to find out what does and does not work in a particular classroom, and likening oneself to magicians and jugglers can add to teachers' plates that are already full.

To sum up, it can be observed that English language instructors in higher education can experience increased workload and feel extra pressure with increased digitalization and datafication, especially if they do not have a choice in the matter.

#### 4.2.6. Student Pushback

The theme “Student Pushback” refers to the participants' accounts of the times when they experienced resistance from their students regarding digitalization and datafication.



**Figure 10.** Britney's Experience with Student Pushback

In Britney's examples (Figure 10), she tries to get her students to do some extra speaking practice by submitting their videos on a third-party educational platform. However, some of her students voice their concerns over recording and uploading personal videos. In the end, although Britney explains the purpose of the assignment and the platform, she understands their concern and comes up with a different way to give them feedback. On another occasion, she suggests using a video platform to gather their presentations. Nevertheless, once again, some students object to this idea as they have worries about their peers making fun of them for their pronunciation or accents. In this example, too, Britney understands their point of view and takes it into consideration when making her decision. To better explain these examples, Britney expresses:

As I said, mutual trust is very important. It is very important for them to trust their teacher. In other words, they need to be sure that I will not take it and use it, and they need to know that I sincerely want this because I want their speaking skills to develop.

Courtney recounts a similar experience:

However, I noticed something. They're okay with group work on [an EdTech platform], for example, but voice recordings... On [EdTech platform], you can record and upload voice recordings to the platform. When I asked my students to do that, I realized some of them were hesitant. You know, worried about exhibiting a bad performance on there...and the semester started a while ago, so they know whose voice it is; they can recognize it, of course.

In both Britney's and Courtney's experiences, their students are anxious about their speaking and pronunciation skills. As such, they are not comfortable with uploading their voice and video recordings to a platform that other people or classmates can access. When they voice their concerns, their teachers listen to them and adjust their lesson plans accordingly. Incidents like this can facilitate stronger bonds between teachers and students as students feel like they also have a say in their own learning journeys. Especially considering that these examples occur in the higher education context with adult learners, it becomes even more important to have these conversations and show mutual respect. In fact, this can facilitate the students' autonomy, as discussed previously, as the students may feel in control of their learning journeys and feel respected.

All in all, it can be understood that English language instructors in higher education might face resistance from their students due to increasing digitalization and datafication.

#### **4.2.7. Dehumanization**

The theme “Dehumanization” refers to the participants’ narrations of particular moments where they felt a loss of connection with their students or felt their profession losing its humane aspects.

More specifically, the participants recount particular moments from the pandemic when online education was a necessity and everyone was trying to adjust to ‘the new normal.’ For Alice, this happened in the following way:

Frankly speaking, during the pandemic, ... we had classes with black screens and with the teacher's video on. So, in that sense, I'm not quite sure to what extent education was successful, or teaching was successful. ... I wasn't sure that they were listening, and I wasn't sure that they were taking me seriously. And they definitely lacked motivation to wake up in the mornings. It affected the teaching experience negatively, I would say. Dehumanized the experience.

For Alice, having to conduct her lessons without being able to see anyone else’s faces on the screen led her to question her job. Having only her face staring back at her, she reflects on how she was unsure about whether her students were even there, badly affecting and dehumanizing her experience. Similar to Alice, Courtney also refers to the pandemic period and gives more context:

At first, students were eager to open their cameras. Then they turned them off. Of course, this... As a teacher, are they really there, or are they doing something else? I can't see the students. Oh no, are they listening to me? Am I losing control? There were a lot of questions like these in the background.

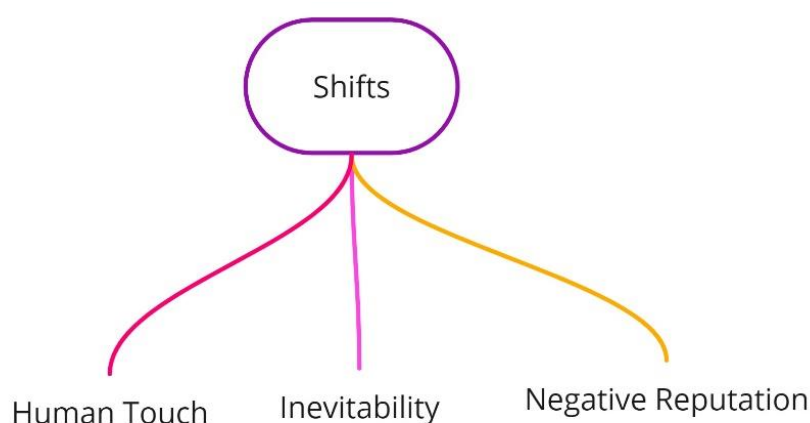
Both Alice and Courtney state that while students were willing to participate and show themselves at the beginning of the pandemic, they later became more withdrawn and began pulling away. As cameras turned off one by one and teachers were

left staring at black squares on their screens, their sense of identity was also affected. Alice's and Courtney's accounts convey that doubt and anxiety quite well and show the dehumanizing aspect of the inquired phenomena.

In summary, the dehumanizing effects of increasing digitalization and datafication of higher education can be observed in the participants' previous experiences with their unwilling students.

#### **4.3. How do English language instructors conceive the shifts in the language teaching profession in relation to digitalization and datafication of higher education?**

This research question aimed to uncover the participants' conceptions of the shifting landscape of their profession in relation to digitalization and datafication of higher education. The interpretations of the participants' answers revealed three major themes, which are "Inevitability," "Human Touch," and "Negative Reputation" (Figure 11). These themes will be discussed in separate sections.



**Figure 11.** Participants' Conceptions of the Shifting Landscape of Their Profession

Responses provided by the participants show that they believe: i) transformation of the ELT profession and higher education is inevitable, ii) human touch is still necessary and irreplaceable, and iii) increased digitalization and datafication, as well as the shifts they cause, can lead to a negative reputation of their profession in society.

### 4.3.1. Inevitability

The theme “Inevitability” refers to the way the participants view the shifting landscape of their profession. All participants express that digitalization and datafication of higher education, and the shifts they bring on are inevitable in both the ELT profession and higher education in general. For example, Britney repeatedly states:

The world is evolving in a different direction. I think we need to adapt. ... I also think that teaching and training methods are undergoing a serious transformation. I believe, with this digitalization, this will be embraced even more. ... Administrators’ stances are also relevant. I mean, if I were in administration, I would value this kind of training because the world is evolving in a different direction now, and we don’t need to be traditional anymore. I think we need to encourage this more.

While emphasizing her personal stance in this matter, Britney also talks about educational leaders and remarks that they have a lot of responsibility in this regard. In fact, she explains that, if it were up to her, she would give more importance to digitalization and datafication of higher education as a way to keep up with the demands of contemporary society. In the previous sections, Britney’s frustrations with the underutilization of digitalization and datafication were explored. Such frustrations come up here, too, as she criticizes institutional leaders. Moreover, at another point, she says:

Robots will not replace teachers, but robots will replace teachers who do not adopt technology. I really believe this saying. I think the more you close your eyes to the digital world, the worse things will be for teachers. If you believe this change is bad for teachers, I think you need to embrace it more. To put it simply, I think this is very individualistic in terms of the teaching profession. Some teachers care a lot about this, while some teachers couldn’t care less. So, this is a case-by-case situation. What will happen in the long run? I really can’t predict anymore.

Here, Britney emphasizes the importance of adaptability for teachers and suggests that more teachers should be open to advancements in the field; if they do not, they risk falling behind and losing their jobs. For Britney, adaptability is a very important aspect of her profession. According to her, every actor involved in this profession, from leaders to students, needs to have this skill to keep up with global develop-

ments. Her criticism of the country's higher education context in the previous sections also affirm this stance.

Likewise, all participants reflect on the significance of adapting to changes when they talk about the inevitability of transformation. For instance, Alice recounts her experiences from the pandemic when she witnessed some of her colleagues retiring:

Maybe using technologies might be- might have been really difficult to accept for some teachers because they were not used to using them at home. But then, all of a sudden, they were exposed to everything. And they had no chance, and they either adapted or they didn't. So this happens. ... But some of them, some of my older colleagues, they were, like, trying to learn, and they were trying to adapt. And it was really, really good for them.

Alice explains that the sudden shift from traditional teaching to emergency online education during the pandemic was difficult for some of her colleagues. Though, on the other hand, some colleagues fared better than expected and ended up adapting to the changes. In Alice's remarks, the underlying message that teachers need to be adaptable and open to change can be inferred. Additionally, Courtney also has similar comments and experiences as she states:

I mean, digitalization... I think it's something that nobody, no teacher, can escape from right now and they have to adapt in some way. ... I mean, with the pandemic and online education, when everything became digital and turned online, teachers who thought they couldn't adapt decided to retire. If it weren't for the pandemic, they would normally continue teaching.

As can be seen here, Courtney also witnessed the struggle of some of her colleagues, who ended up retiring because of it. Thus, all participants view the transformation of the ELT profession and higher education as inevitable while highlighting the need for instructors and administrators to adapt and stay up to date.

#### **4.3.2. Human Touch**

The theme "Human Touch" refers to the participants' perception that digitalization and datafication cannot replace the humane aspects of the teaching profession, as well as their experiences with the loss of that connection.

In Alice's case, she often reiterates the importance of human professionals as she claims, "I still think technology has no good use without a knowledgeable person in charge. I don't know, just tools to make our job easier. But there is still need for professionals." For Alice, this thinking may stem from her strong sense of professional identity and agency since she often talks about how she is still in full control and has the freedom to disagree with any tool she wants. Similarly, at another point, she talks about how "machines shouldn't decide," criticizing the new tendency to make decisions based on algorithms without giving it a second thought.

Britney, on the other hand, refers to the public's opinion regarding the importance of human teachers in the classroom. She refers to the discussions she hears and says, "According to some, there should be a teacher in the classroom." This recounting of other people's opinions is another reason that Britney considers her national and local context as highly traditional. However, in this theme, this is discussed under the interpretation that the human touch cannot be replaced by digitalization and datafication.

From a different standpoint, Britney also muses over her experiences with her students. Comparing the new generations to the previous ones, Britney explains that digitalization and datafication can lead to a loss of connection between instructors and students. She remarks:

I think digitalization has seriously affected communication between humans. I especially think it has damaged the relationship between teachers and students. ... Especially in the past 5-6 years, I've really lost that communication with my students. I believe digitalization has really affected the human aspect of things.

When asked about why she feels this way, Britney gives more details and explains:

There are serious differences between my students from 12 years ago and my current students. When I first started teaching, we would tell each other "Good morning" when we entered the classroom. Now it's different. Let me tell you about something that happened to me last semester. A student walked in with headphones. He was listening to music, and he was late. He entered the classroom like this. No "good morning," no "sorry I'm late." I think these

things are important. No “good morning,” no “sorry I’m late, can I come in?” Never mind saying these things in English. Never mind all that, he doesn’t even say it in Turkish. Let alone English, they are too lazy to say it in Turkish. ... I’ve warned the students now. I said, “Please. People say good morning to each other when they wake up in the morning.” I guess these people, these students were exposed to cameras a lot during the pandemic, and they lost their human communication. I don’t know if it’s something like that. I think this Gen-Z, the new generation, has lost some of those characteristics.

This example from Britney slightly differs from other participants as she reflects on how digitalization causes humans to lose that human touch, rather than digital tools lacking it. Her reasoning behind these thoughts is that newer generations had to learn how to socialize through cameras and devices because of the pandemic and increased digitalization. According to Britney, this led to students lacking the connection that their older counterparts had with their teachers. Further, Britney observes that this shift has been evident in the past five to six years, dating back to the pandemic period.

Lastly, Courtney makes similar arguments as Alice. Believing that teaching is not just a technical job of transferring information, she underlines the affective domains of teaching, “Technology, again, cannot replace a teacher or a human being. That emotional transfer, that empathy. You know, in class, it’s not necessarily like, ‘we’re losing our jobs, teachers are going to disappear!’ or anything like that.” For Courtney, even if digitalized and datafied tools and systems may take away the instrumental and technical parts of the teaching profession, they cannot ever replace teachers as a whole. In addition to this point, she also gives a specific example of how AI recordings creep her out, which can be interpreted as digital tools lacking the necessary human touch. She explains, “Sometimes listening to a robotic voice... [AI tool] or another tool was there. You know, it sometimes feels so weird when it is obviously not a human voice or human recording.” After this example, she states that her students also feel creeped out by such recordings or voices, signaling that this is not a personal issue but rather a common phenomenon.

Overall, it can be understood that the participants view the shifting landscape of their profession from a viewpoint of the importance of the human touch, either by ac-

knowledging its irreplaceable nature or reflecting on how digitalization and datafication may harm that connection.

### 4.3.3. Negative Reputation

As the last theme, “Negative Reputation” refers to the ways that the ongoing transformation of the ELT profession and higher education can create a negative perception of English instructors in the public eye or among their peers and students.

According to the participants, one way digital and data transformations of higher education may lead to a negative image in the public eye is by making the ELT profession seem redundant:

I'm afraid there won't be a need for language teachers in the future. Because the newest version [of AI tool], you definitely know it, it provides you responses, and you can have conversations, meaningful conversations with the AI tool, and you can upload your paragraphs, and the tool provides you with great feedback. So, our job may not be required any longer, I'm afraid, but I'm not quite sure. I hope not. (Alice)

In this excerpt, Alice voices her worries about her profession becoming redundant in the future, instead replaced by new tools. She lists the current capabilities of this AI tool, ranging from giving feedback to holding meaningful conversations, and states that English teachers may not be needed any longer. While these are all instrumental abilities that lack the affective domain of teaching mentioned in the previous section, this does not stop Alice's concerns regarding her profession. Moreover, Alice also believes that other professions may be at risk. She remarks:

Well, I think not only language teachers, but also many, many other fields or other professions will be regarded as redundant. Because technology is improving not only in terms of teaching, but also in medical practices and also engineering. All these stuff will be done quite easily by using technology.

Courtney, on the other hand, shares a different perspective and explains that being considered redundant is not the only negative perception of the ELT profession:

Now, teachers need to adapt to this. Because after a while, if that gap widens, students in their classes may say, “Well, the teacher doesn't know anything.” This is an issue that devalues the perception of teachers in the eyes of their students - devalues the perception of the profession. If teachers are always one step, two steps, three steps, five steps ahead of their students, then students respect them, and society respects them.

Courtney argues that unless teachers adapt to the ongoing transformations, students and society will lose respect for the teaching profession. To avoid such scenarios, teachers need to be several steps ahead of their students and stay up to date with everything. In both cases, the participants’ answers reveal an underlying pressure for English teachers to constantly adapt and adjust to the developments happening in their fields. While this may be true for many professions, teachers, and particularly English teachers, are often brought up in such discussions. Many people fear or foresee that robots will take over teachers, and many people believe that language teachers are especially easier to replace as there are numerous sources available on the Internet. In fact, Britney conveys:

You know, there are so many internet resources, like [speaking practice apps], or I don't know, other applications, AI tools, you talk and it responds, as if you are practicing with a native speaker in front of you. My friend told me, “Your whole profession will disappear very soon.” Maybe so. They see this as negative. I don't think so, actually. Of course, anything that supports students’ knowledge and language skills should be supported. However, I think the teaching profession will cease to exist in society in the future. Especially foreign language education. Now everyone can easily improve their foreign language skills. AI gives writing feedback. You can practice speaking. Word lists, vocabs, all of them are available on the internet with their pronunciations. What else is there? Listening? There are podcasts, listening video recordings, everything is out there. If you go on [video platform], there are already millions of platforms that teach grammar, there are teachers, there are native speakers. In fact, a student who is very disciplined and has very high self-regulation skills can learn a language very easily.

According to Britney, aside from specific cases, anyone and everyone can go online and access countless materials related to all aspects of a language. Thus, she argues that the teaching profession, but especially the ELT profession, will cease to exist in the future. Now, while Alice worries about this becoming a reality, Britney asserts that she does not see this as a negative thing. In fact, she affirms that English teachers should be supportive of any development that helps students learn new things.

This shows that English teachers have varying opinions about the future of their professions and cannot be put into a single box.



## CHAPTER 5

### DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

This chapter will provide a detailed discussion of this study's findings in relation to previous literature and research context. Each research question will be discussed and organized into different sections. After the discussion, a conclusion will be given, which will summarize the main points of this research study. Next, the significance of the study will be conveyed with its implications for the field. Lastly, the limitations of the study will be explained, and recommendations for future research will be given.

#### 5.1. Discussion

##### 5.1.1. English Language Instructors' Perceptions Regarding Digitalization and Datafication of Higher Education

The exploration of this research question uncovered three main themes across the participants' responses. It was found that participants perceived the increasing digitalization and datafication trends of higher education as both positive and negative in different scenarios and reiterated the importance of mindful use.

Under the first theme, participants' positive perceptions of the explored phenomena were detailed further. As per the interpretations, it was understood that participants considered digital tools to be supplementary to their teaching, beneficial to their students, capable of facilitating professional development and accountability, as well as generating useful insights.

The participants revealed that decreased workload and increased accessibility and efficiency were examples of how digital tools could serve as supplementary tools.

This decreased workload included having to create or copy fewer materials, using only one platform instead of many, shifting the responsibility from the teacher to the students, and utilizing different platforms for corrections or alterations. As for improving accessibility, Courtney shared a specific example of a website that she used for bringing authentic writing materials to her students. Later, the participants referred to physical relief from not having to carry around objects, the benefits of asynchronous work thanks to LMS, and the combination of platforms for increasing the efficiency of the profession.

Later, participants agreed that digital tools had the capacity to increase students' autonomy and improve their self-regulation. At other points, they talked about how students can have better confidence thanks to some of the features of digital tools. The fact that digitalized and datafied systems allowed students to have a continuous learning journey was also brought up repeatedly. Lastly, a lot of attention was given to how students can have access to extra practice and feedback thanks to such tools and systems.

Moreover, accountability manifested in forms of objectivity, digital trail, and transparency in participants' narrations. For Courtney, this included thinking back to an experience she had where she was falsely accused, and the digital trail cleared her name. For Britney, increased objectivity and transparency were potential benefits of being tracked.

Next, how digitalization and datafication could provide opportunities for professional development was explored. While all participants reiterated the increase in the number of professional development opportunities available to English language instructors, Courtney also pondered the quality of such opportunities.

Lastly, participants discussed how deeper insight into institutional practices and the progress of students could be achieved with digitalization and datafication of higher education. According to the participants, tracking and keeping data could be the necessary evil for tracking student progress and conducting institutional analyses.

According to the advocates of digitalization and datafication, benefits of digitalization and datafication include i) providing adaptive, flexible, individualized, interac-

tive, authentic, and inclusive learning environments, ii) freeing teachers from time-consuming tasks and allowing them to focus on the affective domains of teaching that will take teaching and learning to the next level, iii) personalized feedback, iv) advanced tutoring systems, v) adjustable educational routes, vi) improving curriculum organization, pedagogy, and assessment, vii) facilitating informed decisions about student progress, and viii) promptly addressing learner needs (Alenezi, 2021; Alshumaimeri & Alshememry, 2024; Beneito-Montagut, 2017; Lane & Finsel, 2014; Luckin et al., 2016). Here, it is understood that the positive aspects that the participants mention are consistent with the claims made by the supporters.

Moreover, when discussing how digital and datafied systems could serve as supplementary tools and benefit students, the participants referred to increasing the students' autonomy and shifting the responsibility from the teacher to the students. This can be considered an example of Biesta's (2019) definition of 'learnification,' where all things related to education get redefined in terms of learning.

At another point, the participants expressed their views on how digital tools are especially beneficial for non-native speakers of English. Although the issue of native speakerism is not within the scope of this study, it is still worth mentioning that the literature on ELT and learning, as well as different educational policies and practices, frequently assume and describe the acquisition of native-like English competence as the ultimate goal of English language learners, despite much criticism regarding the pervasiveness of native speakerism and its essentialist discourses (Choi, 2015).

Moving on from the benefits, the participants also talked about the negative aspects of digitalization and datafication. Specifically, they expressed their concerns about privacy and corporate influence control. They revealed some of their anxious thoughts as well.

According to Courtney, digitalization and datafication may cause instructors and students to feel more pressure than before. On the other hand, Britney and Alice consider the potential misuse of digital tools as a form of anxiety. However, Britney is not quite hopeless and she believes these situations should be handled by trying to

make the most of it and turn it into a positive. Lastly, the unpredictable nature of digitalization and datafication is a source of anxiety for the participants as they are all aware of the fact that they can go to some bad places.

Next, conversations were held about privacy concerns. Specifically, the participants referred to a lack of consent and transparency and increased surveillance to discuss their negative views. The illusion of consent was also explored in this part. Finally, corporate influence and control were mentioned several times in the interviews. The topic of inequality also came up during these mentions.

While digital technologies may be thought of as saviors, they may actually end up widening educational inequalities instead of eliminating them as suggested (Romanova et al., 2020; Selwyn, 2024). This is very consistent with Courtney's specific worries. Additionally, it is suggested that we be mindful of any push to increase digitalization and datafication as there are different agendas and interests at play from commercial companies (Ramiel & Dishon, 2023; Williamson, 2017). It is also recommended to question the legitimacy of claims made by such parties, as well as identify the overt and covert ideologies ingrained in the digitalization policies (Ljungqvist & Sonesson, 2022; Williamson, 2017). Aspects of this criticism can be found in the participants' perceptions of corporate influence and control. Moreover, Britney's example of corporate influence and control highlights how these digital tools and platforms charge for their services and then use user data to create more revenue, in line with Hartong's (2016) definition of 'prosumers.' Furthermore, according to the literature, instructors in higher education express worries about the transparency of datafied systems, data privacy, bias, dehumanization of education, and lack of institutional responsibility (Stewart et al., 2023). This is in line with this study's findings as the participants express similar worries. Finally, the fact that the participants feel lost and scared in the face of unpredictable digitalization and datafication is consistent with Ball and Savin-Baden's (2022) description of instructors finding themselves in a new and uncharted territory where they can feel insecure, threatened, and lost in epistemological, conceptual, and ontological domains.

Lastly, the participants highlighted the importance of mindful use when it came to digitalization and datafication. Numerous instances of balanced and conscious use of

digital and data tools were found in the participants' responses. Critics of both digitalization and datafication repeatedly argue that blind trust in tools and systems is harmful, and we need to be careful and cautious (Atenas et al., 2023; Ball & Savin-Baden, 2022; Castañeda & Selwyn, 2018; Saltman, 2021, 2022; Williamson, 2017). Thus, more connections between the literature and the findings are found here. In addition to this, the interpretation that mindfulness comes with professional agency and autonomy for the participants is an important point for the literature as it showcases the necessity of supporting teachers and allowing them professional freedom (Czerniewicz et al., 2023)

### **5.1.2. English Language Instructors' Experiences Regarding Digitalization and Datafication of Higher Education**

The exploration of this research question uncovered seven main themes across participants' responses. Overall, it was found that, except for a couple of rare instances, the participants did not have much experience with datafication of higher education aside from minor and common data collection practices like tracking students' grades and absenteeism records. As for digitalization, it was discovered that, at their particular institution, there was no pressure to increase the number or the types of digital tools that were used, and all instructors were free to choose whether and which tools they implemented in their lessons.

According to the participants, the tools they utilized were used for proctoring purposes, giving students homework and extra practice, and improving their classroom practice. Moreover, the data they were asked to track and keep was used for institutional analysis and tracking students' absenteeism and grades.

Further, it was revealed that, in the participants' experiences, digitalized and datafied tools were underutilized as their institution followed a traditional teaching system. They also voiced that the tools they used often decreased their workload, yet they also had some experiences where they felt the opposite. Lastly, at different points in their interviews, participants also referred to certain instances where they faced resistance from their students regarding digitalization and datafication.

Studies conducted on datafication of higher education often state that there is a global increase and shift in the collection and use of university data due to the major initiatives by policymakers and affiliated corporations, think tanks, consultancies, and sector organizations (Williamson et al., 2020). This study's findings revealed that this particular institution did not follow this global initiative as only minimal amounts of data are collected and kept here. Moreover, this data also does not leave the premises of this institution. This can be inferred from the following: i) only non-identifying data is recorded and kept, ii) only basic and common analyses are being conducted on the recorded and kept data, iii) only the institutional staff have access to this data because the institution does not outsource its LMS, data collection platforms, or analyses iv) the results of any analysis conducted are only shared within the organization on secure portals that are also not outsourced. Furthermore, the participants shared that they did not face any push on a national level either. Therefore, it is understood that any form of datafication in this institution occurs on the digital tools and platforms used by the teachers and students, which is more difficult to comprehend and prove for the involved parties.

As for digitalization, the participants revealed that any use of any digital tool is completely voluntary and up to the teacher. They stated that there is no institutional or national push to increase the number of tools they use or to use certain tools. Critical research explains that increased digitalization may reduce “teachers and the students in higher education to mere objects of digitalization, rather than seeing them as active subjects participating in the shaping of digital futures” (Suoranta et al., 2022, p. 225). Based on this, it can be understood that this particular institution is not undergoing increased digitalization any more than other institutions. Also, it can be seen that instructors feel a stronger sense of identity and agency when they are able to make their own decisions without facing any pressure from their administrators or other actors. This is in line with previous literature from the opposite end – digitalization and datafication shift how teachers and students view themselves and how they are perceived and treated (Williamson et al., 2020). When digitalization and datafication are not forced upon teachers, they are able to maintain a healthier negotiation of their identity.

Moreover, all participants expressed that digital tools were underutilized at their institution and in Türkiye in general. One reason for this belief could be the fact that they have total freedom at their institution and are not undergoing any pressure or tension to adapt or adjust. Because their experiences are positive and support their professional identities and senses of agency, they are more likely to support the transformation of their institution, even if they acknowledge the potential negatives of digitalization and datafication.

Additionally, participants reflected on how their experiences with digital tools usually decreased their workload and gave them extra free time. However, their experience with digitalization also carried some negative connotations for them. Courtney, specifically, referred to different points in her professional life where she felt that there was extra pressure and workload on her back due to digital tools or expectations. Especially her example about how tiring it was to conduct online lessons and follow numerous steps and tabs is in line with Hillman and Esquivel's (2014) statement about how teachers turn into a "line operator of apps and platforms in the classroom" (p. 517).

Participants also reflected on instances where they faced student pushback in terms of the tools they wanted to use in their lessons. In all instances, the participants explained that they listened to their students and acknowledged their concerns in their decisions. The participants emphasized the importance of mutual trust between teachers and students, which plays an even more significant role in higher education as all parties are adults in this context.

Lastly, dehumanization was identified as a theme in the participants' experiences. More specific to the pandemic context, the participants recounted instances where they felt a disconnection from their students and the teaching practice as they kept staring at black squares on their screens, stating that this dehumanized the teaching experience. This is in line with the claims that teachers in higher education express worries about the dehumanization of education (Daliri-Ngametua & Hardy, 2022, as cited in Gezgin, 2023).

### **5.1.3. English Language Instructors' Conceptions of the Shifts in the Language Teaching Profession in Relation to Digitalization and Datafication of Higher Education**

This research question aimed to uncover the participants' conceptions of the shifting landscape of their profession in relation to digitalization and datafication of higher education. The participants revealed the following beliefs: i) transformation of the ELT profession and higher education is inevitable and requires adaptability from ELT instructors, ii) human touch is still necessary and irreplaceable, and iii) increased digitalization and datafication, as well as the shifts they cause, can lead to a negative image in society.

It is no doubt that higher education is going through a time of uncertainty, transition, and change (Czerniewicz et al., 2023). Accordingly, the participants revealed that they believe the current transformation of the ELT profession and higher education is inevitable and requires teachers to adapt to changing conditions. Yet, despite this belief, they also mentioned that technology or robots cannot replace humanity in the teaching profession. Moreover, one participant also referred to a different aspect of humanity as she explained how she believes increased digitalization caused a decrease in her students' emotional capacities. Finally, the participants also discussed how the current shifts in their professions could lead to a negative perception of English teachers in the public eye. This negative perception ranged from being seen as redundant to losing respect. All of these perspectives are in line with the notion of increased commodification of higher education and teacher labor (Castañeda & Selwyn, 2018; Page, 2020) as participants' answers show that teachers need to work harder and harder in order to remain employable, prove that they deserve respect from society and students, and prove 'their worth.'

### **5.2. Conclusion**

This IPA research study aimed to explore the digitalization and datafication of higher education through the lived experiences and perspectives of English language instructors in Türkiye. An in-depth analysis revealed that participants perceived digi-

talization and datafication of higher education both positively and negatively. It was understood that the participants regarded them as helpful tools that benefit students, facilitate accountability, provide opportunities for professional development, and are capable of generating useful insights. On the other hand, their negative perceptions included anxiety and concerns over privacy and corporate influence and control. Lastly, the participants emphasized the need to be mindful when dealing with either concept.

Next, it was understood that participants had little to no experience in datafication, whereas their experience with digitalization was completely voluntary and up to them. The participants repeatedly explained that they had full freedom when it came to designing and conducting their lessons, and they all preferred to include digital tools for various purposes, such as proctoring, keeping track, and pedagogical use. In their experience, they all explained that digital tools were underutilized at their institution, and better institutional policies could be designed. Moreover, they also stated that while their workload generally decreased, there were instances where they felt the opposite and experienced increased workload and pressure. They also stated that there were times when they faced resistance from their students regarding the tools that they wanted to implement, and in those cases, they made sure to listen to the students' concerns.

Finally, it was revealed that the participants viewed the shifting landscape of the ELT profession and higher education as inevitable. When discussing this viewpoint, they highlighted the need for teachers to be innovative and adaptable to changes. Moreover, they also underlined that, despite these inevitable shifts, the human touch is still necessary in the teaching profession as teaching is a multifaceted job with affective domains. Lastly, they talked about how these shifts could cause teachers to have a negative image in the eyes of the public, which was another crucial reason for teachers to be able to adapt.

In conclusion, this research study shows the dual-edged nature of increasing digitalization and datafication in higher education as the participants reflect on their positive and negative perceptions and experiences. While admitting that they see benefits of

using digitalized and datafied tools and systems, participants also bring attention to risks that must be managed.

### **5.3. Implications**

Digitalization and datafication are complex practices that have taken over higher education on a global scale (Williamson, 2017). This research study offers several implications for English language instructors, higher education administrators, policymakers, the ELT field, and teacher training programs in higher education.

First, this study underlines the importance of critical digital and data literacy. The participants' answers revealed that they have a deeper understanding of digitalized and datafied tools and systems rather than a shallow definition of competence. Thanks to this, they are better able to understand the implications of increasing digitalization and datafication, which, in turn, helps them better navigate the (potential) risks and concerns over their and their students' data and information.

Second, the previous implication showcases the need to include critical digital and data literacy in ELT curricula. This could involve training pre-service English teachers on understanding the data they share, the data that digital tools and systems collect, how their information will be collected and processed, and who can access what. This way, English language teachers can make better-informed choices with the tools that they choose to incorporate.

Third, this study underscores the importance of giving English language instructors in higher education personal freedom to design and conduct their lessons. When English teachers have agency and freedom, they can feel a stronger sense of professional identity, which improves their bond with their institutions and profession.

Fourth, these findings emphasize the need for higher education institutions to keep up to date with the discussions happening around higher education on a global scale. By being better informed, administrators and policymakers can make conscious decisions and develop clear policies that better support their teaching staff and students.

Fifth, this study underlines the importance of ethics in the creation of EdTech tools. Teachers should be central actors in such discussions, and their concerns should be taken into account in the development and distribution of digital tools and systems.

#### **5.4. Limitations and Recommendations for Future Research**

The present study has several limitations that should be recognized. This way, future researchers can design their studies accordingly, and readers of this study can be better informed. First, this study has three participants. While this number is within the recommended range for an IPA study (Smith et al., 2009), having more participants could have uncovered different experiences and perspectives. Therefore, future research may benefit from having a larger sample. Second, this study was conducted at a state university. Due to differences in funding, administration, student profiles, and working conditions, the results may be drastically different in different universities, especially private ones. Thus, future researchers may choose to focus on different institutions. Third, this study only utilized interviews for data collection. Although semi-structured and in-depth interviews are the recommended instrument for IPA studies (Seidman, 2006; Smith et al., 2009), future research may collect data through different means like observations or narrative interviews. Fourth, this study is cross-sectional. However, as it also aims to understand how participants view the shifts in their field, future research may benefit from conducting a longitudinal study that would directly witness and present this transformation.

## REFERENCES

- Ağırtaş, A., & Çavuş, H. (2022). Üniversitelerde görev yapan öğretim elemanlarının acil uzaktan eğitim dönemindeki dijitalleşme durumlarının incelenmesi [Examining the digitization status of faculty members in universities in emergency remote education]. *Çağ Üniversitesi Sosyal Bilimler Dergisi*, 19(1), 36–52.
- Alenezi, M. (2021). Deep dive into digital transformation in higher education institutions. *Education Sciences*, 11(12), 770. <https://doi.org/10.3390/educsci11120770>
- Ali, M. M. (2022). Datafication, teachers' dispositions and English language teaching in Bangladesh: A Bourdieuan analysis. *TESOL Quarterly*, 57(4), 1282–1308. <https://doi.org/10.1002/tesq.3192>
- Alshumaimeri, Y. A., & Alshememry, A. (2024). The extent of AI applications in EFL learning and teaching. *IEEE Transactions on Learning Technologies*, 17, 653–663. <https://doi.org/10.1109/TLT.2023.3322128>
- Arısoy, B. (2022). Digitalization in education. *Cypriot Journal of Educational Sciences*, 17(5), 1799–1811. <http://dx.doi.org/10.18844/cjes.v17i5.6982>
- Atenas, J., Havemann, L., Kuhn, C., & Timmerman, C. (2023). Critical data literacy in higher education: Teaching and research for data ethics and justice. In J. E. Raffaghelli & A. Sangrà (Eds.), *Data cultures in higher education: Emergent practices and the challenge ahead* (pp. 293–311). Springer.
- Baker, R. S., & Hawn, A. (2022). Algorithmic bias in education. *International Journal of Artificial Intelligence in Education*, 32, 1052–1092. <https://doi.org/10.1007/s40593-021-00285-9>
- Ball, J., & Savin-Baden, M. (2022). Postdigital learning for a changing higher education. *Postdigital Science and Education*, 4, 753–771. <https://doi.org/10.1007/s42438-022-00307-2>
- Bayındır, G., & Kahraman, A. B. (2023). Eğitimde zorunlu dijitalleşme: Uzaktan/Online eğitim uygulamalarında yaşanan sorunlar ve sosyolojik yansıma

ları [Imperative digitalization in education: Problems experienced in distance/online education applications and sociological reflections]. *Uluslararası Türk Dünyası Araştırmaları Dergisi*, 6(2), 101–134. <https://doi.org/10.59182/tudad.1265274>

Beer, D. (2019). *The data gaze: Capitalism, power and perception*. SAGE.

Bellanca, J., & Brandt, R. (2010). *21st century skills: Rethinking how students learn*. Solution Tree Press.

Beneito-Montagut, R. (2017). Big data and educational research. In D. Wyse, N. Selwyn, E. Smith & L. E. Suiter (Eds.), *The BERA/SAGE handbook of educational research* (pp. 919–933). SAGE.

Bergel, E. S. (2024). *Hypervigilant enactment: What the Covid years can tell us about datafication, performativity and support for English learners around high stakes tests in primary schools in England and California* [Doctoral dissertation, University College London]. UCL Discovery. <https://discovery.ucl.ac.uk/id/eprint/10185400>

Biesta, G. (2019). Should teaching be re(dis)covered? Introduction to a symposium. *Studies in Philosophy and Education*, 38, 549–553. <https://doi.org/10.1007/s11217-019-09667-y>

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association.

Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). SAGE.

Castañeda, L., & Selwyn, N. (2018). More than tools? Making sense of the ongoing digitizations of higher education. *International Journal of Educational Technology in Higher Education*, 15(22). <https://doi.org/10.1186/s41239-018-0109-y>

- Choi, L. J. (2015). Revisiting the issue of native speakerism: ‘I don’t want to speak like a native speaker of English.’ *Language and Education*, 30(1), 72–85. <https://doi.org/10.1080/09500782.2015.1089887>
- Clarke, R. A. (1988). Information technology and dataveillance. *Communications of the ACM*, 31(5), 498–512. <https://doi.org/10.1145/42411.42413>
- Couldry, N., & Mejjas, U. A. (2019). Data colonialism: Rethinking big data’s relation to the contemporary subject. *Television & New Media*, 20(4), 336–349. <https://doi.org/10.1177/1527476418796632>
- The Council of Higher Education. (2019, February 18). *YÖK’ün “Yükseköğretimde Dijital Dönüşüm Projesi”nde İmzalar Atıldı* [Signatures on YÖK’s “Digital Transformation Project in Higher Education” Complete]. Retrieved March 12, 2024, from <https://www.yok.gov.tr/Sayfalar/Haberler/agri-dijital-donusum-tanitim-toplantisi.aspx>
- The Council of Higher Education Council. (2022, May). *Yükseköğretim Kurulu Büyük Veri Projesi* [Council of Higher Education Big Data Project]. Retrieved March 12, 2024, from <https://www.yok.gov.tr/Documents/Yayinlar/Yayinlarimiz/2022/yuksekokretim-kurulu-buyuk-veri-projesi.pdf>
- Creswell, J.W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). SAGE.
- Cuban, L. (2001). *Oversold and underused: Computers in the classroom*. Cambridge.
- Czerniewicz, L., Mogliacci, R., Walji, S., Cliff, A., Swinnerton, B., & Morris, N. (2023). Academics teaching and learning at the Nexus: Unbundling, Marketisation and digitisation in higher education. *Teaching in Higher Education*, 28(6), 1295–1309. <https://doi.org/10.1080/13562517.2021.1876019>
- Çam, S. (2022). Yükseköğretim kurumu çalışanlarının yönetimde dijitalleşme algısı: Nitel bir araştırma [The digitalization perception in management of the employees of higher education institution: A qualitative study]. *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, 13(30), 273–287. <https://doi.org/10.21076/vizyoner.1143593>

- Denzin, N. K., & Lincoln, Y. S. (2017). *The SAGE handbook of qualitative research* (5th ed.). SAGE
- Decuypere, M., & Williamson, B. (2021). Breaking open the black box of EdTech brokers. *Code Acts in Education*. <https://codeactsineducation.wordpress.com/2021/06/02/black-box-of-edtech-brokers/>
- Emejulu, A., & McGregor, C. (2019). Towards a radical digital citizenship in digital education. *Critical Studies in Education*, 60(1), 134–147. <https://doi.org/10.1080/17508487.2016.1234494>
- Erickson, F. (2017). A history of qualitative inquiry in social and educational research. In K. N. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (5th ed.) (pp. 87–142). SAGE.
- Eynon, R. (2013). The rise of Big Data: What does it mean for education, technology, and media research? *Learning, Media and Technology*, 38(3), 237–240. <https://doi.org/10.1080/17439884.2013.771783>
- Eynon, R. (2023). Algorithmic bias and discrimination through digitalisation in education. In B. Williamson, J. Komljenovic & K. Gulson (Eds.) *World yearbook of education 2024* (pp. 245–260). Routledge.
- Fontaine, C. (2016). The myth of accountability: How data (mis)use is reinforcing the problems of public education. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3126460>
- Foster, L. (2001). Technology: Transforming the landscape of higher education. *The Review of Higher Education*, 25(1), 115–124. <https://doi.org/10.1353/rhe.2001.0018>
- Gartner. (n.d.) Big Data. In *Gartner I.T. Glossary*. Retrieved August 3, 2024, from <https://www.gartner.com/en/information-technology/glossary/big-data>
- Gezgin, U. B. (2023). Datafication of education and algorithm (un)fairness in education: Another form of oppression and repression. *Rethinking Critical Pedagogy*, 5(1).

- Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods*. SAGE.
- Gourlay, L. (2020). Quarantined, sequestered, closed: Theorising academic bodies under Covid-19 lockdown. *Postdigital Science and Education*, 2(3), 791–811. <https://doi.org/10.1007/s42438-020-00193-6>
- Gourlay, L. (2022). Surveillance and datafication in higher education: Documentation of the human. *Postdigital Science and Education*. <https://doi.org/10.1007/s42438-022-00352-x>
- Gökkaya, Ö. (2019). Meslek yüksekokulunda görevli öğretim elemanların dijitalleşme düzeylerinin incelenmesi “Kocaeli Üniversitesi örneği” [Investigation of the digitization levels of academic staff in vocational school “Kocaeli University case”]. *Journal of Social and Humanities Sciences Research*, 6(47), 4383–4386. <http://dx.doi.org/10.26450/jshsr.1701>
- Gulson, K. N., & Webb, P. T. (2017). *Education policy and racial biopolitics*. Policy Press.
- Hartong, S. (2016). Between assessments, digital technologies and big data: The growing influence of ‘hidden’ data mediators in education. *European Educational Research Journal*, 15(5), 523–536. <https://doi.org/10.1177/1474904116648966>
- Hillman, V., & Esquivel, M. (2024). The ‘solution stack’ of a neoliberal inferno apparatus: A call for teacher conscience. *Postdigital Science and Education*, 6, 516–536. <https://doi.org/10.1007/s42438-023-00442-4>
- Howard, S. K., & Mozejko, A. (2015). Considering the history of digital technologies in education. In M. Handerson & G. Romero (Eds.), *Teaching and digital technologies: Big issues and critical questions* (pp. 157–168). Cambridge.
- Jandrić, P., Hayes, D., Truelove, I., Levinson, P., Mayo, P., Ryberg, T., Monzó, L.D., Allen, Q., Stewart, P.A., Carr, P.R., Jackson, L., Bridges, S., Escaño, C., Grauslund, D., Mañero, J., Lukoko, H.O., Bryant, P., Fuentes Martinez, A., Gibbons, A., Sturm, S., ... Hayes, S. (2020). Teaching in the age of Covid-19. *Postdigital Science and Education*, 2, 1069–1230. <https://doi.org/10.1007/s42438-020-00169-6>

- Johnson, M. W., Suvorova, E. A., & Karelina, A. A. (2022). Digitalization and uncertainty in the university: Coherence and collegiality through a metacurriculum. *Postdigital Science and Education*, 4(3), 772–792. <https://doi.org/10.1007/s42438-022-00324-1>
- Kaya, A. (2022). Öğretmenlerin dijital öğretmenlik algıları: Özel okul örneği [teachers' digital teacher perceptions: Example of private school]. *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi, Dijitalleşme Özel Sayısı*. 35–50. <https://doi.org/10.30783/nevsosbilen.1121415>
- Kitchin, R. (2014). Big data, new epistemologies and paradigm shifts. *Big Data & Society*, 1(1). <https://doi.org/10.1177/2053951714528481>
- Korkutan, M., Efşin, R., Ayaz, E., & Yurday, E. (2023). Öğretmenlerin eğitimde dijitalleşme eğilimlerinin incelenmesi üzerine bir araştırma [A research on the examination of teachers' digitalization tendencies in education]. *International Social Sciences Studies Journal*, 9(107), 4961–4968. <https://dx.doi.org/10.29228/sssj.67546>
- Lamb, J., Carvalho, L., Gallagher, M., & Knox, J. (2021). The postdigital learning spaces of higher education. *Postdigital Science and Education*, 4(1), 1–12. <https://doi.org/10.1007/s42438-021-00279-9>
- Lane, J. E., & Finsel, B. A. (2014). Fostering smarter colleges and universities: Data, big data, and analytics. In J. E. Lane (Ed.), *Building a smarter university: Big data, innovation, and analytics* (Chapter 1). SUNY.
- Ljungqvist, M., & Sonesson, A. (2022). Selling out education in the name of digitalization: A critical analysis of Swedish policy. *Nordic Journal of Studies in Educational Policy*, 8(2), 89–102. <https://doi.org/10.1080/20020317.2021.2004665>
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.
- Marx, K. (1973). *Grundrisse. Foundations of the critique of political economy*. Penguin Books & New Left Review. Retrieved March 11, 2024, from <https://www.marxists.org/archive/marx/works/download/pdf/grundrisse.pdf>

Mayer-Schönberger, V., & Cukier, K. (2013). *Big data: A revolution that will transform how we live, work, and think*. Houghton Mifflin Harcourt.

Mejias, U. A. & Couldry, N. (2019). Datafication. *Internet Policy Review*, 8(4). <https://doi.org/10.14763/2019.4.1428>

Miao, F., & Holmes, W. (2023). *Guidance for generative AI in education and research*. UNESCO.

Moran, D. (2000). *Introduction to phenomenology*. Routledge.

Nuroğlu, E., & Nuroğlu, H. H. (2018). Türkiye ve Almanya'nın sanayide dijital dönüşümü: Yol haritaları ve şirketlerin karşılaştırması [Türkiye and Germany's digital transformation in industry: Comparison of roadmaps and companies]. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 23, 1537–1560.

Page, D. (2020). The academic as consumed and consumer. *Journal of Education Policy*, 35(5), 585–601. <https://doi.org/10.1080/02680939.2019.1598585>

Parlak, B. (2017). Dijital çağda eğitim: Olanaklar ve uygulamalar üzerine bir analiz [Education in digital age: An analysis on opportunities and applications]. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 22, 1741–1759.

Patton, M. Q. (2015). *Qualitative research and education methods* (4th ed.). SAGE.

Perrotta, C., & Selwyn, N. (2020). Deep learning goes to school: Toward a relational understanding of AI in education. *Learning, Media and Technology*, 45(3), 251–269. <https://doi.org/10.1080/17439884.2020.1686017>

Player-Koro, C., Bergviken Rensfeldt, A., & Selwyn, N. (2018). Selling tech to teachers: education trade shows as policy events. *Journal of Education Policy*, 33(5), 682–703. <https://doi.org/10.1080/02680939.2017.1380232>

Power, M. (1994). *The audit explosion*. Demos.

- Raffaghelli, J. E. (2018). Educators' data literacy: Supporting critical perspectives in the context of a "datafied" education. In L. Menichetti, M. Ranieri & M. K. Borges (Eds.), *Teacher education & training on ICT between Europe and Latin America* (pp. 91–109). Aracne.
- Raffaghelli, J. E., & Stewart, B. (2020). Centering complexity in 'educators' data literacy' to support future practices in faculty development: a systematic review of the literature. *Teaching in Higher Education*, 25(4), 435–455. <https://doi.org/10.1080/13562517.2019.1696301>
- Raffaghelli, J. E., & Sangrà, A. (2023). Data cultures in higher education: Acknowledging complexity. In J. E. Raffaghelli & A. Sangrà (Eds.), *Data cultures in higher education: Emergent practices and the challenge ahead* (pp. 1–39). Springer.
- Ramiel, H., & Dishon, G. (2023). AI-shaped hole: Anticipation regimes and liminal policy rationalities. In B. Williamson, J. Komljenovic & K. Gulson (Eds.), *World yearbook of education 2024: Digitalisation of education in the era of algorithms, automation and artificial intelligence* (pp. 140–154). Routledge.
- Romanova, N. V., Sabirova, Z. E., & Sidorova, O. V. (2020). Digitalization of higher education in the context of information inequality. *Journal of Physics: Conference Series*, 1691(1), 012099. <https://doi.org/10.1088/1742-6596/1691/1/012099>
- Roumbanis Viberg, A., Forslund Frydek, K., & Sofkova Hashemi, S. (2020). Teacher educators' perceptions of their profession in relation to the digitalization of society. *Journal of Praxis in Higher Education*, 1(1), pp. 87–110. <https://doi.org/10.47989/kpdc80>
- Saltman, K. J. (2020). Artificial intelligence and the technological turn of public education privatization: In defence of democratic education. *London Review of Education*, 18(2), 196–208. <https://doi.org/10.14324/LRE.18.2.04>
- Saltman, K. J. (2021). Education, new technology, and the paranoid politics of disinterested objectivity. *sympleke* 29(1), 143–162. <https://dx.doi.org/10.1353/sym.2021.0008>
- Saltman, K. J. (2022). *The alienation of fact: Digital educational privatization, AI, and the false promise of bodies and numbers*. The MIT Press.

The Scientific and Technological Research Council of Türkiye. (2018). 1004 - Center of Excellence Support Program. Retrieved August 10, 2024, from <https://tubitak.gov.tr/en/funds/academic/national-support-programs/1004-center-excellence-support-program>

Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (3rd ed.) Teachers College Press.

Selwyn, N. (2022). *Education and technology: Key issues and debates* (3rd ed.). Bloomsbury.

Selwyn, N. (2024). Digital degrowth: Toward radically sustainable education technology. *Learning, Media and Technology*, 49(2), 186–199. <https://doi.org/10.1080/17439884.2022.2159978>

Selwyn, N., Nemorin, S., & Johnson, N. F. (2017). High-tech, hard work: An investigation of teachers' work in the digital age. *Learning, Media and Technology*, 42(4), 390–405. <https://doi.org/10.1080/17439884.2016.1252770>

Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review*, 5(1), 9–27. <https://doi.org/10.1080/17437199.2010.510659>

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. SAGE.

Stewart, B. (2023). Toward an ethics of classroom tools: Educating educators for data literacy. In J. E. Raffaghelli & A. Sangrà (Eds.), *Data cultures in higher education: Emergent practices and the challenge ahead* (pp. 229–244). Springer.

Stewart, B., Miklas, E., Szczyrek, S., & Le, T. (2023). Barriers and beliefs: A comparative case study of how university educators understand the datafication of Higher Education Systems. *International Journal of Educational Technology in Higher Education*, 20. <https://doi.org/10.1186/s41239-023-00402-9>

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). SAGE.

- Suoranta, J., Teräs, M., Teräs, H., Jandrić, P., Ledger, S., Macgilchrist, F., & Prinsloo, P. (2022). Speculative social science fiction of digitalization in higher education: From what is to what could be. *Postdigital Science and Education*, 4, 224–236. <https://doi.org/10.1007/s42438-021-00260-6>
- Swist, T. (2023). The EdTech stack: A speculative design thought experiment. In B. Williamson, J. Komljenovic & K. Gulson (Eds.), *World yearbook of education 2024: Digitalisation of education in the era of algorithms, automation and artificial intelligence* (pp. 276–293). Routledge.
- Şahin, H., & Kalkan, M. (2022). Okul öncesi öğretmen adaylarının dijital okuryazarlık düzeylerinin incelenmesi [Investigation of pre-school teacher candidates' digital literacy levels]. *Dijital Teknolojiler ve Eğitim Dergisi*, 1(1), 26–38. <https://doi.org/10.5281/zenodo.6647617>
- Talan, T. (2021). *Eğitimde dijitalleşme ve yeni yaklaşımlar* [Digitalization in education and new approaches]. Efe Akademi.
- Teräs, H., & Teräs, M., & Suoranta, J. (2022). The life and times of university teachers in the era of digitalization: A tragedy. *Learning, Media and Technology*, 47(4), 572–583. <https://doi.org/10.1080/17439884.2022.2048393>
- Thompson, T. L., & Prinsloo, P. (2023). Returning the data gaze in higher education. *Learning, Media and Technology*, 48(1), 153–165. <https://doi.org/10.1080/17439884.2022.2092130>
- Uğur, N. G. (2021). Mandatory digitalization thanks to or due to COVID-19: An empirical study on distance education in Turkey. *Bilgi Yönetimi*, 4(1), 1–15. <https://doi.org/10.33721/by.841249>
- UNESCO. (2023). Education in the age of artificial intelligence. *The UNESCO Courier*, 4. Retrieved January 26, 2024, from <https://courier.unesco.org/en/articles/education-age-artificial-intelligence>
- van Dijck, J. (2014). Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology. *Surveillance & Society*, 12(2), 97–208. <http://dx.doi.org/10.24908/ss.v12i2.4776>
- Wernimont, J. (2019). *Numbered lives: Life and death in quantum media*. The MIT Press.

- Williamson, B. (2015). Digital education governance: Data visualization, predictive analytics, and 'real-time' policy instruments. *Journal of Education Policy*, 31(2), 123–141. <https://doi.org/10.1080/02680939.2015.1035758>
- Williamson, B. (2016). Digital education governance: An introduction. *European Educational Research Journal*, 15(1), 3–13. <https://doi.org/10.1177/1474904115616630>
- Williamson, B. (2017). *Big data in education*. SAGE.
- Williamson, B. (2018). The hidden architecture of higher education: building a big data infrastructure for the 'smarter university'. *International Journal of Educational Technology in Higher Education*, 15. <https://doi.org/10.1186/s41239-018-0094-1>
- Williamson, B., Bayne, S., & Shay, S. (2020). The datafication of teaching in Higher Education: critical issues and perspectives. *Teaching in Higher Education*, 25(4), 351–364. <https://doi.org/10.1080/13562517.2020.1748811>
- Williamson, B., & Eynon, R. (2020). Historical threads, missing links, and future directions in AI in education. *Learning, Media and Technology*, 45(3), 223–235. <https://doi.org/10.1080/17439884.2020.1798995>
- Yardley, L. (2000). Dilemmas in qualitative research. *Psychology and Health*, 15(2), 215–228. <https://doi.org/10.1080/08870440008400302>
- Yılmaz, İ., Akel, A., Bayraktar, G., & Demirkaya, H. (2023). Digital Literacy and Education in Turkey. *International Social Sciences Studies Journal*, 9(116), 8633–8639. <http://dx.doi.org/10.29228/sssj.72590>
- Zeide, E. (2017). The structural consequences of big data-driven education. *Big Data*, 5(2), 164–172. <https://doi.org/10.1089/big.2016.0061>
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. PublicAffairs.

## APPENDICES

### APPENDIX A. INFORMED CONSENT FORM

Dear participant,

This is a study conducted by Middle East Technical University, English Language Teaching M.A. student Elif Genç under the supervision of Prof. Dr. A. Cendel Karaman. The aim of the study is to investigate English language instructors' perceptions and experiences of digitalization and datafication of higher education.

For the purpose of this study, you will be asked to participate in up to two interviews with the researcher. The interviews will take place in a public venue based on your preference. Each interview is expected to take approximately 60 minutes. The interview will be recorded via a voice recorder. During the analysis, your answers will be transcribed by the researcher first. Your identity will be kept strictly confidential. Any voice or written data collected from you will not be shared with any person or institution other than the researchers. The voice recordings or any data collected from you will be kept on a password-protected computer to ensure security. Your data will be used for scientific purposes only. Pseudonyms will be used to ensure your anonymity in research publications.

This research is designed to benefit society by gaining new knowledge. However, you are not expected to gain any direct benefit from participating in this study. There are no risks in participating in this research. Participation is on a voluntary basis. During participation, if you feel uncomfortable for any reason, you are free to quit at any time. In such a case, it will be sufficient to tell the researcher that you want to quit. We would like to thank you in advance for your participation in this study. For further information about the study, you can contact Elif Genç (genc.elif@metu.edu.tr).

**I have read and understood the above information provided to me. I agree that I volunteer to participate in this study on my own will. I consent to giving written and voice data to the researcher for the research purposes.**

Full Name:

Date:

Signature:

## **APPENDIX B. DEBRIEFING FORM**

Thank you for taking part in this research on English language instructors' perceptions and experiences of digitalization and datafication of higher education.

Please read the material on this form carefully to learn important information about your experience in this study and ask us any questions that you have. After this debriefing, you may choose to have information we collected about you removed from this research study.

### **What You Should Know About This Study**

The aim of the study is to explore English language instructors' perceptions and experiences of digitalization and datafication of higher education. This study argues that higher education as a whole is going through a time of uncertainty, transition, and change due to a large number of factors; digitalization and datafication being two of them. This study also argues that the existing research focuses on technical details and applications rather than the affective domain of English language instructors. Therefore, this research aims to fill the gap in the literature by uncovering English language instructors' personal perspectives and experiences regarding the aforementioned phenomena. To achieve this goal, you were asked to participate in a semi-structured interview by the researcher. This interview was recorded and will be analyzed. Your identity will be kept strictly confidential. Any voice or written data collected from you will not be shared with any person or institution other than the researchers. Pseudonyms will be assigned to every participant to ensure anonymity in research publications. You may be contacted for a brief member-checking process after your interview.

### **Your Right to Withdraw Data**

Now that you are done with providing data, you may decide whether you want to have your data removed from the study or not. If you choose to have your data removed, any data or written note regarding your interview will be deleted. There will be no penalties or negative consequences for you if you withdraw from the study. Before making your decision, please ask us any questions you have.

### **Confidentiality**

Whether you allow your data to be used in this study or not, please remember that the integrity of this research depended on keeping some of the details from you and

the other participants. Therefore, it is important that you do not tell anyone else about the details of this study until after June 15, 2024, which is when the analyses are expected to be done. All the information you provided will be completely confidential, including your decision about whether to withdraw from the study.

### **If You Have Any Questions or Concerns**

Please keep a copy of this Debriefing Form for future reference. If you have any questions or concerns about this study and the research procedures used, you may contact the researcher, Elif Genç, at [genc.elif@metu.edu.tr](mailto:genc.elif@metu.edu.tr).

If you would like to receive a copy of the final report of this study or a summary of the findings when it is complete, please feel free to contact the researcher. If you have any questions regarding your rights as a research participant in this study, you may contact the researcher, or METU Ethics Committee at [ueam@metu.edu.tr](mailto:ueam@metu.edu.tr). In case you experience any adverse effects that you feel result from being in this study, please contact the researcher.

## APPENDIX C. ETHICS COMMITTEE APPROVAL

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ  
APPLIED ETHICS RESEARCH CENTER



ORTA DOĞU TEKNİK ÜNİVERSİTESİ  
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06 MAYIS 2024

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

**Sayın Prof. Dr. A. Cendel Karaman**

Danışmanlığımı yürüttüğünüz Elif Genç'in "*An Investigation of English Language Instructors' Perceptions and Experiences of Digitalization and Datafication of Higher Education*" başlıklı araştırmanız İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek 0243-ODTÜİAEK-2024 protokol numarası ile onaylanmıştır

Bilgilerinize saygılarımla sunarım

Prof. Dr. Ş. Hami TURAN  
Başkan

Üye

Doç.

Üye

Üye

Doç.

Üye

CAKIR

Üye

ÖZCAN KABASAKAL

Üye

GÜNDÜZ

## APPENDIX D. SEMI-STRUCTURED INTERVIEW GUIDE QUESTIONS

- Q1. What are your thoughts on digitalization of higher education?
- Q2. What are your thoughts on datafication of higher education?
- Q3. What are some of your concerns about the digitalization trends of higher education? Can you share specific examples/experiences?
- Q4. What are some of your concerns about the datafication trends of higher education? Can you share specific examples/experiences?
- Q5. How do you perceive the influence of corporate interests or commercialization on the digitalization of higher education? Can you share specific examples/experiences?
- Q6. How do you perceive the influence of corporate interests or commercialization on the datafication of higher education? Can you share specific examples/experiences?
- Q7. What are your concerns related to privacy and surveillance in terms of digitalization at universities? (and in your university?) Can you share specific examples/experiences?
- Q8. What are your concerns related to privacy and surveillance in terms of datafication at universities? (and in your university?) Can you share specific examples/experiences?
- Q9. What are your views regarding power dynamics in your classrooms or institution as a result of digitalization of higher education? Can you share specific examples/experiences about this?
- Q10. What are your views regarding power dynamics in your classrooms or institution as a result of datafication of higher education? Can you share specific examples/experiences about this?
- Q11. How do you perceive the impact of digitalization on the autonomy of English language instructors in higher education? Can you share specific examples/experiences about this?
- Q12. How do you perceive the impact of digitalization on the professional identity of English language instructors in higher education? Can you share specific examples/experiences about this?
- Q13. How do you perceive the impact of datafication on the autonomy of English language instructors in higher education? Can you share specific examples/experiences about this?
- Q14. How do you perceive the impact of datafication on the professional identity of English language instructors in higher education? Can you share specific examples/experiences about this?

- Q15. In what ways do you believe the increasing digitalization may influence the perception of English language teaching as a profession? Can you share specific examples/experiences about this?
- Q16. In what ways do you believe the increasing datafication may influence the perception of English language teaching as a profession? Can you share specific examples/experiences about this?
- Q17. How do you perceive the role of governmental actors in shaping the digitalization of higher education, and how does this impact English language instruction? Can you share specific examples/experiences about this?
- Q18. How do you perceive the role of governmental actors in shaping the datafication of higher education, and how does this impact English language instruction? Can you share specific examples/experiences about this?
- Q19. How do you perceive the role of commercial actors in shaping the digitalization of higher education, and how does this impact English language instruction? Can you share specific examples/experiences about this?
- Q20. How do you perceive the role of commercial actors in shaping the datafication of higher education, and how does this impact English language instruction? Can you share specific examples/experiences about this?
- Q21. What are some changes you have observed in the professional development opportunities available to English language instructors in response to digitalization?
- Q22. What are some changes you have observed in the professional development opportunities available to English language instructors in response to datafication?
- Q23. How do you envision the future of the English language teaching profession in light of ongoing digitalization of higher education?
- Q24. How do you envision the future of the English language teaching profession in light of ongoing datafication of higher education?
- Q25. How do you navigate the institutional demands to adopt digital technologies? Can you share specific examples/experiences about this?
- Q26. How do you navigate your own professional knowledge and vision as a higher education instructor? Can you share specific examples/experiences about this?
- Q27. How do you navigate your pedagogical content knowledge and vision as an English language instructor? Can you share specific examples/experiences about this?

## APPENDIX E. EXAMPLES OF INITIAL CODES

**Table 11.** Examples of Initial Codes

| Initial Code                | Frequency | Sample Quote                                                                                                                                                                                                                                                                |
|-----------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| audit                       | 1         | And also, they are very careful about it. Like, we all have our own account data. So, so we- everybody knows who uses a certain computer.                                                                                                                                   |
| plagiarism                  | 1         | First of all, the recent developments, they may pose a big question mark about the originality of the production, especially writing, because we expect students to produce something.                                                                                      |
| interpersonal relationships | 3         | Therefore, I think that this digitalization has seriously affected the communication between people. I think it has especially damaged the relationship between the teacher and the student.                                                                                |
| hireable teachers           | 1         | Those teachers will not be preferred by educational institutions. Therefore, the easier and faster we move to that digital place, the better it will be if we switch to digital teaching.                                                                                   |
| funding                     | 2         | No one has ever used it. I think there is a financial problem in this sense.                                                                                                                                                                                                |
| mutual trust                | 2         | As I said, mutual trust is very important. It is very important for them to trust their teacher. In other words, they need to be sure that I will not take it and use it, and they need to know that I sincerely want this because I want their speaking skills to develop. |
| third parties               | 4         | We have this PDPL system. However, how applicable is it, or to what extent is it applied? I'm not sure about it. And, unfortunately, I think corporations, companies, they have a huge influence. Because it's a really big market.                                         |
| self-study                  | 1         | And instead of asking teachers questions all the time, they can, I mean, they should be able to, you know, able to use those technologies by themselves.                                                                                                                    |
| administrators              | 1         | It's also very important for the administrators to check the students', you know, data from time to time.                                                                                                                                                                   |
| adaptation                  | 1         | There was a sudden transition to online education, of course. In order to adapt to this immediately, there were separate trainings and in-service trainings. After a while, people got used to it, but even if we got used to it, it was tiring to do this every day.       |

Table 11. (continued)

|                       |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| efficiency            | 1 | For example, if the teacher is not used to using these technological tools, it will slow them down a lot and leave them behind in the program.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| tiring                | 3 | I was curious about technology because I also loved it, but of course, it was extremely tiring. Because there were a lot of tabs open on [the browser]... Now, what to do on this one, what to do on that one? What were we following? The steps and things to do are all spelled out in front of me. In other words, following them, applying them even if they were readily available... It was causing an excessive workload, you know, there were many studies on [application] fatigue, it was talked about, having to constantly look at the screen, having to stare, it is a difficult thing, and this is also completely related to the energy of the class in front of you. |
| empathy               | 1 | Now, as a teacher, I always believe that, whether it's face-to-face or online, how would I feel in my own class?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| talking to the screen | 4 | I wasn't sure that they were listening, and I wasn't sure that they were taking me seriously. And they- they definitely lacked motivation to wake up in the mornings. It affected the teaching experience negatively, I would say.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| teacher's role        | 5 | Unfortunately, I was observing that a little more during the pandemic. For example, we were doing all our lessons online, to put it simply. The students would turn off their cameras, and you couldn't say anything. I think they really had a serious power there. They would turn on their cameras when they wanted, they wouldn't turn it on if they didn't want to, they wouldn't listen when they didn't want to. Maybe they weren't even there, they were away. I think the role of the teacher there has diminished a little bit.                                                                                                                                            |
| not the same          | 3 | Technology is improving not only in terms of teaching, but also in medical practices and also engineering. All this stuff will be done quite easily by using technology, but – there is a big “but” coming – I still think technology has no good use without a knowledgeable person in charge. I don't know.                                                                                                                                                                                                                                                                                                                                                                        |
| strange               | 3 | For example, sometimes listening to a robotic voice... [application] or another tool was used there. You know, it sometimes feels so weird when it is obviously not a human voice, or a human recording.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| age                   | 1 | I see this concern, especially in my older colleagues. Their attitudes towards technology are more negative.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| juggling              | 4 | There, my actions are shaped depending on the audience, like they say “nabza göre şerbet” in Turkish. I mean, depending on the attitude of the students because these things are related to each other. I mean, the attitude, the attitude of the teacher... you know, switching to another tool or something healthier... Actually, teachers are a lot like magicians or jugglers. There, it's a bit like I said, pulling a rabbit out of a hat like a magician. Is that rabbit loved, does it make the crowd cheer? If it does, it can be used, if not, you need to switch to another tool. So you have to see every time.                                                         |

Table 11. (continued)

|                          |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| institutional analysis   | 2  | I think it's very good especially when doing item analysis in multiple choice exams, when looking at difficulty levels, etc.                                                                                                                                                                                                                                                                                                                                                      |
| image                    | 8  | Now, teachers need to adapt to this. Because after a while, if that gap widens, students in their classes may say, "Well, the teacher doesn't know anything." This is an issue that devalues the perception of teachers in the eyes of their students - devalues the perception of the profession.                                                                                                                                                                                |
| irreplaceable            | 5  | Because technology, again, cannot replace a teacher or a human being. That emotional transfer, that empathy... You know, in class, it's not necessarily like, "oh, we're losing our jobs, teachers are going to disappear" or anything like that.                                                                                                                                                                                                                                 |
| accessibility            | 1  | Now, in my beginner classes, I do this a little more to open up to the outside world because students come from all over Anatolia, they may not have had any experience abroad before. They may not have spoken to a native speaker or they may not have spoken to someone else in English, a foreigner.                                                                                                                                                                          |
| positive                 | 7  | I don't see it as a threat as long as it is used very sensibly. On the contrary, I think it increases students' autonomy. I think they take responsibility for themselves and develop more self-regulation skills.                                                                                                                                                                                                                                                                |
| power dynamics           | 5  | I mean, some professors say, for example, this is the case at my previous university, "I don't let students play games," they believe that playing games, like using Kahoot or something else, is a bad thing. Or, for example, there were professors there who thought their authority was shaken by digital tools.                                                                                                                                                              |
| professional development | 14 | Now everything is quite easy to reach. Like, you can take courses from around the world. And based on your interest, you can look for some training opportunities and you can easily do them in your own time. So it's- digital tools have a great value for your personal, professional development.                                                                                                                                                                             |
| crime                    | 1  | Everything we click on is ultimately recorded on the internet. I mean, this can go to many, many different places, but it can be a good thing, it can be a bad thing, you know, when it comes to catching criminals, for example. You know, child pornography, for example, it's a crime everywhere, after all, and things like, you know, people in authority follow certain steps and catch these people, you know, what sites did they enter, that deep web part, for example. |
| law                      | 4  | Distributing our phone numbers, for instance, is the simplest example. I mean, you know, numbers we don't know, they call you, and you get like, "Where did they get my number?" I think that's always there. I mean, on a country basis. This must be something related to how solid the laws are, and whether they are implemented or not.                                                                                                                                      |

Table 11. (continued)

|                      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data protection      | 16 | My husband, for example, was working in an IT department and I learned from him, much later, how easy it actually was to access all this data, and I didn't find it, I didn't find it right. ... I really learned how easily that data could be extracted during that period. For example, when a computer is moved to another location, to a better equipped location, I learned that most of the data on the computer, even the lost data, can be restored, all of it can be backed up and extracted, and frankly, that made me a little nervous. Now I am much more careful about the applications I use, and I try to be more careful.                                                                                                                                                                               |
| extra responsibility | 6  | I was working at another university during the height of the pandemic. Students could record and download the online lectures, but for example, in an exam environment, it was different. It didn't matter if it was a speaking or written exam, we would have to record all exams and download them because our observations alone were not enough. And we would go to school on a certain day and hand in the recordings. If you recorded the exam not in a school environment but at home or in another environment, the teacher was fully responsible for the recordings. For example, if the computer crashed, the power went out, or something happened, the teacher is completely responsible. This made us nervous because there were so many things out of our control, but we were responsible for everything. |
| marketing            | 9  | Yes, I think that digitalization is increasing, and I think it is being advertised a little more. Actually, I even think these publishing houses are competing with each other on this issue. Because they are always like, "We have the best digital platform." That's how it is. Ultimately, they have to advertise their books to get them on the market and increase their sales.                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| unfair               | 1  | There is also something like online workbooks instead of physical workbooks. Now, when students do not get the original book, they cannot access the online workbook exercises. If I, as an institution, as a teacher, include a certain percentage of online workbook exercises in the scoring, I will now put students who are economically disadvantaged even more at a disadvantage in terms of points, for example, because they could not get the original book.                                                                                                                                                                                                                                                                                                                                                   |
| institutional choice | 7  | And for example, this institution was using another book before I started. The reason they stopped using it was because it did not have a digital platform. That is what the administration told us. Because the world is going that way now.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

Table 11. (continued)

|                           |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| book publishing companies | 8  | I mean, for example, we are starting a brand new book. Those who come to introduce the book, they are all like “Our digital book is user-friendly, for example, you can do this, that...” I mean, how are the speaking and listening exercises in the book? Are the transitions good? I don't know, is it topic-based or team-based? You know, these... Instead of explaining these first, "Oh, our digital platform is very good, very nice. You know, it is user-friendly, you can play the sound when you press here, you can play the video when you press here..." and these are gradually increasing as the new editions of the books are published. |
| off-class use             | 11 | I used to say when I started working as a teacher that language learning shouldn't stop in the classrooms or outside the class. Try finding as many materials as you can. Now, with the technological developments, it's quite easy.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| proctoring                | 4  | During this online education, especially when everything, all the exams, all the lessons were done via [app], we used [app] before [app]. Now, the exam rules... Of course, it's the teacher's job to manage them, but we also had an exam explanation for the students at that time, like this, you'll be in class at this time, your cameras will be on, I don't know, your hands and face will look like this. It was even like, they'll see their own questions on the computer, and they will have an extra phone camera that shows the room they are in.                                                                                             |
| tension                   | 2  | To be honest, datafication increasing in a way that puts pressure on the students would scare me. Technology's extent, I mean... To what extent will it be included? Also, is this the teacher's choice, or the institution's choice that is imposed on the teacher? Or is it imposed on the institution? When you look at it from a wider perspective... This can create tension between parents and teachers too.                                                                                                                                                                                                                                        |
| parents                   | 4  | Then at the end of the year, it's like an event for what the students did that year. Well, you know, like a portfolio, displaying them, like a class show. Now I realized this thing, I realized that it was something that made my friends proud. You know, “Look, my child is doing such and such things, the school is doing this and this,” you know. Or “The English teacher gave them so many book reading assignments,” something like that, as an extra thing on the platform. The parents see this as, you know, a positive thing.                                                                                                                |
| anxiety                   | 15 | It's scary because they're recording people, people's facial expressions. They're recording our voices. So where will it stop? What will happen next? What will the system do? It's quite personal. I'm afraid.                                                                                                                                                                                                                                                                                                                                                                                                                                            |

Table 11. (continued)

|                    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| student            | 10 | When I first started teaching here, I wanted to use [platform]. I asked my students to upload their self-introduction presentations to [platform]. Again, a few students didn't want to; they were against it, and when I thought about it later, I thought, "They are actually right," you know, they said, "They are making fun of my pronunciation, my accent." It's really personal. Actually, this is what we call PDPL.       |
| pressure           | 7  | The teacher may also feel pressured. If it is imposed on them, if it is something they have to do. And who will review those camera recordings, who will see them?                                                                                                                                                                                                                                                                  |
| education purposes | 10 | Because, for example, when they do that textbook online digital exercise, you see who is doing it, who is not doing it, which topics are lacking, which topics are misunderstood. I see, for example, a lot of mistakes in the simple present tense. I can go back to that topic and explain it to the students again. In this sense, it is beneficial for us and for their education.                                              |
| discomfort         | 7  | I mean, as a regular citizen, every step I take is followed, I don't know, cameras are filming when I walk down the street, etc. The feeling of being watched, being observed is a bit disturbing.                                                                                                                                                                                                                                  |
| surveillance       | 10 | About increasing datafication? Yes. That thing... well... how much is it used? How much does technology interfere with students' privacy or feelings of comfort? We need to look at that. For example, in the Chinese example, as I read the article, having cameras in classrooms, something that records students' emotions, I thought, if I were a student, I would be bothered by this feeling of "big brother is watching me." |
| privacy            | 17 | Yeah, like, I don't know if the news is correct, but [company] takes a screenshot of your, of our computers every 10 seconds so that they can provide data for their own, artificial intelligence, and I don't know about it. I don't approve it, but they get it.                                                                                                                                                                  |
| extent             | 12 | This is a matter of to what extend it is used and what it is used for.                                                                                                                                                                                                                                                                                                                                                              |
| accountability     | 11 | It definitely provides transparency. So nothing is hidden, everything is out in the open and no one can change it anymore. Because it has already been uploaded there. So in this sense, in terms of providing transparency, in terms of being able to track and follow it later, I think it makes our job much easier.                                                                                                             |

Table 11. (continued)

|                            |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| objectivity                | 7  | For example, I believe that our digital grading process here is very objective. Because in midterms, we do not know who the papers that come to us in the digital environment belong to. And this is the same in the proficiency exams. In other words, there is a random number assigned to each paper, we read the paper number and grade it according to the rubric. It is transferred to another teacher's system. If there is a big difference in points, it goes to a third teacher, etc. If the student objects, it is read again. But for example, whose paper is that? I mean, there is no favoritism here, there is no name that comes up there, etc. You know, there are no such things. Well, I think the privacy here is what leads to objective grading. |
| in-class use               | 10 | Yes, yes, yes, for example, face-to-face communication is always better. That's why it makes you feel more comfortable to apply this technology use in face-to-face classes, because I see what the student feels. Now, when I send the [app] link to the student, if their camera is off, for example, does the student say "Oh, ew, is it [app] again?" etc., you can't know because I can't read it, I mean, is the student doing something under pressure, that could definitely be it.                                                                                                                                                                                                                                                                            |
| student attention          | 4  | I think Generation Z needs to be stimulated with different things during class because their attention spans are so short.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| too little                 | 16 | Actually, sometimes I think that some tools are underused. Like we can work on them more and we can incorporate them into our teaching more.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| too much                   | 4  | But of course, instead of using technology for the sake of using technology, I need to understand and integrate the pedagogical purpose it serves.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| mindful                    | 13 | I think, well, at the beginning, everything has a good purpose. Everybody wants to make something useful for their profession. But again, who are the third parties? What kind of data are we going to collect? Why are we going to analyze them, and why are we going to use them? So, these should be decided quite carefully, or else, it can have really, really bad results.                                                                                                                                                                                                                                                                                                                                                                                      |
| personal data keeping      | 5  | Of course, I also kept these, for example, I deleted the name and used them again in later years in later classes to see how many points you could give on the rubric. In other words, to analyze sample paragraphs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| class limitations          | 8  | Speaking is not a skill that can always be evaluated. We don't have that much time. I asked the students to send me voice recordings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| practical                  | 3  | Students do homework and submit it through platforms, teachers download those files, work on them and give feedback. In other words, it seems more practical and easier. It is impossible to do everything in a classroom environment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| learning management system | 6  | For example, prior to the pandemic, we weren't using the university's own learning management system. That was a big problem for us, and I think it was ridiculous. When the pandemic happened, for some reason, they were suddenly like "Ohhh, we should use it too!"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

Table 11. (continued)

|                        |    |                                                                                                                                                                                                                                                                                                                            |
|------------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| keeping track          | 4  | Because on that digital platform, they were also registered in a classroom environment and who - I think if I remember correctly, who was logging in, who was opening the materials, who was doing what, I could check those things.                                                                                       |
| personal preference    | 25 | I mean, like, it's it's completely up to the teacher. Although, I mean, in, in case of the university's own learning management system, there are some things that we need to do weekly. But, other than that, whether we use the software of the book or if we use, I don't know, [app] or not, it's completely up to us. |
| inevitable             | 13 | There's no opposition against using technological tools in class or using tablets, using internet in class, because we cannot avoid it, so we have to involve it in our teaching.                                                                                                                                          |
| data example           | 31 | It is especially useful for tracking student absences, reports, etc. We don't track data other than this and grades.                                                                                                                                                                                                       |
| digitalization example | 31 | For example, each and every week, we are given a word list by our coordinators. So, in the past, I used to find each and every word from the dictionary. But instead these days, I just enter those words into [AI tool] and it gives me, provides me with these definitions, with all examples.                           |
| help                   | 2  | Especially before the lessons. I prepare lots of materials with the help of [AI tool] these days.                                                                                                                                                                                                                          |
| ease                   | 7  | Like the book's software, the listening is one click away. But before the software, we used to carry our CD players to the classroom. So it was a huge burden from time to time. We used to carry speakers. And so I don't know. And now everything is one click away. So they make my job easy now.                       |

## APPENDIX F. TURKISH SUMMARY/TÜRKÇE ÖZET

### GİRİŞ

Dünya, jeopolitik, ekonomik ve sosyal sorunlar nedeniyle giderek artan bir öngörülemezlik ile karşı karşıyadır ve bu durum, yükseköğretim alanına da yansımaktadır (Czerniewicz vd., 2023; Johnson vd., 2022). COVID-19 pandemisi bu zorlukları daha fazla ortaya çıkarmış olsa da neoliberalizm ve özelleştirme gibi faktörler zaten yükseköğretimi yeniden şekillendirmekteydi (Saltman, 2022; Williamson vd., 2020). Bazıları dijital araçların öğrenmeyi ve organizasyonu geliştirdiğini savunurken (Selwyn, 2022), diğerleri bu araçların yükseköğretimin ticarileşmesini, gözetimi ve veri odaklı hale gelmesini kolaylaştırarak akademik özgürlüğü ve öğretmenlerin yetkilerini tehdit ettiğini öne sürmektedir (Gourlay, 2022; Williamson, 2017). Türkiye’de dijitalleşme, "Yükseköğretimde Dijital Dönüşüm Projesi" (YÖK, 2019) ve yükseköğretimde büyük veri uygulamaları üzerine yapılan araştırmalar (YÖK, 2022) gibi girişimlerle ulusal bir gündem haline gelmiştir.

MOOC, yapay zeka ve oyunlaştırma gibi dijital araçların yükselişi, öğrenmeyi devrim niteliğinde değiştireceği vaadini taşısa da (Alenezi, 2021; Saltman, 2020; UNESCO, 2023), sıklıkla gerçekçi olmayan beklentiler yarattığı için eleştirilmektedir (Selwyn, 2024). Tam aksine, eleştirmenler, teknolojilerin eğitimdeki eşitsizlikleri artırabileceğini, varlıklı okulların bu araçları daha yoksul okullardan farklı kullandığını savunmaktadır (Eynon, 2023; Romanova vd., 2020). Hem savunucular hem de eleştirmenler, daha fazla araştırmaya ve öğretmenlerin karar alma süreçlerine katılmasına ihtiyaç olduğu konusunda hemfikirdir (Emejulu ve McGregor, 2019; Luckin vd., 2016; UNESCO, 2023).

Yükseköğretimde dijitalleşme, akademik emeğin metalaştırılmasına yol açmış ve küresel teknoloji şirketlerinin üniversiteler üzerinde artan bir etkiye sahip olmasına neden olmuştur (Castañeda ve Selwyn, 2018). Bu değişim, öğretim ve öğrenme uy

gulamalarını da etkilemiş, dijital araçlar sınıfta nelerin mümkün olup olmadığını sıkça belirler hale gelmiştir (Castañeda ve Selwyn, 2018; Williamson, 2017). Öğretmenler de rollerinin yeniden tanımlanması süreci yaşamaktadır ve bazıları bunu, dijital platformların "hat operatörleri" haline gelmeye benzetmektedir (Hillman ve Esquivel, 2024; Suoranta vd., 2022). Ayrıca, yükseköğretimde özel şirketlerin artan etkisi ve öğrenciler arasındaki derinleşen eşitsizlikler, akademisyenlerin profesyonel rollerini yeniden şekillendirmektedir (Czerniewicz vd., 2023).

Hızla artan dijitalleşme eğitimi veri odaklı bir alan haline getirmiştir (Hillman ve Esquivel, 2024). Verileşme kavramı, ilk olarak Mayer-Schönberger ve Cukier (2013) tarafından ortaya atılmış olup, olguların analiz edilebilmesi için nicel formatlara dönüştürülmesini ifade eder. Mejias ve Couldry (2019), verileşmenin sadece insan yaşamının verilere dönüştürülmesini değil, aynı zamanda verilerden değer üretilmesini de içerdiğini vurgular. Sosyokültürel dünyaların makine tarafından okunabilir formatlara dönüştürülmesi olarak tanımlanan verileşme (Williamson vd., 2020), neoliberal etkiler nedeniyle artmıştır. Eğitimde bu süreç, daha geniş toplumsal eğilimlerle paralellik gösterir ve finansal ve politik yatırımlarla desteklenen geniş çaplı veri toplama ve analizine yol açar (Williamson, 2017). Büyük veri gibi araçlar, eğitim sistemlerinde izleme, karar alma ve süreç otomasyonunu mümkün kılar (Williamson vd., 2020).

Verileşme, eğitim üzerinde giderek daha fazla etkili olmakta ve algoritmik veri madenciliği ile performans ölçüm teknolojilerinin yükselişiyle kendini göstermektedir (Williamson, 2017). Yükseköğretimde bu durum, çok modlu veriler ve sınıf ortamında duysal analizler de dahil olmak üzere çeşitli veri türlerinin toplanmasıyla genişlemiştir ve sektörü bir veri sınırına dönüştürmüştür (Thompson ve Prinsloo, 2023). Bu değişim, veri temelli ölçüm teknolojilerinin dayatılmasına yol açmakta ve hiyerarşik sınıflandırmalar ile otomatik karar alma süreçlerini beraberinde getirmektedir (Williamson vd., 2020). Bu tür süreçler, dijital eğitim yönetişimi olarak adlandırılan eğitimin yönetiminde giderek daha fazla yer almaktadır (Williamson, 2016).

Eleştirmenler, verileşmenin tarafsız olmadığını ve eşitsizlikleri pekiştirdiğini dile getiriyorlar (Atenas vd., 2023; Stewart, 2023). Ayrıca bu süreç, akademik emeği me-

talaştırarak öğretmenleri teknoloji şirketlerine veri üreten tüketicilere (prosumer) dönüştürmektedir (Hartong, 2016). Ayrıca, veri sistemlerinin önyargı ve ayrımcılığı, özellikle de dezavantajlı gruplar için artırabileceği endişesi bulunmaktadır (Eynon, 2023; Thompson ve Prinsloo, 2023).

Akademisyenler, bu zorlukları ele almak için daha eleştirel bir veri okuryazarlığı anlayışına ihtiyaç duyulduğunu savunmaktadır. Mevcut yaklaşımlar büyük ölçüde teknik olsa da yükseköğretim öğretmenleri ve araştırmacılarının verileşmenin yaygın etkisiyle başa çıkabilmek için daha eleştirel perspektifler benimsemeleri gerektiğini öne sürmektedirler (Emejulu ve McGregor, 2019; Raffaghelli ve Stewart, 2020). Veri aracılığıyla eğitimin mahremiyeti, şeffaflığı ve insanlıktan uzaklaştırılmasına ilişkin endişeler giderek artmakta ve dijital okuryazarlıkta sistematik ve eleştirel tartışmalara ihtiyaç duyulmaktadır (Raffaghelli ve Stewart, 2020).

Yerel ve küresel çalışmalar teknik zorlukları ortaya çıkarsa da dijitalleşmenin ve verileşmenin daha geniş etkileri üzerine eleştirel perspektifler genellikle eksiktir. Bu eksikliği göz önünde bulundurarak, bu çalışma aşağıdaki soruları cevaplamayı hedeflemektedir:

1. İngilizce öğretmenleri yükseköğretimin dijitalleşmesini ve verileşmesini nasıl algılıyor?
2. İngilizce öğretmenleri yükseköğretimin dijitalleşmesini ve verileşmesini nasıl deneyimliyor?
3. İngilizce öğretmenleri, yükseköğretimin dijitalleşmesi ve verileşmesiyle ilgili olarak dil öğretimi mesleğindeki değişimleri nasıl kavlıyor?

## YÖNTEM

Nitel araştırmalar, disiplinlerarası ve gelişen doğası nedeniyle tanımlanması zor bir alandır (Denzin & Lincoln, 2017). Nitel araştırmalar, insan deneyimlerini ve çevre ile etkileşimleri yorumlamaya ve anlamaya odaklanır (Given, 2008; Strauss ve Corbin, 1998;). Yorumlayıcı Fenomenolojik Analiz (IPA), bireylerin yaşam deneyimlerini nasıl anlamlandırdıklarını araştırmayı amaçlayan bir nitel yöntemdir (Smith vd., 2009). Bu çalışma için, IPA, İngilizce öğretmenlerinin yükseköğretimde dijitalleşme

ve verileşme konusundaki yaşanmış deneyimlerini araştırmak amacıyla seçilmiştir. Çalışma, katılımcıları kriter örnekleme ve kartopu örnekleme yöntemleri aracılığıyla seçmiştir. Kriter örneklemede, katılımcıların 5-15 yıl deneyime sahip olması ve Türkiye'deki önde gelen belli bir üniversitede çalışıyor olmaları aranmıştır. Kartopu örnekleme, katılımcılardan birinin başka bir katılımcı bulmasına yardımcı olmuştur. Sonuç olarak, 10-15 yıl deneyime sahip üç İngilizce öğretim elemanı çalışmaya katılmıştır.

Bu çalışmada iki derinlemesine, yarı yapılandırılmış görüşme gerçekleştirilmiştir. Görüşmelerden önce, katılımcıların anlayışları ve deneyimlerine odaklanan açık uçlu sorular hazırlanmıştır. Katılımcılar, görüşmenin yapılacağı yeri ve kendilerini rahat hissettikleri dili seçmişlerdir; görüşmeler, katılımcıların tercihlerine göre İngilizce, Türkçe veya her iki dilde yapılmıştır. Tüm görüşmeler ses kayıt cihazıyla kaydedilmiş ve aynı gün araştırmacı tarafından birebir yazıya dökülmüştür. Transkripsiyonlar, nitel analiz yazılımı MAXQDA 24'e yüklenmiştir. Araştırmacı, transkriptleri birden çok kez okuyarak veri azaltma ve kodlama sürecini kolaylaştırmıştır. İlk kodlama aşamasında, geçici kodlar listelenmiş ve ardından karşılaştırma ve yeniden okuma yoluyla kodlar yeniden düzenlenmiş, bazıları birleştirilmiş, yeniden adlandırılmış veya çıkarılmıştır. Bu süreç, hem katılımcıların anlatılarını hem de araştırmacının yorumlarını yansıtan nihai temaların geliştirilmesine yol açmıştır. Analizde tümevarımsal bir yaklaşım uygulanmıştır. Analizi doğrulamak için, katılımcılara sonuçların özetleri gönderilmiş ve bu süreçte üye kontrolü yapılmıştır.

## **BULGULAR**

### **İlk Araştırma Sorusu**

İlk araştırma sorusunun cevabını yorumlarken üç ana tema ortaya çıkmıştır. Bu temalar “Olumlu Algılar,” “Olumsuz Algılar” ve “Farkındalık” olmuştur.

### **Olumlu Algılar**

"Olumlu Algılar" teması, katılımcıların yükseköğretimin dijitalleşmesini ve verileşmesini yararlı veya makul olarak görme biçimlerini ifade etmiştir. Bu temayı ince-

lerken, algılarını daha fazla açıklayan beş alt tema belirlenmiştir. Bu beş alt tema "Tamamlayıcı Araçlar", "Öğrenci Faydaları", "Hesap Verebilirlik", "Mesleki Gelişim" ve "İçgörü" olmuştur.

Katılımcılar, görüşmelerinde yükseköğretimde dijitalleşme ve verileşmenin, sınıf içi ve dışındaki pedagojik uygulamalarına yardımcı olabilecek araçlar olarak görüldüğünü belirtmişlerdir. Bu cevaplarda, dijitalleşme ve verileşme, "Tamamlayıcı Araçlar" olarak adlandırılan bir alt tema altında değerlendirilmiştir. Katılımcılar, dijital araçların öğretmenlerin iş yükünü azaltabileceğini, öğrenmeyi ve öğretmeyi daha erişilebilir hale getirebileceğini ve derslerin verimliliğini artırabileceğini ifade etmişlerdir.

Katılımcılar, dijitalleşme ve veri odaklı araçların öğrencilerin öğrenim süreçlerine sağladığı yararları çeşitli açılardan ele almışlardır. Bu yararlar, "Artan Özerklik," "Artan Güven," "Sürekli Öğrenme" ve "Ek Pratik ve Geri Bildirim" olarak dört ana başlık altında toplanmıştır.

Katılımcılar, dijitalleşme ve verileşme odaklı sistemlerin yükseköğretimde arttırılmış hesap verebilirlik sağladığını belirtmiştir. Bu hesap verebilirlik, öğrencilere, öğretmenlere ve yöneticilere yönelik çeşitli seviyelerde kendini göstermektedir. "Objektiflik," "Dijital İz," ve "Şeffaflık" bu alt temanın kodları olarak belirlenmiştir.

Görüşmelere katılanlar, dijitalleşmenin ve verileşmenin profesyonel gelişim için önemli faydalar sunduğunu vurgulamıştır. Dijital araçların kariyerle ilgili becerilere ve eğitim fırsatlarına erişimi artırdığını düşünmüşlerdir. Ancak fırsatların arttığını düşünürken aynı zamanda etkinliklerinin ve geçerliliklerinin değişken olabileceğini öne sürmüşlerdir. Miktardaki artışın her zaman daha yüksek kaliteye dönüşmediğini belirtmişlerdir.

Katılımcılar, yükseköğretimde dijitalleşmenin ve verileşmenin içgörü üretimini önemli bir fayda olarak belirlemiştir. Bu süreçlerin daha iyi analiz ve takip yoluyla öğrencilerin ve öğretmenlerin deneyimlerini nasıl geliştirebileceğini vurgulamışlardır.

## **Olumsuz Algılar**

Katılımcılar, yükseköğretimin artan dijitalleşmesi ve verileşmesi konusunda "Olumsuz Algılar" teması altında kategorize edilen çeşitli endişelerini dile getirmişlerdir. Endişeleri üç alt temaya ayrılmıştır: "Kaygı", "Gizlilik" ve "Kurumsal Etki ve Kontrol."

Çalışmadaki katılımcılar, yükseköğretimde dijitalleşme ve verileşmenin etkileri konusunda önemli kaygılar ifade etmişlerdir. Özellikle bu değişikliklerin öngörülemezliği, hem öğretmenler hem de öğrenciler üzerindeki artan baskı ve dijital araçların potansiyel kötüye kullanımı konusunda endişelerini dile getirmişlerdir.

Katılımcılar dijitalleşme ve verileşmeden kaynaklanan gizlilik sorunları hakkında önemli endişeler dile getirmişlerdir. Hem kişisel yaşamlarında hem de eğitim bağlamında dijital platformlara olan güvenlerini etkileyen rıza eksikliği, şeffaflık eksikliği ve artan gözetimin kapsamı konusunda korkuları olduklarını belirtmişlerdir.

Katılımcılar, yükseköğretimin dijitalleşmesi ve verileşmesinde kurumsal varlıkların artan etkisi ve kontrolü konusunda endişelerini bildirmişlerdir. Bu etkinin, eğitim kaynaklarının ticarileştirilmesi, öğrenci verilerinin kâr amacıyla kullanılması ve eğitim eşitsizliklerinin potansiyel olarak daha da kötüleşmesi gibi çeşitli şekillerde ortaya çıktığını gözlemlemişlerdir.

## **Farkındalık**

Son tema olan "Farkındalık", katılımcıların yüksek öğrenimde dijitalleştirme ve verileşmenin dikkatli ve amaca uygun kullanımına olan vurguyu göstermektedir. Genel olarak, katılımcılar dijital ve veri araçlarının önemli faydalar sağlayabilmesine rağmen, sorumlu ve düşünceli bir şekilde kullanılması gerektiği konusunda hemfikir ve bu da eğitim uygulamalarına bilinçli entegrasyonun önemini pekiştirir.

## **İkinci Araştırma Sorusu**

Bu araştırma sorusu, katılımcıların yükseköğretimin dijitalleşmesi ve verileşmesiyle ilgili deneyimlerini ortaya çıkarmayı amaçlamıştır. Katılımcıların cevaplarının yo-

rumları, "Amaç", "Azalmış İş Yükü", "Kişisel Seçim", "Az Kullanılma", "Artmış İş Yükü ve Baskı", "Öğrenci Direnci" ve "İnsandışılaştırma" olmak üzere yedi ana temayı ortaya çıkarmıştır. Katılımcıların verdiği yanıtlar, katılımcıların genel olarak dijitalleşmiş ve verileşmiş araçları ve sistemleri farklı amaçlar için kullandığını ortaya koymuştur. Giderek dijitalleşen ve verileşmiş bir yükseköğretim ortamında İngilizce öğretmenleri olarak yaşadıkları deneyimler, i) iş yüklerinin farklı zamanlarda hem azaldığını hem de arttığını, ii) kurumlarındaki dersleri üzerinde tam kontrole sahip olduklarını, iii) kurumlarında dijital araçların yeterince kullanılmadığını, iv) zaman zaman öğrencilerden direnç gördüklerini ve v) artan dijitalleşme ve verileşmenin öğretim deneyiminin veya ilgili aktörlerin insanlıktan çıkarılmasına yol açabileceğini göstermiştir.

### **Amaç**

Bu araştırmadaki "Amaç" teması, yükseköğretimde dijital araçların ve veri toplamanın arkasındaki gerekçeyi ifade etmektedir. Bu tema üç alt temaya ayrılmıştır: "İzleme", "Gözetmenlik" ve "Pedagojik Kullanım".

Katılımcılar, kurumlarında veri toplamanın asgari ve geleneksel olduğunu, çoğunlukla devamsızlık gibi temel ölçütlere odaklandığını bildirmiştir. Toplanan verilerin öncelikle eğitim ortamını geliştirmek için kullanıldığını ve kurum içinde güvenli bir şekilde saklandığını açıklamışlardır. Bu, veri analizinin dahili olarak yapıldığını ve verilerin üçüncü taraflarla paylaşılmadığını belirten diğer katılımcıların deneyimleriyle tutarlıdır. Dijital araçlar sıklıkla pedagojik amaçlarla kullanılmıştır. Bu kullanım sınıf içi veya derse hazırlık gibi sınıf dışı olarak gerçekleşebilmektedir. Dijital platformlar üzerinden gözetmenlik, pandemi sırasında özellikle kullanılmıştır ve kurumlar sınavları izlemek ve akademik dürüstlüğü sağlamak için çeşitli dijital araçlara güvenmiştir. Genel olarak, katılımcıların deneyimleri dijital araçlara ve veri toplama karşı temkinli ancak pragmatik bir kullanımı yansıtmaktadır.

### **Kişisel Seçim**

"Kişisel Seçim" teması, katılımcıların kurumlarında dijital araçları ve pedagojik uygulamaları seçmede özerkliği nasıl deneyimlediklerini vurgulamıştır. Tüm katılımcı-

lar, sınıflarında uygun gördükleri araçları seçme ve uygulama özgürlüğüne sahip oldukları konusunda hemfikirdir. Bu özerklik, onların profesyonel kimlik ve kontrol duygusunu güçlendirmektedir. Genel olarak, katılımcıların çalıştığı kurum İngilizce öğretmenlerinin profesyonel özerkliğini desteklemektedir ve dijital araçları özgürce seçmelerine ve kullanmalarına izin verir, bu da profesyonel kimliklerini ve inisiyatif duygularını güçlendirmektedir.

### **Az Kullanılma**

"Az Kullanılma" teması, katılımcıların kurumlarında dijital araçların ve sistemlerin yetersiz kullanımı hakkındaki görüşlerini yansıtmaktadır. Katılımcılar, kurumlarının ve Türkiye'deki daha geniş eğitim bağlamının dijitalleşme ve verileşme konusunda geride kaldığına dair ortak bir duyguyu ifade etmiştir. Hem kurumun hem de Türkiye'nin bir bütün olarak gelişen eğitim eğilimlerine uyum sağlamada başarısız olduğuna ve Avrupa ve ABD gibi bölgelere kıyasla geride kaldığına inanmaktadırlar. Genel olarak, katılımcılar öğretimlerinde dijital araçları kullanma konusunda özgürlüğe sahip olmalarına rağmen, kurum ve ulusal bağlamın dijital gelişmeleri tam olarak benimsemediğini düşünmektedirler. Küresel eğitim eğilimleriyle uyumlu hale gelmek için daha fazla dijitalleşmeye doğru bir kaymayı savunmakta ve mevcut dijital entegrasyon düzeyinin yetersiz olduğuna inanmaktadırlar.

### **Azalmış İş Yüğü**

"Azalmış İş Yüğü" teması, katılımcıların dijital araçların ve sistemlerin öğretimle ilgili görevlerini nasıl azalttığına dair deneyimlerini yansıtmaktadır. Üç katılımcı da artan dijitalleşme nedeniyle hem sınıf içinde hem de dışında daha az iş yaşadıklarını bildirmiştir. Bunun yanı sıra, çalıştıkları kurumun onların iş yükünü azaltmak için öğrencilere dijitalleşme ile ilgili bazı ekstra bilgiler verdiğini anlatmışlardır. Kişisel tercihleri ile kullandıkları araçların ve sistemlerin hayatlarını kolaylaştırdıklarını vurgulamışlardır.

### **Artan İş Gücü ve Baskı**

"Artan İş Yüğü ve Baskı" teması, katılımcıların yükseköğretimde dijitalleşme ve verileşme nedeniyle karşılaştıkları zorlukları vurgulamaktadır. Bir önceki kısımda iş

yüklerinin azaldığından bahsetmişken, burada bazen tam tersini yaşadıklarını da belirtmişlerdir. Katılımcıların cevapları, özellikle pandemi zamanı gibi dijital araçların kullanımını zorunlu kılan durumlarda iş yüklerinde ve hissettikleri baskıda bir artış olduğunu göstermiştir. Bu da, dijitalleşme ve verileşme trendlerinde, ana aktörlerin karar alabilme mekanizmalarının önemini vurgulamaktadır.

### **Öğrenci Direnci**

"Öğrenci Direnci" teması, öğretmenlerin dijital araçlar ve uygulamalar konusunda öğrencilerden gördüğü direnci anlatmaktadır. Katılımcıların paylaştığı örnekler, bazı öğrencilerin kişisel verileri içeren dijital uygulamalara karşı hissettikleri rahatsızlığı ve isteksizliği vurgulamaktadır. Öğrencilerin endişelerini dinleme ve yöntemlerini ayarlama istekleri, güven ve saygıyı teşvik etmekte, bu da öğrenci-öğretmen ilişkisini geliştirebilir ve öğrencilerin öğrenmelerinde özerkliklerini desteklemektedir. Bu özellikle de herkesin yetişkin olduğu yükseköğretim bağlamında ekstra önem taşımaktadır.

### **İnsandışılaştırma**

"İnsandışılaştırma" teması, katılımcıların öğrencileriyle kişisel bağlarını kaybettikleri veya mesleklerinin insani yönlerinde bir düşüş algıladıkları anları belirtmektedir. Katılımcılar, özellikle pandemi esnasında zorunlu online eğitimde bu negatif hissi yaşadıklarını anlatırken, bu anlatımları İngiliz dili öğretimi mesleğinin dijitalleşme ile ne denli negatif etkilendiğini ve önemli özelliklerini yitirdiğini göstermektedir.

### **Üçüncü Araştırma Sorusu**

Bu araştırma sorusu, katılımcıların yükseköğretimin dijitalleşmesi ve verileşmesiyle ilgili olarak mesleklerinin değişen manzarasına ilişkin kavramlarını ortaya çıkarmayı amaçlamıştır. Katılımcıların cevaplarının yorumları, "Kaçınılmazlık", "İnsan Dokunuşu" ve "Olumsuz İtibar" olmak üzere üç ana temayı ortaya çıkarmıştır. Katılımcıların verdiği yanıtlar, onların şu görüşlere sahip olduğunu göstermektedir: i) İngilizce Öğretmenliği mesleğinin ve yükseköğretimin dönüşümü kaçınılmazdır, ii) insan do-

kunuşu hala gereklidir ve yeri doldurulamazdır ve iii) artan dijitalleşme ve verileşme ile bunların neden olduğu değişimler, toplumda mesleklerinin olumsuz bir üne kavuşmasına yol açabilir.

### **Kaçınılmazlık**

"Kaçınılmazlık" teması, katılımcıların yükseköğretimde ve İngilizce öğretmenliği mesleğinde dijitalleşme ve verileşmenin kaçınılmaz doğası konusundaki fikir birliğini yansıtmaktadır. Hepsi bu değişimlerin sadece olası değil, aynı zamanda gerekli olduğunu kabul etmektedir. Bunun yanı sıra, öğretmenlerin ve özellikle de İngilizce öğretmenlerinin küresel değişikliklere açık olup, sürekli değişen dünyaya adapte olmaları gerektiğini savunmaktadırlar. Adapte olamayan öğretmenlerin, meslekte yer bulamayacağını ya da çok zorlanacağını belirtmişlerdir.

### **İnsan Dokunuşu**

"İnsan Dokunuşu" teması, katılımcıların eğitimde dijitalleşme ve verileşmenin yükselişine rağmen, öğretimin kişisel, insani yönlerinin yeri doldurulamaz olduğuna olan inancını belirtmektedir. Katılımcılar, eğitimde insan profesyonellerin gerekliliğini vurgulayarak, onu yönlendirecek ve yönetecek bilgili bireyler olmadan teknolojinin tek başına yeterli olmadığını ileri sürmüşlerdir. Sadece algoritmalara dayalı karar alma eğiliminin artmasını eleştirerek, öğretimde insan unsurunun çok önemli olduğuna olan inancını vurgulamışlardır. Katılımcılardan Britney aynı zamanda artan dijitalleşmenin öğrenciler üzerinde iletişim ve bağ kurma gibi alanlarda soruna yol açtığını paylaşmıştır. Genel olarak, katılımcılar dijital araçların ve verileşmenin eğitimin ayrılmaz bir parçası haline gelmesine rağmen, empati, kişisel bağlantı ve profesyonel rehberliği kapsayan yeri doldurulamaz insan dokunuşunun öğretmenlik mesleğinin hayati bir bileşeni olmaya devam ettiğini vurgulamıştır.

### **Olumsuz İtibar**

"Olumsuz İtibar" teması, yükseköğretimdeki devam eden dijital ve veri dönüşümlerinin İngilizce Dil Öğretimi profesyonellerinin algısını nasıl olumsuz etkileyebilece-

ğini araştırmıştır. Katılımcılar, yapay zeka araçlarındaki gelişmelerin dil öğretmenlerini gereksiz kılabileceği konusunda endişelerini dile getirmiştir. Geri bildirim sağlama ve anlamlı sohbetler yapma gibi bu tür araçların yeteneklerini vurgulayarak gelişmelerin İngilizce öğretimini daha az gerekli hale getirebileceğinden endişe ettiklerini belirtmişlerdir. Ayrıca öğretmenler teknolojik gelişmelerle ayak uyduramazlarsa, mesleklerinin öğrenciler ve toplum gözünde saygınlığını kaybedebileceği konusunda uyarılarda bulunmuşlardır. Katılımcılardan Britney ise mesleklerinin yok olabileceği konusunda hemfikir olduğunu belirtmiş ancak bunu negatif görmediğini, önemli olanın öğrencilerin iyiliği olduğunu açıklamıştır.

## TARTIŞMA VE SONUÇ

Araştırma raporunun bu bölümü, bulguların tartışmasını sunup, alanyazın taraması içerisinde yorumlamaktadır. Tartışmalar ve yorumlamalar araştırma sorularına göre bölümlere ayrılmıştır. İlk araştırma sorusu katılımcıların yükseköğretimde artan dijitalleşme ve verileşmenin etkilerini nasıl algıladıklarını araştırırken, ikinci araştırma sorusu katılımcıların deneyimlerini sorgulamıştır. Son araştırma sorusu ise katılımcıların, mesleklerinin değişen durumu hakkındaki algılarını incelemiştir.

İlk araştırma sorusu incelenirken, katılımcıların hep olumlu hem olumsuz algılara sahip oldukları ortaya çıkmıştır. Bunun yanı sıra, katılımcılar farkındalığın önemine de vurgu yapmıştır. Başlangıçta, katılımcılar dijital araçlarla ilişkili çeşitli faydalardan bahsetmişlerdir. Bu araçları, öğretimi geliştiren, mesleki gelişimi kolaylaştıran ve hesap verebilirliği teşvik eden ek yardımcıları olarak tanımlamışlardır. Özellikle, dijital araçların fiziksel materyallere olan ihtiyacı en aza indirerek, platformları birleştirerek ve belirli sorumlulukları öğretmenlerden öğrencilere kaydırarak iş yükünü azalttığı görülmüştür. Örneğin, Courtney, dijital araçların sunabileceği erişilebilirliği ve verimliliği vurgulayan, otantik yazma materyalleri sağlamak için kullandığı bir web sitesinden bahsetmiştir. Ek olarak, katılımcılar dijital araçların öğrencilerin özerkliğini, güvenini ve sürekli öğrenme fırsatlarını artırmaya yardımcı olduğunu ve ayrıca ekstra pratik ve geri bildirim sağladığını belirtmiştir. Hesap verebilirlik temasında katılımcılar dijitalleşme ve verileşmenin nesnellığe, şeffaflığa ve dijital bir iz oluşturmaya katkıda bulunduğunu belirtmiştir. Courtney, dijital bir izin adını temize

çıkarmasına yardımcı olduğu kişisel bir deneyimi paylaşmıştır ve Britney, artan nesnelliğin ve şeffaflığın dijital izlemenin potansiyel avantajları olduğunu gözlemlemiştir. Dahası, araştırma, dijitalleşme ve verileşmenin İngilizce öğretmenleri için daha fazla mesleki gelişim fırsatı sunduğunu ortaya koymuştur, ancak Courtney bu fırsatların kalitesiyle ilgili endişelerini dile getirmiştir. Katılımcılar ayrıca, izleme ve veri toplamanın öğrenci ilerlemesini ve kurumsal analizi izlemek için gerekli olduğunu belirterek, dijitalleşmenin ve verileşmenin uyarlanabilir, bireyselleştirilmiş ve verimli öğrenme ortamlarını desteklediğine dair daha geniş iddiaları tekrarlamıştır (Alenezi, 2021; Alshumaimeri ve Alshememry, 2024; Beneito-Montagut, 2017; Lane ve Finsel, 2014; Luckin vd., 2016).

Ayrıca, dijital ve verileşmiş sistemlerin nasıl tamamlayıcı araçlar olarak hizmet edebileceği ve öğrencilere nasıl fayda sağlayabileceği tartışılırken, katılımcılar öğrencilerin özerkliğini artırmaya ve sorumluluğu öğretmenden öğrencilere kaydırmaya atıfta bulunmuştur. Bu, Biesta'nın (2019) eğitimle ilgili her şeyin öğrenme açısından yeniden tanımlandığı *learnification* tanımına bir örnek olarak düşünülebilir.

Farklı noktalarda katılımcılar, dijitalleşme ve verileşmeyle ilgili önemli endişelerini de dile getirmişlerdir. Gizlilik, kurumsal kontrol ve dijital sistemlerin uyguladığı baskı gibi konular vurgulanmıştır. Courtney, hem öğretmenler hem de öğrenciler üzerindeki artan baskı konusunda endişelerini dile getirirken, Britney ve Alice dijital araçların potansiyel kötüye kullanımı konusunda endişelidir, ancak Britney bu sorunları hafifletme konusunda iyimserliğini korumuştur. Katılımcılar ayrıca gizlilik konusunda da rahatsızlıklarını dile getirmiş, rıza eksikliği, şeffaflık ve artan gözetimin yanı sıra eğitim eşitsizliklerini daha da kötüleştirebilecek kurumsal çıkarların etkisinden bahsetmişlerdir (Romanova vd., 2020; Selwyn, 2024). Hartong (2016) tarafından açıklanan kurumsal etki ve kullanıcı verilerinin finansal sömürüsü sorunu, Britney'nin paylaşımlarında görülmüştür.

Katılımcılar ayrıca endişelerini literatürdeki daha geniş eleştirilerle ilişkilendirerek dijitalleşme ve verileşme politikalarının meşruiyetini ve altta yatan ideolojilerini sorgulama gereğini vurgulamıştır (Ljungqvist ve Sonesson, 2022; Williamson, 2017). Çalışmanın bulguları, veri gizliliği, önyargı ve eğitimin insandışılaşmasıyla ilgili

endişeleri dile getiren literatürle (Stewart vd., 2023) örtüşmekte ve eğitimcilerin dijitalleşmedeki hızlı değişikliklerden dolayı belirsiz ve tehdit altında hissetmelerinin daha geniş duygusunu yansıtmaktadır (Ball ve Savin-Baden, 2022).

Son olarak, katılımcılar dijitalleşme ve verileşmeye yönelik dikkatli bir yaklaşımın gerekliliğini vurgulamışlardır. Dijital araçların dikkatli ve bilinçli kullanımını savunan literatürdeki eleştirel duruşu tekrarlayarak, profesyonel temsilciliğin ve özerkliğin bu değişikliklerde etkili bir şekilde yol almak için çok önemli olduğunun altını çizmişlerdir (Atenas vd., 2023; Ball ve Savin-Baden, 2022; Castañeda ve Selwyn, 2018; Saltman, 2021, 2022; Williamson, 2017; Czerniewicz vd., 2023).

İkinci araştırma sorusu, katılımcıların yükseköğretimin dijitalleşmesi ve verileşmesi konusundaki deneyimlerini araştırmıştır. Bu inceleme, katılımcıların yanıtlarında yedi temel tema ortaya koymuştur. Genel olarak, çalışma, birkaç istisna dışında, katılımcıların notları ve devamsızlığı takip etme gibi yaygın uygulamaların ötesinde verileşme konusunda sınırlı deneyime sahip olduğunu bulmuştur. Benzer şekilde, dijitalleşme açısından, incelenen kurum, kullanılan dijital araçların sayısını veya türlerini artırma konusunda baskı uygulamamaktadır ve araç seçimini tamamen öğretmenlerin seçimine bırakmaktadır.

Katılımcılar, kullandıkları dijital araçların öncelikle gözetmenlik, ödev ve ek uygulama atama ve sınıf uygulamalarını geliştirme için olduğunu belirtmiştir. Takip etmeleri gereken veriler, esas olarak kurumsal analiz ve öğrenci katılımını ve performansını izleme amaçlıdır. Buna rağmen, kurumun geleneksel bir öğretim modeline bağlı kalması nedeniyle dijital ve veri odaklı araçların yeterince kullanılmadığına dair yorumlarda bulunmuşlardır. Kendi tercihleriyle kullandıkları araçlar ise genellikle katılımcıların iş yükünü azaltırken, tam tersi etkiyi hissettikleri durumlar da olmuştur. Ek olarak, katılımcılar dijitalleşme ve verileşme konusunda öğrencilerden zaman zaman direnç görmüşlerdir.

Bu çalışma, politika yapıcılar, şirketler ve danışmanlık şirketleri tarafından yönlendirilen yükseköğretimde artan veri toplama ve kullanımına doğru küresel bir artışı kaydeden araştırmalarda belirlenen daha geniş eğilimlerle çelişmektedir (Williamson

vd., 2020). Söz konusu kurum bu eğilimle uyuşmamaktadır çünkü veri toplama asgari düzeydedir ve tamamen kurum içidir. Öğrenme yönetim sistemlerinde bile dış kaynak kullanımı yoktur. Kurum yalnızca tanımlayıcı olmayan verileri toplamakta ve yalnızca güvenli portallar aracılığıyla kurum içinde paylaşılan temel analizler yürütmektedir.

Bulgular ayrıca, dijital araçların kullanımının öğretmenler için tamamen gönüllü olduğunu ve bu araçların benimsenmesi veya kullanımının artırılması için kurumsal veya ulusal bir zorunluluk olmadığını ortaya koymuştur. Bu özerklik, öğretmenlerin daha güçlü bir profesyonel kimlik ve inisiyatif duygusunu sürdürmelerine olanak tanımıştır; bu da dijitalleşmenin öğretmenlerin ve öğrencilerin kendilerini nasıl algıladıklarını ve başkaları tarafından nasıl algılandıklarını etkileyebileceğini öne süren literatürle uyumludur (Suoranta vd., 2022; Williamson vd., 2020). Dijital araçları benimseme baskısının olmaması, öğretmenler için daha destekleyici bir ortam yaratarak mesleki kimliklerini ve inisiyatif duygusunu güçlendirmektedir.

Katılımcılar, dijital araçların genel olarak iş yükünü azaltıp ek boş zaman sağlarken zorluklar da getirdiğini gözlemlemiştir. Örneğin, Courtney, Hillman ve Esquivel'in (2014) öğretmenlerin "uygulamaların ve platformların hat operatörleri" olabileceği gözlemini yankılayarak, çevrimiçi derslerin talepleri nedeniyle artan baskı ve iş yükü hissettiğini açıklamıştır. Ek olarak, katılımcılar öğrencilerin dijital araçlara karşı direnç gösterdiği durumları bildirmiştir, ancak öğrenci endişelerini ele almanın ve bu kararlarda karşılıklı güveni sürdürmenin önemini vurgulamıştır.

Ortaya çıkan önemli başka bir tema, özellikle pandemi bağlamında insandışılışmadır. Katılımcılar, ekranlara bağımlılık nedeniyle öğrencilerinden ve öğretim deneyiminden kopuk hissettiklerini anlatmıştır; bu duygu, literatürde ifade edilen eğitimin insanlıktan çıkarılmasıyla ilgili endişelerle örtüşmektedir (Daliri-Ngametua ve Hardy, 2022, aktaran Gezgin, 2023).

Özetle, incelenen kurumun verileşme ve dijitalleşme alanındaki daha geniş eğilimlerle sınırlı bir etkileşimi olmasına rağmen, katılımcıların deneyimleri bu uygulamalarla

ilişkili hem faydaları hem de zorlukları vurgulayarak, dijital araçların öğretim ve öğrenme ortamlarını nasıl etkilediğine dair ayrıntılı bir anlayışı yansıtmaktadır.

Üçüncü araştırma sorusu, katılımcıların yükseköğretimde dijitalleşme ve verileşme nedeniyle mesleklerinin değişen manzarası hakkındaki görüşlerini anlamaya çalışmıştır. Katılımcılar bu değişiklikler hakkında birkaç temel inançlarını dile getirmiştir: birincisi, mesleklerinin ve yükseköğretimin dönüşümünü kaçınılmazdır ve eğitmenlerin uyum sağlaması gereklidir; ikincisi, insan unsuru hâlâ önemlidir ve teknoloji bunun yerini tutamaz; ve üçüncüsü, artan dijitalleşme ve verileşme mesleklerine yönelik olumsuz bir algıya yol açabilir.

Katılımcılar, yükseköğretimin önemli bir belirsizlik ve değişimden geçtiğini kabul etmişlerdir (Czerniewicz vd., 2023). Mesleklerindeki ve yükseköğretimdeki dönüşümün kaçınılmaz olduğunu ve eğitmenlerin bu değişen koşullara uyum sağlaması gerektiğini belirtmişlerdir. Bu kabule rağmen, teknolojinin ve otomasyonun öğretimde insan dokunuşunun yerini tam olarak alamayacağını güçlü bir şekilde hissetmektedirler. Hatta bir katılımcı, artan dijitalleşmenin öğrencilerin duygusal kapasitelerini azalttığını vurgulayıp, teknolojinin insan yönleri üzerindeki etkisine ilişkin endişelerini paylaşmıştır.

Ayrıca, katılımcılar bu değişimlerin İngilizce öğretmenlerine yönelik kamu algısını nasıl etkileyebileceğini tartışmışlardır. Dijitalleşme ve verileşmeye artan odaklanmanın meslekleri hakkında olumsuz bir imaja yol açabileceği konusunda endişelerini dile getirmişlerdir. Bu olumsuz algı, İngilizce öğretmenlerini gereksiz olarak görme şeklinde ortaya çıkmıştır. Katılımcıların görüşleri, öğretmenlerin bu devam eden dönüşümler sırasında istihdam edilebilirliklerini, toplumsal saygılarını ve algılanan değerlerini korumak için daha çok çalışmaya zorlandığını göstermektedir. Bu görüşler, yükseköğretimin ve öğretmen emeğinin metalaştırılmasına ilişkin daha geniş endişeleri yansıtmaktadır (Castañeda ve Selwyn, 2018; Page, 2020).

Sonuç olarak, bu araştırma çalışması, katılımcılar olumlu ve olumsuz algılarını ve deneyimlerini yansıttıkça, yükseköğretimde artan dijitalleşme ve verileşmenin çift taraflı doğasını göstermektedir. Katılımcılar, dijitalleştirilmiş ve verileştirilmiş araç

ve sistemleri kullanmanın faydalarını gördüklerini kabul ederken, yönetilmesi gereken risklere de dikkat çekmektedirler.

### **Araştırmanın Etkileri**

Dijitalleşme ve verileşme, küresel olarak yüksek öğrenimi derinden etkilemektedir (Williamson, 2017) ve bu çalışma, İngilizce öğretmenleri, yöneticiler, politika yapıcılar ve öğretmen eğitim programları için birkaç önemli çıkarımı vurgulamaktadır. Öğretmenlerin dijital araçların ve sistemlerin çıkarımlarını daha etkili bir şekilde anlamalarını ve yönetmelerini sağlayan kritik dijital ve veri okuryazarlığına olan ihtiyacı vurgulamaktadır. Bu okuryazarlık, öğretmen adaylarını veri yönetiminin karmaşıklıklarına hazırlamak için müfredata dahil edilmelidir. Ek olarak, eğitmenlere ders tasarımı daha fazla özerklik sağlamak, daha güçlü bir profesyonel kimlik ve işlerine olan bağlantıyı teşvik etmektedir. Kurumlar, personellerini ve öğrencilerini etkili bir şekilde desteklemek için küresel eğilimler hakkında bilgi sahibi olmalı ve eğitim teknolojilerinin geliştirilmesinde etİge öncelik verilmeli, bu araçların oluşturulması ve uygulanmasında öğretmenlerin endişelerinin ele alınması sağlanmalıdır.

### **Çalışmanın Sınırlamaları ve Gelecekteki Araştırmalara Tavsiyeler**

Mevcut çalışmanın kabul edilmesi gereken birkaç sınırlaması vardır. Birincisi, bu çalışmada üç katılımcı vardır. Bu sayı bir IPA çalışması için önerilen aralıkta olsa da (Smith vd., 2009), daha fazla katılımcının olması farklı deneyimleri ve bakış açılarını ortaya çıkarabilirdi. Bu nedenle, gelecekteki araştırmalar daha büyük bir örneklem-den faydalanabilir. İkincisi, bu çalışma bir devlet üniversitesinde yürütölmüştür. Finansman, yönetim, öğrenci profilleri ve çalışma koşullarındaki farklılıklar nedeniyle, sonuçlar farklı üniversitelerde, özellikle de özel üniversitelerde büyük ölçüde farklı olabilir. Bu nedenle, gelecekteki araştırmacılar farklı kurumlara odaklanmayı seçebilirler. Üçüncüsü, bu çalışmada veri toplamak için yalnızca görüşmeler kullanılmıştır. Yarı yapılandırılmış ve derinlemesine görüşmeler IPA çalışmaları için önerilen araç olsa da (Seidman, 2006; Smith vd., 2009), gelecekteki araştırmalar gözlemler veya anlatı araştırmaları gibi farklı yollarla veri toplayabilir. Dördüncüsü, bu çalışma kesitseldir. Ancak, katılımcıların kendi alanlarındaki değişimleri nasıl gördüklerini de

anlamayı amaçladığından, gelecekteki arařtırmalar bu dönüşüme doğrudan tanıklık edecek ve bunu sunacak uzunlamasına bir çalışma yürütmekten faydalanabilir.



## APPENDIX G. THESIS PERMISSION FORM / TEZ İZİN FORMU

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**TEZİN ADI / TITLE OF THE THESIS (İngilizce / English):** AN INVESTIGATION OF ENGLISH LANGUAGE INSTRUCTORS' PERCEPTIONS AND EXPERIENCES OF DIGITALIZATION AND DATAFICATION OF HIGHER EDUCATION

**TEZİN TÜRÜ / DEGREE:** **Yüksek Lisans / Master** ☒ **Doktora / PhD** ☐

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