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THE PROMISE AND PERILS OF TRANSITIONING FROM ERT TO DISTANCE LEARNING DURING COVID-19 PANDEMIC:

A CASE OF A PRIVATE LANGUAGE SCHOOL IN ESTONIA

MA thesis

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ABSTRACT

This study aimed to empirically explore different dimensions of teachers' appropriation of technology during Emergency Remote Teaching imposed by worldwide pandemic (spring 2020-spring 2021) and to evaluate the current position of education and its participants in its relation to distance learning and to ERT and distance learning. Qualitative research was conducted as a case study by interviewing 7 teachers from Private Language School (Tallinn, Estonia). The results indicated that the teachers have mostly passed the ERT stage but yet haven't fully transitioned into Distance Learning mode due to the encountered barriers, therefore the current situation can be described as a transaction period from ERT to ERTE and later to distance learning.

Keywords: educational technology, appropriation, transitioning, ERT, ERTE, distance learning.

TABLE OF CONTENTS

INTRODUCTION

In the light of the current world situation and the consequent changes inflicted by the pandemic restrictions it became evident that the realm of education resulted to be one of the most affected areas of the social life. It manifested in the forced closure of educational institutions and consequent implementation of a remote teaching in virtual classrooms (Bozkurt et al., 2020). As the global epidemiological situation remained the same for more than one year, it caused significant and long-term changes in the educational system. In order to understand those changes this study will analyze the existing literature on the original perception of distance learning as well as the emerging frameworks discussing the current deviations.

This study aims to evaluate the scope of educators' technology appropriation during the transition period, to explore differences and similarities between the first and the second wave of technology mediated distance teaching and learning, and to consider teachers' stance regarding the current state of education. Moreover, based on the data obtained during the course of this study, important implications of the findings would be brought to light and suggestions for further research would be given. The motives of conducting this research can be justified with Canter's Theory of Assertive Discipline (Canter, 1988) as it indicates that the educator has the right to decide what is best for their students and any deviation and disruptions should be met with an assertive action from the educator.

The qualitative research is conducted as a case study. Two sets of semi-structured interviews are conducted with the 7 teachers from Private Language School (Tallinn, Estonia) over the course of 2020-2021 school year. The limitation of this study consists mostly of the limited scope of the research as it is localized in a private institution that has a narrow specialization in teaching languages.

THEORETICAL OVERVIEW

Historical Context of Distance Learning

Historically, distance education has a rather history that according to Spector et al., 2008 has been unfolding over almost two centuries. “[T]his time period represents significant changes in how learning occurs and is communicated. From basic correspondence through postal service to the wide variety of tools available through the Internet, society has embraced new forms of communication through the years” (Moore et al., 2011, p. 129).

In recent years a considerable interest in the topic has been shown, which has produced a growing body of research. Due to the diversity of different labels that have been used previously, in this literature review we will focus our attention on defining distance education, web-based instruction, e-learning and online learning which sometimes are used interchangeably (Anderson & Rivera-Vargas,2020).

Initially, “[d]istance education was […] defined as courses delivered or instruction that occurs when students are not present in the same room, which could occur synchronously or asynchronously” (McQuiggan, 2007, p 1). According to Conceicao, 2006 and Tallent-Runnels et al., 2006 this mode of education could include teleconferences, interactive TV, courses using videotapes or online courses.

Web-based instruction used to be thought of as a “hypermediabased instructional program which utilizes the attributes and resources of the World Wide Web to create a meaningful learning environment where learning is fostered and supported” (Khan, 1997, p. 6). Originally, this type of instruction is delivered to learners via a computer by using the Internet, which provides an opportunity of instant updating, distribution, and sharing of needed information (Rosenberg, 2001).

While Conrad, 2004 specifies that online courses are those that are delivered completely on the Internet platforms Benson, 2002 claims that online learning is a newer and improved version of distance learning.

Regarding the e-Learning Ellis, 2004 points out that it includes audio- and videotape, satellite broadcast and interactive TV streaming as well as it may cover content and instructional methods delivered via CD-ROM, Intranet or the Internet as Benson, 2002 and Clark, 2002 claim.

Previous Studies and Reviews on Distance Learning

For the purposes of this literature review, we would use distance education to refer to the abovementioned concepts.

The literature seems to agree that face-to-face teaching significantly differs from distance education (Kreber & Kanuka, 2006). This distinction has been addressed by developing pedagogies specifically for distance education (Laat, Lally, Lipponen, & Simons, 2007; Natriello, 2005).

Also, it has been underlined that "while the traditional roles of teachers can be transferred to the online environment, the affordances and limitations of the new learning setting require teachers to adapt to new roles for creating effective and meaningful learning experiences" (Baran, Correia, & Thompson, 2011, p. 425)

Over the years, a great number of the roles assigned to online teachers have been discussed and described in the literature under a variety of terms (Anderson et al., 2001; Berge & Collins, 2000; Coppola et al., 2002; Goodyear et al., 2001; Graham et al., 2001; Guasch et al., 2010).

Berge, 1995 defined one of the earliest models describing the teacher's role in an online environment as the one performing the following four functions – pedagogical, social, managerial and technical.

As it was discussed in the context of distance education, the pedagogical role was supposed to facilitate the learning in discussions. The function of the social role to encourage and promote collaboration between learners. Organization of the discussion was meant to be facilitated trough the managerial role. And, finally, technical role guaranteed the learners access to an easily manageable and understandable technological environment (Berge, 2009; Berge & Collins, 2000).

According to Baran, Correia, & Thompson, 2011 abovementioned roles were proposed when the participants of the teaching and learning process were just starting to use online environments and therefore online discussions were seen as the central activities. It has also been found that the

presence of the teacher had a significant effect on students' overall impression, their satisfaction with the learning process and their community spirit (Gorsky & Blau, 2009; Russo & Benson, 2005; LaPointe & Gunawardena, 2004).

Later on, in an effort to define online teaching roles and competencies, a group of researchers and practitioners described the main roles of online teachers: process facilitator, counselor, content facilitator, designer, technologist, assessor, manager and researcher (Goodyear et al., 2001). Aydin, 2005 pointed out several additional roles that online educators are performing, such as materials producer, content expert and instructional designer. Baran, Correia, & Thompson, 2011 summarize the preexisting research and highlights the following emerging roles of the online teachers according to their representation in the literature (e.g., Bawane & Spector, 2009): professional, pedagogical, social, evaluator, administrator, technologist, advisor/counselor, and researcher.

Natural Experiment

The events of 2020-2021 have provided us with a priceless opportunity to observe an unprecedented large-scale natural experiment that can be described as forced digitalization. "Natural experiments are defined by a shift in exposure that was caused by forces outside the researchers' control, but which may be used to infer the causal impact of these changes" (Thomson, 2020, p. 14). Generally, it is impossible to reach such a scope by the means of controlled and planned experiment. Natural experiments present a unique chance to witness temporary, cyclic, or permanent shifts that occur in ordinary life, experiences and habits due to external change in the conditions many of which may be harmful, and some can be beneficial. In either case, according to Thomson (2020), the consequences of these changes may provide critical information about how to improve certain spheres of our lives. In the light of this study, we will focus on education, and especially on the field of educational technology and distance education. As the aforementioned scholar suggests, "data must be rigorously collected, reported, integrated, and shared to capture the full repercussions of the global response to the COVID-19 pandemic" (Thomson, 2020, p. 16). In this case, this experiment has revealed the difficulties of the transaction period and the unrealistic expectations of reaching a utopian ideal of distance learning on a global scale.

Emergency Remote Teaching (ERT)

Due to the global changes inflicted by Covid-19 pandemic in early 2020, the educational system was also highly affected and had to either stop its activity or switch to the online platforms in order to keep delivering the lessons (De Giusti, 2020). Even though technology has provided the educators with the opportunity to continue teaching during the spring semester of 2020, that was not a proper online learning, but rather an "emergency remote teaching" (Schlesselman, 2020). As Bawa, 2020 highlights, Emergency Remote Teaching (ERT), essentially means shifting courses originally designed to be face to face to alternate or online delivery modes, in order to provide instruction during a critical situation, until the crisis has subsided. Bawa's definition of ERT gives a clear distinction between ERT and distance or online education environments in order for these terms not tos be mistaken for synonyms. This distinction has addressed the skepticism and potential doubts with regards to comparing face-to-face to distance education (Butz et al., 2014; Hodges et al., 2020; Wilson & Allen, 2011; Wolff et al., 2014).
Distance or "online" learning is a complex process which requires specific preparations in terms of developing, analyzing and implementing the courses and programs. Each of the processes that were mentioned earlier requires a significant amount of time to accomplish.

> Because it has been around for decades, it has evolved and morphed into a multidimensional procedure that needs meticulous planning, evolvement, and evaluation. It is aimed to provide meaningful learning experiences to students who may not otherwise have the option to attend college, due to personal or professional responsibilities. Students of distance/online courses and programs usually choose to join voluntarily, and designers of such programs purposefully plan for them to be online from the start (Bawa, 2020).

On the contrary, emergency remote teaching, as the name implies, is a response to an emergency or crisis situation in which teaching and learning process has been moved to alternative environments until the external situation normalizes. After crisis is averted or ended the schooling process is supposed to go back to was it was before. Therefore, the set of skill required to operate in an emergency remote teaching situation is not the same one that is required for operating in distance learning environment. To a high extend this is due to the fact that during the ERT educators apply numerous practices and features taken from face-to-face teaching via

alternative methods of delivery. That does not happen with the distance learning as it operates on completely different set of rules and educators' skills (Hodges et al., 2020; Bozkurt et al., 2020). According to the De Giusti (2020), from the very beginning of the pandemic, "teachers were immediately tasked with implementing distance learning modalities, often without sufficient guidance, training, or resources. […] In many contexts, teacher professional development has moved online or been disseminated via telephone and video applications, but marginalized teachers may have missed out on such support. Web-based class meetings and messaging applications have become useful tools and new ways of communicating with their learners and the education community. Teachers across the globe were largely unprepared to support continuity of learning and adapt to new teaching methodologies" (De Giusti, 2020, p. 14). Adequate infrastructure and connectivity were available to the educators and their students, many educators were reported to "lack the most basic ICT skills, meaning they [would] likely struggle with their own ongoing professional development, let alone with facilitating quality distance learning" (De Giusti, 2020, p. 15). Nonetheless, the confusion regarding the terms is still present among general public, which is reflected through social media coverage (ERR News, 2020).

After undergoing this turbulent switch and analyzing both the educators' response and the further possibilities in terms of coping with the crisis the educational system was facing, a new brunch of research has emerged. It also became clear that this global crisis has highlighted the need for reformation both in the initial teacher education and the in-service one in order to train the educators in new methods of education delivery (De Giusti, 2020).

The study proposed the plan of actions for the educators in case the crisis does not subside by the beginning of the fall 2020 semester. It included the list of recommendations regarding adjustments of the preparations that the educational institutions and the educators needed to consider.

As Schlesselman (2020) highlights, the mode of instruction that used to be acceptable during the emergency remote teaching is not a suitable long-term solution. "Rather than attempting to replicate face-to-face lectures using technology, quality online courses require engaging students with the content, fostering collaboration, and creating community" (Schlesselman, 2020, p. 1043). According to De Giusti (2020) underlines, that the teachers' improved ICT competence and skills alone cannot guarantee good learning outcomes, as "[d]igital solutions need relevant

content, adequate instructional models, effective teaching practices, and a supportive learning environment" (De Giusti, 2020, p. 24). The author also emphasizes that educators' continuous professional development is a key component to ensure that teachers are adequately qualified and prepared for accomplishing this new task. Moreover, it is accentuated that the policymakers should also reinforce support systems for educators in order for them to safely and successfully make good use of technology for enhancing teaching and learning processes.

Emergency Remote Teaching Environment (ERTE) Framework

Another valuable discovery that was made by the scientific community is the novel ERTE framework. This Emergency remote teaching environment puts "its emphasis on shifting constants and variables rather than planned pedagogy and is specifically for use in unplanned or responsive remote teaching situations" (Whittle et al, 2020, p. 311)

Inside this framework there is one crucial topic that was brought to the discussion by the scholars – the inadvertent obfuscation of learning goals. The authors emphasize that "[d]uring COVID-19, participants experienced a focus on the method of delivering instruction rather than the learning goals, leading to uncertainty around assessment for both teacher and student. The emergent theme of the *instability of expectations* highlights the importance of a step that is normally "assumed*"* in lesson design" (Whittle et al, 2020, p. 315).

Another crucial idea is stated by Garrison and Arbaugh, 2007 who claim that disruptions to learning can be caused when new technologies are being introduced into the teaching and learning process without adjustment and a proper instruction period. To support this point let us turn to the observation provided by Whittle et al, 2020 is that "[t]eachers found the rapid introduction of multiple learning management tools disruptive rather than supportive, and participants describe their ERTEs as more successful when time is taken to teach required technologies" (Whittle et al, 2020, p. 315).

The major takeaways from Whittle et al, 2020 research in terms of the ERTE framework are the following parts:

Communication method implies that the "teacher must determine whether to use either synchronous or asynchronous learning strategies" while having learning goals in mind. It was

proven that with certain adaptations asynchronous learning can present a "valuable opportunity in many circumstances, contributing to the emergence of the synchronicity theme" (Whittle et al, 2020, p. 316).

Building agency describes an alternative format in which instead of being limited to lessons and arrangements that are chosen by the majority of the class, students are able "to pursue learning in their own homes and at their own pace might allow teachers to engage learners in topics and approaches of particular interest" (Whittle et al, 2020, p. 316).

Assessment that according to the ERTE framework was deprioritized in initial planning. In the cases when "assessment standards are determined by the administration, this framework suggests that the inquiry phase should incorporate a broadened perspective to identify assessment constants and design fair assessment standards aligned with these" (Whittle et al, 2020, p. 316-317).

Social role of the instructor refers to the social presence of the teacher in the online learning process and it is acknowledged to be beneficial to learning. Nonetheless, some educators indicated that due to remote teaching they saw their social contact with learners hindered and limited to "initial interactions with students increasingly defined by the academic relationship" (Whittle et al, 2020, p. 317). Other participants of the research viewed it as an opportunity to connect to students' parents.

Pedagogy and the student social role presume that the "students with an engaged social presence in online learning would report increased satisfaction" with their leaning experience as well as in the experimental "focus group, teachers observed a perceived negative impact on students who experience a sudden loss of classroom social engagement because of emergency online learning" (Whittle et al, 2020, p. 317). Although this framework does not recommend a specific pedagogical approach, it advises to use social-driven learning strategy.

Feedback is considered an important part of the teaching and learning process and therefore even when a sustained traditional communication is not available, "alternative feedback strategies, not connected directly to assessment, may need to be explored. These strategies include peer feedback, self-feedback and non-graded formative feedback" (Whittle et al, 2020, p. 318).

Aim of the Current Research

The aim of this study was to explore different dimensions of teachers' appropriation of the technology in the context of distance learning. This paper analyses the impact of reorganization on educators' teaching practices that occurred after the beginning of the emergency remote teaching. This research also aims to investigate how teachers articulate the similarities and differences between the 1st and the 2d wave of technology mediated distance teaching and learning. Moreover, current research is aiming to inquire about educators' wellbeing while being subject to technology mediated distance teaching and their estimation of the current situation in education. And finally, the aim of this study is to evaluate the current position of education and its participants in its relation to distance learning and to emergency remote teaching.

Research Questions

In order to do this, we have elaborated the following research questions:
RQ 1: To investigate the scope of educators' technology appropriation during ERT.
RQ 2: To explore differences & similarities between the 1st and the 2d wave of technology mediated distance teaching and learning.
RQ 3: To consider teachers' stance regarding the current state of education.

METHODOLOGY

Type of Research

The overall goal of the study is to explore the development of the ERT phenomenon and the teachers' adaptation to the new teaching reality through pedagogical appropriation of technology. As the field of appropriation of technology and the consequential reorganization of teaching and learning process is quite complex and contains different variables,
I decided to apply grounded theory as the methodological approach. This choice was made because it allows for both collecting rich data on a research topic and developing theories abductively. I found it to be the most suitable due to the fact that Dick (2005) highlights the fact

that grounded theory offers more freedom for the interpretation of collected data and permits adaptation as well as the emergence of a research methodology.

While choosing a strategy, I considered that relying on grounded theory was the best option due to the following factor: grounded theory can be used to modify existing theory, to expand on and uncover differences from what is already known (Cohen et al, 2007).

The research questions of this study focus on understanding how individual educators perceive the change, how they accept it and adjust to the new ways of teaching it has brought into the schools and what changes have they made to their teaching process in order to carry on.

The current research was carried out as a case study because this approach allows for involving an up-close, in-depth, and detailed examination of a particular phenomenon within a real-world context, which is taken as a whole (Bromley, et al., 1986).

The case study was focused on a private language school in a specific context (Tallinn, Estonia 2020) and was conducted in two phases:

1. after the first lockdown was over (early autumn 2020)
2. during the second lockdown (spring 2021).

Design

For data collection purposes I used semi-structured interviews with open-ended questions that were based on the previously done observations (Creswell & Creswell, 2018). An important factor in this study is that I myself am also directly involved with the organization. I am acting as **participant observant (**Moeran, 2007**)** of the research while at the same time a colleague to the interviewees. Therefore, I also had to consider the constantly changing conditions of the study due to epistemological situation in the country. Also, due to a very trusting and honest relationship between the researcher and the examinees, it was possible to appraise the whole process in depth based on various sources of information and perspectives such as interviews and observations.

Sample & Sampling

For the process of choosing the sample for the interviews, I made use of the fact that I myself am a part of the institution (the Language School) and I possess information that an external researcher wouldn't have.

Therefore, I took into consideration the comments and requests that have been brought up by the teachers during our weekly meetings (both during and post ERT) as well as I relied on the my general every day observations.

I chose my samples by means of the sampling strategies proper of grounded theory: "the researcher chooses participants who can contribute to the development of the theory" (Creswell, 2007, p.128).

Population

In order to avoid biases and background interventions I strived to provide maximum diversity by selecting my samples considering the following aspects:

1) the gender and age distribution of teachers (from 24 to 55 years old);

2) their background and previous teaching experience (all the interviewees proceed from different countries and do not have any shared background);

3) the representation of different subjects and the languages they teach (4 different languages and 7 different areas of teaching were represented);

4) the age and CEFR level of their students (the complete beginners, A1-C1).

In total I have selected and interviewed 7 teachers. As the number of interviewees is relatively small and specific to a particular context, in certain respect it is not representative enough and therefore generalizations on a broader scale cannot be made. Nonetheless, the data that was obtained during this research provides important insights into the understanding the factors influencing the processes that have been studied and thereof provides the basis for further research.

Data Gathering Procedure

Instrument development

As I was am part of the school staff, I had an opportunity to witness the ERT situation unfold and based on the analysis of my observations of teachers' responses to the ERT situation collected throughout the spring semester and during the early autumn of 2020 together with my supervisor who took part in this project as a second researcher we have elaborated the first questionnaire. Please, see table 1 in the Appendix.

In order to compile the first questionnaire, we, together with my co-researcher who was involved in this study, and consulted have analyzed the data that was previously collected by me during my daily observations of our school activity and teachers' response to it. We have decided to focus on the teachers' experience and feelings regarding the following points: a) general questions about teacher's background; b) the most significant changes they experienced the reorganization of the teaching and learning process; c) the main things they had to change about their teaching style and its consequent effect on the teaching and learning process; d) which of those novelties did they like and wanted to make part of their future teaching practice; e) which of those novelties they didn't like and did don find suitable for their future teaching practice; f) their working environment and the way it helped or hindered their progress.

After conducting the first phase of the interviews, we have come up with several presuppositions - intermediate guesses - that were formulated by us while conducting the research and which were the basis for further action. Thus, we together with my co-researcher have formed the second questionnaire focusing on the teachers' expectations and possible preparations for facing the second "wave" as well as on the differences and similarities between Spring 2020 and Spring 2021. Please, see table 2 in the Appendix.

Instrument description

During the two sets of interviews, the data saturation point – "the point in category development at which no new properties, dimensions, or relationships emerge during analysis" (Strauss & Corbin, 1998, p.143) – has not been reached, as it was expected. On the contrary, we obtained a variety of perspectives, which enabled us to explore the way in which emergency remote teaching was adapted and experienced by the teachers.

Validity and reliability

As these questionnaires were an instrument to explore how they coped with the situation, the main criteria for measuring validity and reliability were whether or not the interviewees would easily understand the questions.

In order to evaluate how effective and clear those questionnaires where we have decided to test it on several teachers (they were not included in the study) in the same school where my interviewees were from. The corrections were made and the questionnaire was refined. After making sure the questionnaires were fully operational and were providing us with clear and reliable data, we proceeded with the data collection.

Collecting information

Once we made the final version of the questionnaire #1, I have proceeded by introducing the goal, the concepts used in the study and the procedure including the instruments of the study to all of the abovementioned teachers. All 7 of them found this topic very relevant and useful and willingly agreed to take part of the research and contributing as much as they could. Throughout the entire duration of the research my colleagues were very helpful, supportive and cooperative.

Interviews

I decided to collect my data by conducting semi-structured interviews as this method resulted to be the most appropriate due to the several reasons. First of all, as semi-structured interviews are often preceded by observation, informal and unstructured interviewing that allowed me as the researcher to develop a keen understanding of the topic of interest which is essential for elaborating relevant and meaningful semi-structured questions. Secondly, as my colleagues had very limited time I as a researcher had to make sure that to collect all the relevant data without putting too much limit on the way they are responding. In such a case the semi-structured interview questionnaire is a perfect solution as it: a) provides a clear set of instructions for the researcher to be able to collect reliable, comparable qualitative data; b) presents the opportunity to follow relevant topics that may stray from the discussion and therefore help to identify new ways of seeing and understanding the topic at hand; c) motivates and invites the responders to elaborate on each topic as freely as they choose to (Rubin & Rubin, 1995).

The semi-structured interviews for this research were conducted in a face-to-face setting in two phases. The interview was built up as a conversation, following the indications about qualitative interviews of several authors such as Kvale (1996); Rubin & Rubin (1995); Witzel (2000).

During the first phase I will ask 1) about their experience while teaching under the restrictions in the spring of 2020, 2) to reflect whether it was a successful experience or not, 3) to specify whether they would like to keep any of the newly acquired practices in their further teaching process.

During the second phase I will ask the teachers to 1) describe their expectations and the changes in their preparations for the fall semester, 2) reflect on the differences/ similarities regarding their teaching practices during the spring 2020 and the fall 2020 semesters, 3) express their thoughts and wishes concerning those things that could have been done differently.

Data Analysis Procedure

After conducting the interviews, I will conduct a thematic analysis of the collected data in which I will specify the most relevant and common threads for further qualitative analysis and discussion.

The interviews length varied from 25 to 60 minutes making it approximately 45 minutes per respondent for both interviews. All interviews were audio-recorded with a smartphone recorder. After all the interviews were conducted, I proceeded with transcriptions.

After I listening to the all the recordings for several times, I proceeded with selecting the segments of the interviews for transcriptions. As transcription does not have be an exhaustive representation of all the details of the discussion, a selective reduction of the data can be chosen and thus should be done in such a way that it preserves the possibility of different analyses and interpretations (Ehlich, 1993). It is worth mentioning that my interviewees preferred different languages to be used during our discussion, namely English and Russian. For transcribing and editing English text I have used an application called Descript. For working with the Russian text opted for a manual transcription followed by my translation of that transcript into English.

After transcribing, I applied a coding system and proceeded by analyzing the data by means of a grounded theory-based approach (Strauss &Corbin, 1998). A systematic design in grounded theory is broadly applied in educational research and consists of three stages of coding, namely open coding, axial coding, and thematic coding (Creswell, 2012, Strauss & Corbin, 1998).

In the first stage of coding, open coding, I constructed initial categories of information about the studied subject by segmenting the collected data, identified the codes – key words – and tagged

them (Creswell, 2012). Axial coding stage comes after the open coding (Creswell, 2012). For this stage I chose the codes which I had previously marked during the provisional coding and related them with their corresponding categories and subcategories. During the last stage of coding, the thematic coding, I carefully examined previously categorized codes in order to identify the existing links between specific topics.

Key Terms Used in the Current Work

Throughout this paper, the term 'ERT' will refer to Emergency Remote Teaching, while "ERTE" will be used for discussing Emergency Remote Teaching Environment Framework.
It is necessary here to highlight that only in the Results chapter terms "online teaching", "online mode", "online" and "distance learning" will be used interchangeably and will refer to the new technology mediated mode of teaching that the educators had to start using from the beginning of spring 2020 till today.

RESULTS

The purpose of this research was to analyze the impact of reorganization on educators' teaching practices that occurred after the beginning of the emergency remote teaching.
The researchers also aimed to investigate how teachers articulated the similarities and differences between the 1st and the 2d wave of technology mediated distance teaching and learning.
Moreover, current study was aiming to inquire about educators' wellbeing while being subject to technology mediated distance teaching. And finally, the aim of this study was to evaluate the current position of education and its participants in its relation to distance learning and to emergency remote teaching. In the following section I present an overview that based on the research questions in which the results are presented in a story line that connects the categories (Creswell, 2007), as context in this research is one of the essential components (Firmin & Genesi, 2013). The results are illustrated by quotations from interviews to which comments and clarifications in brackets were added where it was needed. The prime findings are marked in bold.

In order to understand and appreciate the processes that the interviewees were undergoing, I consider it to be of highest importance to start this chapter by presenting the main findings regarding the changes the teachers had to make to their teaching practice in order to adjust it to a new teaching mode. As mentioned above, all the references to "online" or "distance" teaching in this chapter are according to the common understanding of the phenomena, namely the emergency transferring of teaching and learning process into the technology mediated environment.

Technology Appropriation Difficulties

In the continuation are listed the common features that all 7 interviewed teachers found relevant and representative of the reorganization period (from Spring 2020 until Spring 2021).

As **none of the participants had any previous experience with online teaching mode**, they all found themselves in need of finding the solutions as they go. The initial switch was abrupt and unexpected, all the teachers in out institution were notified only several hours before the beginning of the school day that the students were not coming to school premises and teaching had to be done **online in a synchronous way**. In terms of instructions, they have received a suggestion to transfer the materials into a PowerPoint presentation and they were also given a brief handout regarding how to operate the Google Meets platform (how to start a meeting, how to add participants and how to share the screen with them). Also, they had access to the school's IT support system and if something needed to be urgently fixed there was a person to do that for them. Apart from that they have never received any additional training on the variety of tools or their possible meaningful usages during the online teaching mode. Anything additional they were using during their lessons was exclusively due to their own findings.

> Well, I'd be optimistic. I think it's a passing thing. I think it will eventually go away. But while it's still going on, **we have to do the best job possible and adapt to it and be as creative as possible**. And I think it's been relatively short. To become really good at something you need more than three, four months. **I think everyone was basically just learning on the job**.

Nonetheless, all respondents have encountered **technology appropriation difficulties** and found themselves in need of additional trainings and instructions. Based on how techno savvy they

considered themselves their requests varied. The one respondent who had the most struggles commented on the situation in the following way:

> I think that could be **more support in terms of teaching people, how to use technology**. How about using this? This is how you do it. Cause I can look into it. I can Google it. I can go through it, but I'm still not clear on how it works, if it goes wrong. Cause you know, it's learning styles. Some people are quick. They're very good with technology. Some people aren't very good. I wasn't very good. And so, **it needs to be taught, mythologically by steps slowly, patiently**. But instead, you just get: "okay, it's easy to just do this". So, **you need a person explaining** you don't need the guides. [If it is] the paper [that] would be fine if it's clear, if it's free of jargon, if it's easy to follow, if it's user friendly. The one we got was full of jargon.

The other four agreed that they were content with the instructions given and were mastering the skills needed to use the offered technology efficiently to meet their own needs. And the last two respondents said that they had no problems looking for additional information on the forums, Facebook groups, by watching the university lectures and by reading the latest articles on the topic.

However, all the respondents mentioned that another problem they have been encountering daily was **the need to help their students to solve their technical problems**. Therefore, in addition to all the preparations for the lesson, by all the interviewees technical problems were added to the list of the items that should be accounted for:

> "Not only I needed to take care of my own equipment, but also I needed to help my young students solve their problems without actually seeing what was going on there on their screen."

Constant search for a suitable digital solution

The switch towards the computer mediated teaching and learning has completely changed the practice of the interviewed teachers, as they had to redo, restructure and completely reorganize the practices, methods and approaches they used to use previously.

First of all, **communication** between the instructor and the students **has suffered**:

> "Uh, they tell me: *"*teacher, I choose the right picture, the picture on the right*"*. What do you mean top right? Or bottom right? I don't understand. Okay. Let's go through it again."

Games, interactive activities that requires the student to be physically present in the classroom and that would allow teacher to interact directly with the student due to the change of mode needed to be either completely erased from the program or to be changed into something much less interactive and interesting for the students:

> I had to come up with some games. Well, I kind of improvised, but still like tried to adjust to the games that I was using in actual classroom. Like [we used to play with] balls sometimes, but [some] games, for example, memory games, when I have them all repeat word of comfort and it makes it personal. So, I had to turn on their microphones and then it's took maybe more time. I guess these games **were not as engaging as they were inside the classroom. Many of them didn't work at all**.

As **the majority of the previously perfected activities became useless**, some teachers saw the need to change even their teaching approach, it was almost only the solid material that the teachers were left with and the urgent need to transform it into a more age and situation adequate format:

> "I had to totally redo, rethink and readapt all my teaching approaches and techniques in order to make it suitable for the online environment."

The **manual activities have almost disappeared** due to the lack of physical presence:

> So, if we're in the classroom, I would just do something more like arts and crafts or something that they have to write with the hands, um, because during all their lives they will write and they have to know how to write, um, typing on the keyboard is easy because it shows them their mistakes. However, when they make mistakes and they see that I correct them, they're expected to learn more. I think, also they can draw, they can be creative, they can cut. They can act. So, it's managed more like a project [while we are] online and I didn't see how it can work.

Group work or pair work was not always an option either due to the limitations of the online environment:

> It's difficult for them to do some pair work, some group work. **If two of them talk at the same time it's already a lot of a mess**. So, we cannot really hear what they're saying or, you know, it creates a lot of noise for others. They also cannot hear what's going on.

5 out of 7 respondents found it impossible to use recently added option – breakout rooms – due to the following reasons:

> What's hard again is speaking, speaking together. You know, the chatrooms didn't work for me because **they just speak Russian**, because they're basically **unseen**. I've got to know what they're doing. You know, God knows what they're doing [in the breakout rooms], which sites they're going to.

Also, such a common thing as **student-centered environment has suffered**:

> So again, just a mono, just one [teacher talking]. I tried dialogues, but it just didn't kind of take off. There's probably a way of doing it. I'm sure there is, but I think it'd be useful for all of us to come together with all the teachers, discuss how we're dealing with this and share resources and ideas.

The interviewees acknowledged that their **time management** in the online classroom **got affected** as well:

> **It takes more time to do one activity**. Cause you're not there to see what this happening. You're not there to observe, to monitor them. So sometimes you can say, okay guys, are you ready? And they say nothing. So, you don't know if there is anything [going on] and you have to give them extra time. So this thing that I'm trying to say is that it takes more time.

Psychological and physical effects of distance learning on teachers

In addition to the aforementioned factors, all respondents highlighted the following as one of the main concerns – their psychological and physical state got highly affected by the situation as well:

> I am sitting in an empty classroom and it feels like kids are kind of here, but also, they are kind of not. **For me it is utterly hard, psychologically speaking, to deal with such a situation**. Also, it seems that the parents are always somewhere around and the kids have turned into silent angels, which is a totally opposite picture from the one I see in my classroom and that it is sort of unsettling.

I hate sitting down at a desk. It was my former job and I left it for this a reason. Online means I'm back to seating behind it, **looking at a screen everything's kind of frozen for me.** Cause I'm not that kind of person.

Comparison of the Educators' Experience During Two Waves of Remote Teaching

In order to discuss similarities and differences the interviewed teachers have experienced during the first and the second wave of online teaching I would exemplify the common features expressed by all the 7 respondents. If it was a specific case, or just a few instances of a such, the number of respondents who identified themselves with it would be specified.

Differences

1. **(Un)expected scenario**

First of all, it is was clear from the interviews that the participants had a clear distinction between the two waves of technology mediated learning, as in the first case it was an absolutely unexpected situation, in the second case it was perceived both by teachers and students as the least desirable but a very plausible scenario:

a) During the first wave:

When it all [the first wave of pandemic] just started and our school was transferred into online teaching mode, I was panicking, I have never thought I would be teaching online and I had absolutely no clue on how to manage the situation.

b) During the second wave:

This year it was not a surprise unlike during the spring 2020, so we were more or less ready to continue in the same format, therefore the transition went more smoothly. It [the online teaching] did not get better, but at least it was already a familiar situation and we had an idea how to work with it.

2. **Assessment**

As it used to be quite difficult for the teacher to evaluate the accuracy of the completed task and therefore grade it due to several factors, the students' cameras were usually off, the microphones were used reluctantly and when they were asked to use the chat box to submit their answers there was a very high possibility of them copying the answers because according to the teachers' observations the accuracy level of weak students has drastically increased, but only during such kind of tests. Therefore, the following reflection:

> I just learned more about these tools that we have like snipping one [that I now use] for creating Google forms for assessment. Because last year **it was very difficult for me to assess** the students. Let's say for reading, or listening, or dictation, because they would just say we have it all correct, we got an "A". **It's more objective now, I guess**.

3. **Feedback**

As many of the international exams are still being held on-site and require handwritten parts, it is important to practice this type of activities with the students regardless the current mode of teaching. The feedback therefore became a big issue for the educators:

> If you work online, you don't have much choice: either your students send you the blurred low-quality photos of their poorly handwritten texts or you can go for digital format but even then you realize that when they go to the exam this kind of "digital practice" would not be of much help for them. Another point is that these types of writing activities should be checked, discussed and corrected right after completing the task, which with the online mode is merely impossible.

4. **Operating digital tools**

Regarding the improvement in operating the digital tools during the second wave of remote teaching I received three types of answers.

All of them are listed below in the following sequence:

a) first, the one of the interviewees that considered themselves to be a techno savvy person;

b) second, the teachers who managed to find solutions to their situations rather quickly and efficiently; c) third, the educators who mastered some approaches and tools presented by the administration yet, although rarely, but would experiment with the new ones from time to time;

and lastly, d) the respondent who was striving to use only those tools that were presented by the school administration and for which they had handmade manuals on their correct usage.

a) 1 out of 7 respondents:

I have always been good with computers and keen on learning more about its possible role in education so it was not a big deal for me to start using them for teaching during the first wave. **I also spent the summer analyzing the other teachers' experience** (of those who were involved in distance learning before it became the global reality and of those who were sharing their recent experience of coping with this switch that happened during the spring 2020). **I was also looking for other meaningful ways to better accommodate my teaching with the help of technology**.

b) 2 out of 7 respondents:

As this form of teaching and learning became the only one available not only here in Estonia, but all over the world, there was a rise in new platforms that got developed, new sites with the adapted materials and tasks, videos, games and explanatory lectures as well. All that was non-existent during our first encounter with the online teaching in 2020.

c) 3 out of 7 respondents

This year **it was easier for them to proceed with their teaching practice as they have already tried it once** during Spring 2020 and saw first-hand where the major problems could arise and had some idea how to overcome them:

If last year it was an incredibly stressful process and all the checking of the sound, microphones, arranging the setting seemed like a never-ending nightmare, this time it was much easier due to the fact that both I and my students were already familiar with the process. Moreover, you already have a bunch of tricks and games that you know for sure will work. So, it is easier in that sense.

d) 1 out of 7 respondents

As that person has never used technology for teaching, due to their personal teaching style they had to learn from scratch and now they claim to be **using only those tips that they**

know will work for sure. “Basically. It's just a survival mode from my point of view. Like you just scrambled something and you're just holding on to that.”

5. **Teaching outcome in the form of students’ progress**

3 out of 7 respondents confirmed that from their point of view this current yeah had a **greater negative effect on the students’ performance** even despite all the effort from both sides:

> I believe that for the students this year turned out to be worse than the last one because last year they only stayed online for just two months, and now many of them had to switch to online basically since the New Years, that means around half of the school year they had to stay at home and that resulted to be even more difficult for the students then for the teachers. I believe that in terms of the outcome and the results even though I gave them everything I could. I only could have given them more and better results could have been achieved only if they would have been present in the classroom.

6. **Acceptance**

All the participants of the teaching and learning process somehow **accepted the situation**, even though they admit it is not the best nor it is a desirable solution:

> “For me personally, and for children now, it's like, we all thought it would be temporary last year, but now we have to accept it as a new reality.”

3 out of 7 respondents also found the following statement regarding the technology use and the corresponding training relatable for it to be helpful and not hindering during their lessons:

> **I'm not quite sure, because I don't know what we can do with technology**. I guess you got to do whatever your idea is and you can find the way. I'm not really sure. Um, would it be a way of involving the kids, for example, in terms of video links? Like more interactive ways of them communicating visually for me so that instead of just sitting in the room and speaking. Is there a way of getting them to do something better than that?

Similarities

1. Extensive use of PowerPoint

Not all the students in our institutions have the books, as they used to be kept in the classrooms and given to the students before the beginning of each lesson. **PowerPoint presentations** used to be the main tool for structuring the lesson and still remains as such:

> Well in this school, [students] don't have student books. Right? And [in the classroom] I have to all the time distribute them. So, I had to find out a hint – I can upload things into PowerPoint. So that I could portray or the activities and exercises there for them to see.

Also, with the transition into the online mode, teachers got deprived of the option of using their whiteboards for explanations, as their laptop camera does not offer a high-definition quality of the video which means the students would not be able to see clearly. Neither could they use the e-board tools due to the fact that many of the students were joining the lessons via their smartphones with a very limited capacity and they would not have a fair chance of following the teacher's explanation on another tab or in another application simultaneously. And as two of the responders said:

> "I have to think through all the possible questions and doubts that my students might come up with during the lesson to put it all in the presentation beforehand."

2. Type of activities

All the responders that their lessons mostly became limited to **individual work**, with the only exception – adult learners:

> The only thing that I've kind of came with, [is that] we take turns, everybody takes their turn to speak or just to ask a question. **Like a dialogue, but not really valid one**. They just ask each other questions. But there is **no real interaction**. I think for me it's really hard to achieve that. I mean, yes, there are these breakout rooms, which is okay, but you cannot control it. I don't do it to be honest. So, I think these **breakout rooms** are more suitable for adults because you can trust that they are going to do the task, but for the younger students, this [tool] is less effective to be engaged, I guess.

Lack of socialization, **behavioral changes in the students**

All 7 interviewees have reported the same situation, they are concerned that they are **losing contact with their students**:

> "But online, you don't see them, **you don't see their reactions**. Microphones are off 90% of the time, cameras that are off 100% [of the time]."

That produces in the students the **growing feeling of isolation and alienation from the group**, causing difficulties in expressing themselves:

> The students became shy and very self-conscious about showing themselves on cameras and that is why they were almost never used. The **students became shyer in regards of asking questions or asking teacher for clarifications, they were much more timid in terms of uttering their suggestions and answers**.

The **students' motivation and engagement are dropping** due to the fact that many external supportive structures have been taken away:

> When they were all together in the classroom, they used to check with each other what they have done at home, share their projects and success and encourage each other to go on. During the distance learning this practice has totally disappeared.

3. **Permanent distractions**

All the responders have noticed constant distractions in terms of background noise which causes lower concentration in the students. **Lack of concentration due to external stimuli** (barking dogs, crying babies, arguing parents, tornado passing by, etc.) was not such a big issue when the teaching and learning process was done on-site:

> "Now the students run to the kitchen to grab a snack, they catch a cat and start petting it and showing it to everyone, they go to attend to their crying baby sister, etc., etc."

4. **Technology mediated distance teaching and its effect on educators' wellbeing**

Another important issue in this research was to explore how do the respondents describe their personal and professional experience while being subject to technology mediated distance teaching.

The first and the most repeated concept was the semi-permanent feeling of being upset or annoyed as a result of being unable to change or achieve something that was desirable for the person, that can be summarized as **frustration**:

> By the end of the semester the situation became more **frustrating** and I was losing my nerves. I haven't been prepared for **laptop [issues], the problems came up with the internet connection or network**. The problem is that also sometimes I think somebody had their [computer] crashing [during the lesson]. And then they had to switch it on again. It might just turn the whole day into a disaster and **throw me off like psychically** if I'm given an answer that, I can't see you very well or there is a technical problem. That kind of things **alienates me anyway.**

The second recurrent idea was the **total absence of control** as now the **student can chose not to be heard or seen**:

> I don't know. I'm just sitting at home. I hate that really. I cannot sit for a long time and when the children used to be here, I wouldn't sit, I was moving all around [the classroom]. I want to see their reaction. I want to see what they're doing, you know, things like that. So, when you're just sitting here, you don't have that much of control.

> Um, and also the worst part is the communication with the students, you know, this online thing, when you say "okay guys, we're going to turn on the microphones" and I see no microphone is turning on so it's like, okay guys… now you can turn your microphones off...

Another disturbing feeling expressed by the interviewees was distancing and losing the contact with the students, which from their point of view is considered and essential component of the lesson has disappeared, there was **no direct not verbal feedback and the teachers were feeling disorientated**:

> Looking at the screen was the poorest [experience] because none of them uses cameras. So, I rarely saw any of the students. **I want to see their emotions, their reactions. And that helps me to know whether they understood something and how well we did it**.

To the question what they had found missing they replied:

> …**just the reality of a classroom of people, you know, sitting in a classroom, moving around in a classroom, being emotionally involved with other people, socializing. Getting knowing me as a person, knowing each other as people that is invaluable, I think this is what education is all about**.

And finally, the common predominant feeling was that the educators sensed they were **underperforming**, as if they were not doing enough and even though they did everything they could, the results were far from ideal:

> I think that it got **boring both for students and for teachers**. I guess if you just sit in front of the screen and talk to a screen without seeing anything… like it is the most interaction that is happening between me and my students [right now].

They were feeling **guilty** for failing to reproduce the atmosphere they used to have in their classrooms, and therefore consider themselves as ineffective:

> You know, when, when you can laugh, you can just create an atmosphere, a positive atmosphere, but online, it's very difficult to create the atmosphere because you don't see them. You don't know their emotions, you don't, some of them even don't care, they play [video] games or something like that. So… So, **I became ineffective**, [I became] slower. **And the atmosphere wasn't as good as it's inside the classroom, at least in my case.**

Current Position of Education and its Participants Regarding Distance Learning and Emergency Remote Teaching Frameworks

All the responders agreed that this mode of teaching is **"a temporary thing**, for the students not to lose the thread of everything, not to waste time doing nothing, just to keep up, you know, **but in the long-term perspective it's not a good idea."**

It was not effective due to the fact that the teachers were not notified in advance regarding the expected dates and the duration of the remote teaching period. Thus, they were unable to plan long in advance and were later forced to redo and reschedule the plans they have prepared in the

beginning of the school year which needlessly added to the teachers' workload. Moreover, most of the learning modules of both on-site and online instructions could not be completed due to the urgent switches between the two which were done at a very short notice from the government:

> When you are writing a scheme of work for the entire upcoming year and even though you suspect that the online mode is going to be back at some point, as you are not given any directions in advance in terms of when and for how long it is going to be the case, you end up redoing the whole plan once the governmental announcement is out. So, it just adds a lot of unnecessary workloads and **does not allow you to properly finish your cycles as you can never guess whether the lessons are going to be on-site or online**.

The respondents suggest that the education system is still a transition stage and cannot be called online teaching in its original sense:

> I think that for it to be called proper online teaching **there should be special separate curriculum and special materials**, like for example interactive materials that students can use while staying at home for their studies. Right now, I cannot say that I have any of that as it is all limited to the workbook and some creative tasks (like some kind of arts and crafts projects) that they can do without my direct supervision. Therefore, no, I cannot say that we have reached the stage of proper distance learning, as again, I still use the books that require students to be in the same room as the teacher.

Currently **implemented online model is** also quite **inefficient** even despite the fact that all the participants of the teaching and learning process have reluctantly accepted it as the new reality:

> So, I think now it's **like a new normal**, which we actually don't like, but I think everyone already somehow adapted to it, especially students because they spend online whole day in their public schools this year. **I am afraid they can get fed up with that**. Then, in the future, if these things continue to be as bad for a long time, we might lose many students.

As young students were forced to stay at home in isolation for quite a long time all the interviewed educators who work with young people have admitted that some of the processes they have been working on started to go backwards:

> It's also difficult [for the students] when you ask and there are some open questions and they have to think about, and to give their opinion and all that. I think it's difficult because then **they're losing the sense of it**, I guess. I'm [not talking] just about English or education it's connected to their everyday life. If you just pull that information online, you don't think and you don't have anyone to exchange opinions with nor to hear other people's opinions.

Therefore, another idea on which all the interviewed teachers agreed was such type of learning can be adequate for the adult students as they have already acquired most of the necessary socialization skills, while the younger learners have done so yet:

> I think it's different because adults already have some experience meeting people. They don't have to learn as many things as children do. For us, it's different. I think online teaching for adults can be effective as usually adults do it because they want to, and they have some goal in mind. In the case of children, they're still too young to decide. They're going to lose the social skills because they're always alone or with their parents, which is really bad, especially for younger students, like teenagers or kids. It's terrible. So, they wouldn't be able to [continue online], because if you lose social skills, you don't know what to do the life. People don't like isolation. I guess most of the people, of course, everybody likes their own time, but we are made to mingle. We have to talk to communicate with others and if it stays online, all of that's going to be ruined.

DISCUSSION

In this section, based on the research questions, I discuss the most significant research findings by bringing the arguments onto a higher level of abstraction. I also highlight the importance of this work, underline main takeaways and report the limitations of the study.

Technology Appropriation During ERT

According to the data shown by this study, it is unreasonable to expect all the teachers to be able to instantly appropriate the technology, even if the technology itself is suitable and is able to be

meaningfully used in the virtual classroom. As my interviewees have highlighted, there is a very strong need for a) training and support, b) time.

a) Training and Support

As it has appeared in mass media on many occasions, the schools have good equipment and suitable technology (ERR REF). And that in itself definitely is a positive factor, but, as it was proven by this study, there is no direct cause-and-effect relationship between having working tools and improvement in teachers' technology appropriation ability. All participants expressed their desire and need to be instructed regarding not only operating the tools, but also its meaningful application inside the classroom. The fact that the teachers are "making it work" does not mean the transaction to the new mode has fully taken place and there is no need to offer a training or a workshop to them. There is. The necessity to manage all the training process by themselves adds a lot of unnecessary workload and stress to the teachers as they need to singlehandedly look for information, come up with the ideas of the meaningful use of the new tool, learn how to operate it, try it out in a certain teaching and learning context, decide whether to readjust its applicability or to look for another tool because the current one resulted to be inadequate. Interviewees have expressed their need in having a special person – educational technologist – whom they a special person whom they could turn to in case they had a technical issue or they required to accommodate a certain type of activity into their virtual classroom.

b) Time

This is the second factor that should be underlined. It is unacceptable to consider that this sort of a colossal change that affects a variety of interconnected areas can be accomplished in a short period of time. That is confirmed by the respondents' comments regarding the actions that were not taken by the administration in the beginning of the 2020-2021 school year, namely there was no training, no course, no workshops on the meaningful technology use for sustaining teaching and learning process in the virtual classroom. That shows that it was regarded as a stage that has been already overcome by then, when according to the interviewees it clearly was not.

Current Situation vs. Distance Learning and ERT

Another aim of this research was to evaluate the current position of education and its participants regarding the distance learning and emergency remote teaching. According to the data obtained during the study, this research has clearly distinguished several areas that are to be discussed, such as the teachers' previous and new roles, their rearrangement and adaptation.

1. Current situation and distance learning

While comparing the current state of events to the original literature discussion regarding distance learning, we can underline several emerging similarities with the roles described by Berge (2009) and Berge & Collins (2000). The data suggests that among the responders, "pedagogical role" was the one that was adopted by the teachers much faster and much easier in comparison with the other roles. The appropriation of the "managerial role" also seemed to be in demand due to the growing need to provide an organization of the discussion for the students while not having them in the physical classroom. The interviewed educators appeared keen on trying to perform according to their "social role" in order to encourage students and promote collaboration between learners. And lastly, the "technical role" which would guarantee the learners access to an easily manageable and understandable technological environment was the one that the educators had the most struggles with due to their own lack of digital competences. Regarding all the four aforementioned roles, as we can see from the results of the study, all these roles were emerging and all of them were submitted to modifications. However, not all of them has been successfully and fully acquired yet. Even though some of the roles are quite similar to the ones proper of the on-site classroom, most of the interviewed educators have failed to transfer them into their virtual classrooms due to the specifics of the new educational environment. The findings show significant insufficiencies in teachers' performance which is mostly due to the lack of suitable training on how to *meaningfully* incorporate technology into their virtual classrooms for these new tools to be more aboveboard, trustable and, therefore, useful. Hence, we can say that the educational situation the interviewees are facing today **is not yet a "proper" distance learning as it was described in the literature**. In other words, the findings of this study do not conform with what stated in the literature regarding distance learning.

2. Current situation and ERT

Before the natural experiment caused by COVID-19 pandemic it was assumed that distance education or distance learning was exactly according to what has been described by scholars in the literature. Incidentally, despite the fact that this practice to certain degree was adopted in higher education, it has been never implemented in schools. It required teachers to get acquainted with a number of tools, methods and teaching roles that they could make use of in the virtual learning environment, which would be top-down approach as it presupposes an organized and predetermined change.

It was only when the pandemic-imposed restrictions made it impossible to continue traditional on-site instruction, teachers were forced to use distance education/learning. At the time that was happening, the scholars compared the real-world situation to the previously composed framework of distance learning and saw that these were two different phenomena, therefore, the former was assign the name of emergency remote teaching (ERT) as the situation surrounding the mention transition suggested.

The data gathered in the results section gives us the basis to consider whether the teachers today are still in the ERT situation. And as we have discussed in the literature review part, according to De Giusti (2020), during the ERT teachers across the globe were largely unprepared to support continuity of learning and adapt to new teaching methodologies. The data the interviewees have provided clearly demonstrated that it is not the case anymore – responders have stated that they were expecting the remote teaching scenario to be repeated during 2020-2021 school year and therefore for them it was not an emergency state anymore. However, some residual ERT features such still remain. It is evident in the results section, where the gathered data clearly testifies the issues that needs to be recognized and addressed by all the stake holders which is to focus “on social and emotional welfare of the student population, teachers and staff” (De Giusti, 2020, p. 23). Having said that and taking into account the data obtained from the interviewed teachers, we can say that they have **mostly passed the stage of ERT** by the time the second phase of the interviews took place.

Nonetheless, if we are limiting our perception to just these two frameworks it would be easy to disregard what teacher had done: they did use technology; they did think of the ways “distance learning” could be useful, helpful and beneficial to their students; they did learn new methods and they did acquire certain skills to operate the new tools. Moreover, all of the mentioned

advances were achieved in an authentic setting. Therefore, the following question – is there a *real need* force educators to aspire achieving the ideal and maybe nonexistent etalon of distance learning? Should we consider literature as the endpoint which teachers should sooner or later reach and measure their success by that idyllic scenario? Or should we allow the front-line educators be the initiators of the bottom-up change according to the *real* situation with its *real* limitations and needs?

Current Situation and ERTE

Regarding comparison of the current state of events and the ERTE framework, the later seems to be the most apposite description of the situation our responders are facing, as it addresses unplanned or responsive remote teaching situations. Also, its main statement second the idea uttered by the responders in this study, namely that the rapid introduction of multiple learning management tools resulted to be disruptive rather than supportive from the teachers' point of view as well as the ERTEs were claimed to be more successful when time was taken to understand and master the required technologies (Whittle et al, 2020).

Likewise, the data provided by interviewees confirms the importance of all the pillar points of the ERTE framework. Although not all of them could be met by the teachers or were in a realm of teachers' control such as determining whether the communication method was going to follow synchronous or asynchronous learning strategies, or creation and modifying the assessment protocols, it was definitely suggested by the responders that these aspects should be taken into much consideration. That would help in building agency as it would offer alternative formats in which students are able to self-pace their learning while staying in their own homes instead of being limited to the arrangements chosen by the majority of the class or by the administration. Collected data suggest that the interviewees highlighted the importance of both social role of the instructor and the students' social role as the social presence of the teacher, social involvement of the students and social contact between the participants played crucial role in increasing satisfaction from the online learning process when it was present and, likewise, had a negative impact on both students and teachers when they experienced a sudden loss of classroom social engagement. Finally, feedback was proven to become a powerful supportive instrument when

strategies such as peer feedback, self-feedback and non-graded formative feedback were included.

Importance of Analyzing Differences and Similarities Between the First and the Second Waves of Remote Teaching

As we were expecting to see a steadily slowly growing learning curve that would testify about the improvement in the current situation the interviewees are facing, we were quite surprised to discover that only a minor growth took place until it **reached an acceptable level allowing to support continuity of learning**. The next unexpected discovery was that once the acceptable level was reached, the **stagnation in growth started** and it is still an issue. This data is of crucial importance as it demonstrates the graph of technology appropriation **when the educators are provided with little to zero support in this area**.

Another important aspect that was brought to light through comparison of 1st and 2d waves of remote teaching is that some of the important aspects such as communication and social interaction between the participants of the learning process is still experiencing a significant turbulence and decline. And what it tells us is that instead of transitioning to a proper distance learning model the educators were unable to progress further because it became too problematic. This in-between state may be due to the number of reasons like a low level of teachers' freedom in choosing tools, no say on whether the studies are conducted in a synchronous or asynchronous way, inaccessibility of a continuous training on the meaningful use of the available tools, which make the whole idea of self-paced tailor-made learning a very unrealistic one.

Importance of the findings for stakeholders

As it appears the remote education is becoming a prominent part of our world especially during these turbulent times, it is of crucial importance that both policy makers and school administrations recognize the importance of constant support and relevant trainings that should be provided to educational institutions in order for the educators to be able to provide best service to their students and minimize the negative impact of the transition process.

Main Takeaways and Suggestions for Further Studies

Distance learning as educational practice has a long history as it goes back to the radio and even before that (Garrison & Cleveland-Innes, 2010). Also, there is a research branch, distance learning (Aydemir et al., 2015). However, all the ideas and models imagined by educational technologists and people interested in this discipline have never been materialized on a large scale. At the same time, we saw that schools have always operated in a traditional "old" way. That is to say, they were based on the two major pillars – classroom activities and homework. Optionally, some additional activities could have been added. Later they started using projectors, computers, mobile applications when it was possible. That was a commonly witnessed picture until COVID-19 worldwide pandemic lockdown restrictions were put in place. This abrupt change has marked the beginning of a natural experiment in which all educators were obliged to use distance learning tools.

On one hand, this situation has made educational technologists' dream come true and finally all the teachers were forced to use technology in their teaching. On the other hand, what happened and what has been reported in the result section was the following: if it just about using the tools, if it's just about using the tools, no substantial change happens. In fact, several major issues have been reported by the interviewees, which means that **the transition from traditional forms of teaching and learning at school to distance learning is problematic**. Just introducing technology into the classroom doesn't make any change. Actually, it might even result being disruptive. It appears that if the focus is put exclusively on teachers and on providing them with tools and without simultaneous change in the system the same issues as those depicted in the results chapter would be manifested again. As the study has shown, the learning curve was not continuously and steadily going up as educators' level of freedom was limited by the administrative directives (teachers were not allowed to choose whether it's synchronous or asynchronous mode, what tools they are allowed to use etc.). It may be concluded that the current situation in education cannot be properly assigned to either of the aforementioned theoretical frameworks as it has distinctive features of all of them in different degree.

This change **requires an ongoing process of reconstruction, readjustment of the school system and re-education of the stakeholders**. As we have parted from an idolized idea of distance learning though nobody has tried to apply it massively at school until the natural

experiment forces all educational institutions go online. Paradoxically what we have witnessed was not a transition from traditional learning to distance learning, but it was a transition to something else – ERTE, as some scholars call this emerging framework, which is not a long-term solution either. And when there is a reality check such as this, we see that there are no factual conditions under which this utopian model can be implemented. So, we're forced to create the conditions as well. And instead of doing that, we will have to rethink the whole idea. Therefore, it's narrowed down to our ability to imagine alternatives to this idolized form of distance learning. And **the majority of these alternatives are yet to be discovered.**

Limitations

To conduct the study, qualitative strategy, case study and grounded theory were used as research methods. The data was collected in two stages (in the beginning and in the end of the 2020-2021 school year) though semi-structured interviews. The sample of the study: 7 teachers from the Private Language School were interviewed twice. The limitations of the study: a) the limited number of participants; b) the fact that all the participants perform their duties in the same school, which is not representative of Estonian educational system, even though certain generalizations were made. Although it is a qualitative case study, its outcomes may provide suggestions for further investigation into the matter.

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AUTHOR'S DECLARATION

I hereby declare that I have written this thesis independently and that all contributions of other authors and supporters have been referenced. The thesis has been written in accordance with the requirements for graduation theses of the Institute of Education of the University of Tartu and is in compliance with good academic practices.

Anastasia Chuneva Date:

____(signature)____ _____05.06.2021_____

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APPENDICES

Appendix № 1 – Questionnaire for phase one

1. Background information:
    a) Subject thought
    b) Years of experience
    c) Age range of students
2. Please, name at least four (4) most significant changes in the way teaching and learning are organized. What is your opinion about them?
3. Could you please name at least four (4) main things you have changed about your teaching style and specify how it has affected the teaching and learning process?
4. Which of those novelties do you want to keep in your further teaching practice? Why?
5. In your opinion, how could your working environment help you in accommodating these goals of yours and/or what could hinder your progress in this matter?
6. Is there anything else you would like to share?

Appendix № 2 – Questionnaire for phase two

1. Describe your expectations and challenges in preparation for the fall 2020 semester.
2. Reflect on the differences and similarities regarding your teaching practice in spring 2020 spring 2021.
3. Express thoughts and suggestions concerning the things that could have been done differently and explain why it is important.
4. Is there anything else you would like to share?

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