Big Brother Mentoring in the Let's Teach for Hungary Program

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Abstract

The number of mentoring programs within the framework of schools is increasing both internationally and domestically (Raufelder et al., 2012; Fejes et. al., 2009). Besides traditional mentoring, the role of peer mentoring (Miller, 2002) has also come to the fore in recent years. In our study, we focus on cross-age peer mentoring (Miller, 2002; Sipe, 2005), where older youth mentor younger youth. One example of this in Hungary is the Let's Teach for Hungary (LTHMP) mentoring program, where undergraduate students mentor primary school students. In our research, we studied mentors at the University of Debrecen who had completed at least two semester-long cycles in the program. We were curious about how the COVID-19 pandemic period affected mentoring, so we examined the transition of a mentoring program based on a personal meeting to online mentoring, and its pivotal points, advantages, and disadvantages. As a method, we used qualitative interview analysis, during which we worked with semi-structured interviews, recorded in the spring of 2020 and 2021 – during the global pandemic situation – with a total of 50 mentors. The content analysis of the interview texts was performed based on the codes formulated based on the theory, and the emic codes emerged in the interviews (Creswell, 2012). Our results show that mentors can be grouped into different types based on their attitudes towards online mentoring. Overall, the digital transition has been a big challenge. The biggest problem was the lack of equipment. The issue of age has been also an important factor in terms of the sense of digital comfort. We noticed the phenomenon of Big Brother Mentoring and the importance of chameleon mentors. Our research, which can fill a gap, highlights both the challenges and benefits of online mentoring. In addition, we can also contribute to the effective and successful operation of the Let's Teach for Hungary Mentoring Program.

Keywords: mentoring; e-mentoring; digital transition; remote mentoring; chameleon mentor

Introduction

The effective role of mentoring in education is clearly demonstrated by the phenomenon of various spreading mentoring programs. On the international scale, indeed, peer mentoring is no longer a new practice (Jacobi, 1991), but it is becoming an established good practice in Hungary as well. The mentoring program we are presenting plays a major role in this. In this paper, we present our research among undergraduate student mentors of the Let's Teach for Hungary (LTHMP) mentoring program during the COVID-19 pandemic, which can be considered as a domestic example of cross-age peer mentoring (Miller, 2002; Karcher, 2005). According to the international scientific literature, one of the most common forms of cross-age peer mentoring is the mentoring of primary school students by undergraduate students, but it is also common for older undergraduate students to mentor younger undergraduate students (Miller, 2002). Topping (1994) suggests that within mentoring, age differences can be segmented in different ways; mentors and mentees can be the *same-age* (same-age mentoring), *near-age* (near-age mentoring) (age differences of 1-3 years), or *different-age* (cross-age mentoring) (age differences of 4 years or more) in relation to the mentees (Topping, 1994, quoted in Miller

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2002: 126). In our research, the age gap between primary school and university students is 4 or more years, hence the cross-age peer mentoring appears, where older youth mentor younger youth. We are curious, among other things, about the impact of the pandemic period on the duration, the way, and continuity of mentoring. We discuss both the advantages and disadvantages of online mentoring and compare how prepared mentors were for the second wave of remote mentoring compared to the first wave. Our study is divided into two main parts; the theoretical part and the empirical part. In the theoretical part, we discuss the relationship between information and communication technologies (ICT) and education, a topic that has received increased attention in the mentoring process during the period under review. The changing roles of teacher and student will be discussed, as well as the emergence of concepts related to online education and mentoring. Afterward, we present our research, including the target group, the methodology, and the results. We conducted semi-structured interviews with 50 mentors studying at the University of Debrecen in spring 2020 and 2021. Among our findings, we point out the phenomenon of non-stop mentoring alongside Big Brother Mentoring, and the need for chameleon mentors in this particular, special situation, who can accommodate in a flexible and adaptive way to the changing circumstances of mentoring. And at the end of our study, we will reflect and refer back to our research questions.

The relevance of our research is that we are currently experiencing a revolution in online mentoring, which has not only affected a single mentoring program during the pandemic but has also pushed the originally face-to-face mentoring towards the online environment in large quantities. We are currently focusing on one such program, the Let's Teach for Hungary mentoring program. However, the findings from our research may also be useful for other mentoring programs, where a similar phenomenon has been observed; the transition from offline mentoring to online mentoring. The transition to online has been a major challenge for mentoring program, originally started online, has responded to these challenges. Our research was evaluated in the light of a survey of the experiences of the mentored.

Information and Communications Technology and Education

One of the most basic features of the 21st century is the rapid change and development of technology. The various info-communication (ICT) tools that define our daily lives are extremely renewed, and there is a tendency for newer and newer "smart" models to appear on the market, one of the features of which is the accumulation of functions (fmc.hu). More recently, the scientific literature speaks of a "digital revolution" (Z. Karvalics, 2012), that is fundamentally one of the peculiarities of our era today. During the revolution, widespread access to information became possible, including content that was previously only available to a narrow group of people. Our world is increasingly moving towards changing educational content and forms, and the spread of digital devices won't evade the schools either (Z. Karvalics, 2012). Reform efforts in this area began with the appearance of computers in education and continued with widespread internet access for public institutions and interactive whiteboards (Nógrádi and Szalai, 2013), which can support the learning-teaching process at the same time. Within the framework of the Intelligent School Program, one of the goals of the state was to modernize the infrastructural conditions of public education (Tar, 2009). As a result, schools in many small and large settlements now have this tool, and the use of the "World Wide Web" in pedagogy is part of the modern learning environment (Mile, 2012). Education has stepped onto the path of innovation to such an extent that certain textbooks are already available in an interactive, digitized version (Education Office, 2020). In this sense, education follows the technological development of recent years. The school was able to domesticate so to speak (Tóth, 2004: 8), namely, to incorporate the new achievements of the digital world into its methodological repertoire. Many researchers say this technical development will not stop (Monda, 2017), it will only intensify. Today, in fact, there is a trend towards "dematerialization" due to these courses as well (Monda, 2017).

One of the reasons for the integration of info-communication tools into education is that the transformation of the society around us into an information society cannot be ruled out (Csapó, 2003), according to which, since these tools are gaining ground in everyday life, we cannot balk ourselves from their influence, so education must also reflect this process in society. In the words of Herczeg (2016: no page number): *"every single school and classroom is an imprint of the society"*. The results of a 2016 study also illustrate this transformation: it turned out that the use of ICT devices at home is very common already in preschool age, and by the age of 5 children are presumably extremely proficient in using digital devices (Palaiologou, 2016, quoted by Győr et al., 2018: 13.). The Eurostat 2020 survey showed that while in 2011 81% of young people aged 16-19 in Hungary

used the Internet on a daily basis, by 2019 this value had increased to 97% (Eurostat, 2020). Daily and regular use of digital devices is typical today. According to a U.S. survey (Deloitte, 2006), young people look at their phones 82 times a day, and nearly 80% of the total population does so within half an hour after waking up (Price, 2018: 54–56). If students taught by teachers are active Internet users, it is worthwhile for educators to take advantage of the new platforms that are an integral part of their lives.

There are several attitudes towards ICT tools: one group is the so-called technophobes, while the other group consists of technophiles (Pintér, 2007). Technophobes are the persons, who reject using every tool, on the contrary, all kinds of technological innovation are attractive to technophiles (Pintér, 2007, quoted by Győri et al., 12 December 2018). Rigid rejection by no means supports the integration of digital culture into educational practice, although it is well known today that these tools can increase the effectiveness of education; and can have a positive effect on the learning-teaching process. Students 'intrinsic motivation can also be multiplied if the teachers include tools in their education, that are comfortable and familiar for them. Moreover, the use of ICT tools is now classified as a basic skill such as writing and reading (OECD, 2001, quoted by Hinostroza et al., 2008). The key task of the school is also the development of digital competence, with which, like a new skill, the repertoire to be developed has been expanded. Partly, as a result of this, digitization has also appeared among the subjects, that are taught. In 2020, the traditional IT class was replaced by the "digital culture class", which has been renewed in its content and aims. The underlying intention is to educate students on a new way of thinking and approach. These tools also play an important role in education today. Overall, according to the scientific literature, the school today can no longer be the same as it was for our parents or grandparents, it must innovate. As Fegyverneki (2018: 16.) put it, "the school can't be mummified". Educational institutions need to provide space for tools, that can support social progress.

The Changing Role of Teachers

The rapid pace of change in technology and its "rapid penetration" into education (Győri et al., December 12, 2018) have simultaneously reshaped the role of the teacher, but at the same time, it must be stated, that it never eliminates the need for it. Regardless of all these processes, the transfer of lexical knowledge by the teacher cannot be avoided or spared. According to Csapó (2003:1481), "abilities can only be effectively developed by thinking about an object. The selection, critical assessment, recording and retrieval of information, its appropriate transformation and its effective use can be learned, above all, through the processing of large amounts of information.". So teachers are also needed for digital learning, only in a different kind of their quality. In this sense, the previously familiar, traditional pedagogical practice is radically transformed by the "digital revolution". It removes the teachers from their chairs and puts them among the students while it is also keeping them in the background (Fegyverneki, 2018: 55.). The "position" of the educator shifts from the "stage sage" to a guide alongside the boundary line (McNair, 2001, quoted by Buda, 2017: 170.). Szunyogh puts it in such a way that the holder of knowledge becomes more of a kind of "guide" (2016: 122–123) who can help the student to understand the deeper, narrower-broader connections between the information, and provide some kind of framework for the multitudes of partial and/or whole information. Therefore, Fegyverneki (2018: 55) calls them "masters of framing" who organize and frame the learning process, while they are creating a differential and inspiring learning environment. All of this sounds good, and it presents us with the image of the ideal teacher, but we must know that digital tools require digital training – especially among the older generation, where ICT competence is low (Kárpáti, 2013). According to Fegyverneki (2018: 55.), educators should act as "digital magicians" to grab the attention of the audience with the help of ICT tools, furthermore, they should be "online tour guides", to draw students' attention to the advantages and disadvantages of online space, while almost educating them for conscious internet use. In summary, "chameleon teachers" are needed, which means that they should be able to adapt according to the situation (like a chameleon), while also being reflective (Fegyverneki, 2017; 2018). It is often in vain for educators to believe that digital technology would be able to remedy pedagogical problems, if they cannot apply it themselves - partly because they do not have access to these tools or because they do not have the appropriate methodological skills (Horváth, 2018 - moderniskola.hu). Digital education without digital knowledge is like explaining something without expertise; it lacks the essence. In many cases, idle tools can be a characteristic trend, meanwhile, their value is deteriorating, and unfortunately not typically due to overuse. In the collective consciousness of teachers, there are so-called "digital natives" or, more recently, "digital hermits" (Buda, 2020) approach, as well as the negative stereotypes emphasizing this narrative. A German study found about young people, that they feel technical (technological) superiority over the elderly due to ICT deficiencies of

teachers (Thiersch et al., 2021), and they also clearly pointed out the phenomenon, when students experience, that digital tools are still largely unknown to teachers and are unable to handle new ICT technologies. The ICT deficiencies of teachers, who lag behind in technological development, lead to the widening of the generation gap (Thiersch et al., 2021). Researches in this direction have also been carried out domestically in Hungary. In 2004, Fehér surveyed teachers' attitudes towards ICT tools and found that very few teachers were confident and enthusiastic about their daily use of computers, only 10% of those surveyed (N=116) (Fehér, 2004: 31.). However, by 2020 this trend is likely to change - and in a positive direction. In any case, the problem of so-called *"nostalgic pedagogy"* is now becoming an all-out educational problem (Thiersch et al., 2021). According to Dancs (year unknown), there is also a need for more and more methodological innovation, not only in digital literacy but in other forms as well.

The Changing Role of Students

According to Prensky (2001), today's students are radically different from those, for whom traditional forms of education were designed. Various terms have been used by researchers to describe today's learners; some refer to them as the N-generation (N for Net), while others refer to them as the D-generation (D for digital) (Prensky, 2001: 1). But the most widespread is the concept of 'digital natives', introduced by Prensky (2001). In a digitalizing society, educators have to take into account that they are working with a "digital generation" (Forgó et al., 2015) who are growing up with the daily use of various ICT tools. According to Prensky (2001: 1), the "digital natives" already speak the language of the digital world, the language of the Internet world, including the slang of the so-called "net generation", at a "native level". They are no longer lay users, growing up in the crossfire of the virtual world and offline reality. For them, it is evident, it is natural. Especially in the case of Generation Z (or net-) (Kulcsár, 2008), whose essential characteristic is the phenomenon of online connectivity and active presence/readiness (in other words: "always-on" - Szabó, 2021: 9) on the World Wide Web. Members of Generation Z have never known or experienced our online-free world. However, Papp-Danka (2013: 33) also highlights, that digital natives cannot be said to be homogeneous, and they do not form a consistent group. As students are diverse, so their digital literacy can be also very diverse. Obviously, this depends on a number of factors; it depends on the quality and quantity of the tools owned, but also on the availability of broadband internet access to these tools. ICT tools are often "brought to life" by the Internet, without which their use is severely limited if the benefits of the Internet are not exploited. Overall, the fact that students can access a variety of informative content with a mouse click has certainly had a significant impact on education, so the value of information has decreased compared to the last century.

The Emergence of New Concepts

Technological progress has also brought with it a variety of terminological outgrowths. The concept of digital teaching-learning emerged, which pointed to the effectiveness of technical and virtual tools and content in education. Individuals can support the learning-teaching process with the possibilities offered by digital tools. Today, the role of so-called Technology-Based Teaching (TBT) has been significantly enhanced (Forgó, 2007). Specific forms have emerged, such as e-learning (electronic learning), which is "a form of technology-enhanced learning, that gives participants some control over time, place and/or pace" (source: online gosa.georgia.gov). This means that the individual can be free of time constraints. Learning is no longer confined to a single school day, but becomes self-organized; students can learn on their own schedule, at their own pace, rhythm, and tempo (Lengyel, 2007; Forgó, 2007). They have the possibility to replay content, to self-check. Learning thus becomes adaptive, because it adapts to the student's progress needs (Rapos et al., 2011). In addition to e-learning, distance education (distance learning) will also be an important keyword. This method is based on a geographically distant teacher-student relationship. In this process, contact is established, but through an intermediary channel and not in the same real space, but it is possible that educational actors can meet in the same virtual space. This is obviously also channel-dependent because distance learning can also be carried out over the phone – although this is less common. Within the framework of distance education, we can also speak of the so-called traditional/classical form and electronic distance education (Kovács, 2002, quoted by Forgó, 2004). However, this form of education is not new, as it has been a long-standing phenomenon - especially in the offerings of higher education institutions. Nowadays, distance learning courses are also offered at several universities and colleges. It is particularly popular for adults with families because it provides a flexible framework but also a high degree of autonomy. However, it is not indifferent by no means, whether distance learning is the result of a voluntary choice or the consequence of a forced situation, as it affected primary, secondary and higher

education in large numbers during the COVID-19 pandemic (see later), and not everyone can be said to have undertaken it of their own free will. One form of distance learning is *blended learning*, which combines e-learning and traditional classroom teaching (Baranyai: no year, quoted in Forgó, 2007: 21.) Its common elements are *"traditional classroom sessions, virtual collaboration, and electronically accessible curricula"* (University of Debrecen teaching aid: no pages). According to Garrison and Vaughn (2007), the benefits of using computing in hybrid education are also reflected in the sharing of information. According to Garrison and Vaughn (2007), the benefits of using computer technology in hybrid education are also reflected in the sharing of information. In higher education, the blended learning model can be particularly useful as it offers a flexible approach to reflective discussion and can help to reduce the number of large and impersonal lecture-style classes. It can also increase the frequency of online- and even indirectly offline dialogues.

Traditional Mentoring and E-mentoring

The concepts mentioned above can also be interpreted in terms of mentoring in schools, which is becoming an increasingly popular practice in teacher education and beyond (Klein et al., 2013). According to the traditional understanding, mentoring is about the active collaboration of an older (senior) and a younger (junior) person, with the first and most important goal being the development of the mentee (Bencsik et al., 2017; Rhodes, 2002). However, this concept is now becoming more nuanced in several ways, as not only the mentees but also the mentors can build from the relationship, this is what the concept of "reciprocal mentoring" is all about (Harvey et al., 2009, cited in Bencsik et al., 2016: 382). Alternatively, peer mentoring is also emerging, in which the proximity of age or career stage is relevant (Fejes et al., 2009; Kram et al., 1985). According to Miller (2002: 125), "peer mentoring is when people of similar age and/or status assume the roles of mentor and *mentee*". The author believes that peer mentoring means mentoring by equals, but is usually used for people of the same status. In the case of the mentoring program we are examining, the mentor himself is still *a student*, with the difference that the mentee is a representative of a primary school institution and the mentor is a student in higher education, so we believe that TM can be categorized as *cross-age peer mentoring* (Miller, 2002). Topping (2004) was the first to distinguish between same-age mentoring, near-age mentoring (age differences of 1-3 years), and cross-age mentoring (age differences of 4 years or more) (Topping, 1994, cited in Miller 2002: 126). In fact, near-age or same-age mentoring models address concerns about power differentials in traditional mentoring relationships, i.e. there is a qualitative difference between the peer and traditional mentoring (S. Stockdale et al., 2017; Kupersmidt et al., 2020). Thus, while in traditional mentoring, the substantial age difference and greater experience can create a power differential between mentor and mentee, which can inhibit the development of the relationship, contemporary mentoring overcomes this so-called hierarchical gap (Kram and Isabella, 1985). In the former case, the give-and-take process is largely shifted in one direction, whereas in peer mentoring it is somewhat more even. It is for this reason that peer mentoring is closer to reciprocal mentoring, according to which not only one of the actors in the mentoring process (the mentee) but also the other key actor (the mentor) is positively affected by participation in mentoring (Harvey et al., 2009, cited in Bencsik et al., 2016: 382). Moreover, peer mentoring is often more accessible to potential mentees.

In addition to the basic definition, as introduced above, we can talk about *telementoring* (O'Neill, Wagner, and Gomez, 1996; Siegle, 2003), where participants take part in mentoring activities from two different locations, geographically separated from each other. Furthermore, we can talk about *online* or *e-mentoring* (Bander et al., 2015), which takes place alongside traditional mentoring in a hybrid form (blended mentoring – Edelkraut, 2011) or even instead of it (*e-mentoring* – Sipe, 2005, cited in Bander et al., 2015). *Hybrid mentoring* (Edelkraut, 2011) is a blend of face-to-face and online mentoring, where the availability and accessibility of participants are extended (beyond face-to-face contact). More recently, it is not excluded that the mentoring relationship is established from the outset in such a way that it is exclusively linked to the online sphere (see the Digital Crossroads Programme - Oz).

In online mentoring, communication takes place mainly on the internet. In this sense, we believe that we can also speak of a mentor-supported learning process (Mentor Based Learning - after Wang and Odell, 2002). And by the term offline mentoring, we mean, following Perjés and Héjja-Nagy (2018: 26.), that mentoring is not a process that takes place on the internet, but rather mentoring that takes place in *real space and time with the mutual personal presence of the participants*; in other words, mentoring that takes place outside the online space and requires personal presence.

The Pandemic and its Imprint in Mentoring

The spread of digitization in education has been further strengthened by the COVID-19 pandemic. We can talk about similar tendencies during mentoring. In Hungary, the government declared a state of emergency on 11 March 2020 to protect against the virus, which resulted in educational institutions closing their doors and calling for the isolation of individuals, thus reducing community activity and the spread of the pandemic. From September 4, 2020, a shift to a digital work schedule was typical. Instead of traditional distance learning, the literature refers to emergency/emergency distance learning (Emergency Remote Learning - Hodges et al., 2020) also because it can be interpreted as a special, sudden intervention in an outbreak situation, and thus there was no time for professional, thorough planning and development. In the process, students "retreated" into their micro-communities. This situation brought a radical change in the lives of both mentors and mentees, without much prior preparation – thanks to the suddenness of the pandemic. However, the emergence of the pandemic, which limited the personal presence between mentors-mentees, demanded a rapid response and effective intervention from the actors involved in the whole educational system. The direct relationship with the students that had been established in the past, was henceforth defined and influenced by this. The dynamics that emerged formerly, were upset by the external compulsion that reorganized mentoring into an online platform. In the following sections, we will look at the mechanisms of change that led to this new situation, which necessitated the discontinuation of personal mentoring. From its first appearance, the coronavirus reached our country in socalled waves. After the start of the first wave (March 2020), the second wave appeared in autumn 2020, while the third wave of COVID-19 was dated February 2021. As a result, a sudden changeover was required in March 2020, although its duration was unknown for us at that time, it was significantly delayed by the second and third waves, allowing for an increasingly flexible adaptation in both teaching and mentoring.

Research design and Methods

Presentation of the Let's Teach for Hungary Mentoring Program (TM) and the Target Group

The program was established in September 2019 at various universities in the country and with the involvement of the surrounding small settlements. In the case of TM, it is a pilot program, which has already proven to be a good initiative in the realm of personal interaction, as it has also started to expand. However, due to the COVID-19 pandemic, the originally offline mentoring programs have also moved online. The same happened to the Let's Teach for Hungary Mentoring Program on April 9, 2020. We wonder to what level and to what extent this has affected the mentors involved in the program. In our research, we investigate the process of online mentoring among the mentors of Teach for Hungary (TM). Our primary target group is mentors studying at the University of Debrecen, regardless of age, gender, work schedule, and profession. They were able to join the program voluntarily, which is also important for mentoring motivation (intrinsic) (Gefferth et al., 2014). Hence, they also receive a scholarship amounting to 30,000 Ft. per month. Their activities include career guidance and study support, personality and competence development. They mentor students with both disadvantaged and non-disadvantaged backgrounds in the 7-8th grades of primary school. From the beginning, the focus of the program was dominated by face-to-face mentoring, which was replaced by a shift to an "online mode". From the beginning, the focus of the program was dominated by face-to-face mentoring, which was replaced by a shift to an "online mode". The mentors had to work with the students for 6 hours a week. The school did not stop despite distance learning, so the mentoring program was essential, as the pandemic did not diminish the importance of career choice, further studies, and skills development. It can also be argued that the discontinuation of personal mentoring, given that it is a supportive relationship that requires trust, would probably have had negative consequences. In mentoring, regularity and continuity are issues of key importance because then a development curve can emerge, which is the conscious result of longer-term, guided, goaloriented planning. After all, mentoring is not for its own sake, it is going somewhere. Nagy (2014) also highlights the essence of the long duration of the process.

Research Methods

Our research was qualitative, using semi-structured interviews. The data were largely, but not exclusively, retrieved online using a voice recording device with the prior consent of the persons concerned in spring 2020 and 2021. The audio material was then transcribed into a text corpus. While in quantitative research we start from an explicit hypothesis formulation, in our qualitative research study we started from a set of research questions and problems that better fit the terminology of qualitative research (Sántha, 2006: 38). The number

of respondents was 50. The research was conducted among people who had been mentoring for two or more semesters and therefore had experience and opinions about mentoring. We took special care to interview people who had already had an experience of traditional mentoring. Because they have a basis for comparison. The aim was to have a full survey, of which 73% responded so that we would be able to reach a significant proportion of the University of Debrecen's core population.

The content analysis of the interview transcripts was carried out on the basis of the theoretical codes and the emic codes that emerged in the interviews (Creswell, 2012). To generate the main codes, we used a priori coding (list coding) according to deductive logic; we identified the main content nodes, based on which we then analyzed the transcribed (typed) text corpus and subsequently constructed the subcodes from the text according to the inductive method. Here we took into account the different coding techniques (Sántha, 2006). In the process, we used the technique of intra-coding, i.e. we performed at least two coding techniques for a document using the same logic scheme and coding system at two different times (at least one week apart), during which the pre-produced codes (dimensions) were examined, compared and re-evaluated, thus increasing the reliability of the coding.

Our research can be a gap-filling study, as it is one of the first to provide insights into the impact of COVID-19 on mentoring in the TM mentoring program. We explore the sudden change in mentoring after the start of the pandemic and its progress in the so-called "more routine" period one year later. To do this, we interviewed the mentors. We raised several research questions.

Research Questions:

- Q1. What impact did the pandemic period have on the continuity, the way, and the duration of mentoring?
- Q2. How successful and sustainable was the online interaction and contact between mentors and mentees?
- Q3. After the first wave of COVID-19, how prepared were the mentors for the second wave?
- Q4. What were the advantages and disadvantages of the pandemic situation and the shift to an online format in the mentoring process?
- Q5 What characterized the mentors' attitude to mentoring during the pandemic?
- Q6. After the remote mentoring experiences of the first wave of COVID-19's first wave, how prepared were the mentors for the remote mentoring, made necessary by the second wave?

Results

Below we present the results of our qualitative research among university student mentors in Debrecen. We cover various aspects; such as the question of age, i.e., how good it is for mentors and mentees to be close to each other in age. Furthermore, we focus on the specifics of mentoring in the online space, the ICT tool availability of the participants, and the main issues that the respondents have addressed. With regard to the undergraduate students participating in the research, it appears that women are over-represented in our sample. 80% of respondents are women and 20% are men. We also looked at their average age, which for the overall sample (mean=23.7). Furthermore, we also looked at our sample in terms of subject areas, and 46% (23 people) are participating in teacher education but mentors from other subject areas are also represented (see Annex 1).

Table 1. Sex distribution	Table	1.	Sex	distri	bution
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	Number of		Average age
Sex	participants	(%)	
Female	40	80	24,0
Male	10	20	22,7
Total	50	100	23,7

Source: own editing based on Annex 1.

The Role and Effectiveness of Peer Mentoring

As shown above, young people feel more comfortable using digital devices compared to older people. We were, therefore, curious to know what the mentors think; whether it is good that there are no big age gaps between the participants in the program. Another important aspect is that the participants share the common bond and life experience of being students, even if they are at different levels of education. Learning as a "related activity" can be found in the lives of both parties. And this "community of learners" can also be the basis for

important experience exchanges. According to Schuster, this is good because it allows passing on so-called insider tips ("Insider-Tipps" – Schuster 2021: 7.). Participation in the Let's Teach for Hungary Mentoring Program is linked to student status for both mentors and mentees. Age proximity may be particularly important during the COVID-19 period, as participants can exploit their digital competencies in online mentoring. That's why we thought this could also have a positive impact on e-mentoring. In response to our first research question (Q1) on what mentors think about the fact, is it whether good or bad that there is not such a big age gap between mentors and mentees within the program, the undergraduate students gave positive feedback. They see the reason for this in the fact that, that due to the proximity in age, mentored people open up more easily and do not feel a strong hierarchy in the relationship. On the other hand, they feel that peer mentors have a better understanding of the students' situation because of their recent school experiences. In addition, the "youthful", dynamic use of language and the issue of setting up fewer obligations are also important. Miller (2002) has highlighted that this type of relationship. This is supported by students' feedback (see Table 2).

Table 2. Benefits of peer mentoring

Enables openness, directness

"And they are closer in age... And they dare to ask questions, they dare to ask more questions, and it's easy." (25-year-old woman, English-History teacher)

"They tell you things, they would never tell a teacher." (25-year-old female bioengineer)

"I feel it's an advantage that I'm close to them in age (....) yet they just have a connection and they feel that more direct and immediate threat." (23-year-old male, architect)

Current school experience - easier to understand each other

"I think maybe I'm closer in age to them and I still know what it's like to sit there in the classroom." (24 years old, teacher of Hungarian and Maths)

"The advantage for them is that I'm a young girl who went through the same things not so long ago" (20-year-old woman, dietician)

Use of the same language

"I see it as more of an advantage than a disadvantage because we are just closer in age, but they don't disrespect us because there is some kind of age difference. (...) So it's such a happy medium I think that as undergraduate students we mentor these kids because we still speak almost the same language." (21-year-old female, psychology)

Less obligation - neither teacher nor parent

"I think it's actually an advantage, because I'm not really, sort of immature for anything. But I'm not an adult either, so I know that we, the undergraduate students are exactly that age group of students, who are still allowed to enter the younger students' community, so to say in our true personality. But we already have some respect." (24-year-old woman, community service)

"And what is this role? Well, it's still difficult to articulate anyway, but I think it's somewhere **halfway** between the student and the teacher, so they know that they can rely on me for a lot of things, but they also know that they don't have to address me formally. And so I don't have to be treated like a teacher." (21-year-old male, teacher of Hungarian Ethics)

"(...) we don't impose anything because **they are surrounded by people** like teachers who impose obligations on them and parents who impose obligations on them as well" (22-year-old male, mechanical engineer)

At the same time, although, from an age point of view, it seems good to have students mentored by undergraduate students, this may not at first in itself help confidence. This is due to the so-called social gap between undergraduate students and primary school students. There is also an underlying intention in mentoring to bridge the gap between the two target groups and to be a platform for the program to get to know each other; in this sense, it has a high "social permeability" (after Gazsó, 2006; 218).

Table 3. Terms referring to the social gap

Social gap

"Well, at the beginning it felt more like a handicap because when we started mentoring in this way, we were treated as if there was a huge social gap between us. And so, as we got to know each other, they realized that we were just like them, **average Joes and Janes**." (21-year-old woman, English-Hungarian teacher)

"It's twofold. In the beginning, I felt, they were very cold and dismissive. Precisely because I'm a university student, I come from a community with bigger prestige. And I was talking to them about it and **they had this image in their minds that if you're a university student, you're rude,** pretentious, dismissive and that they might disdain people who are, so to say, not as educated like them." (21-year-old woman, teacher of Hungarian and Russian)

"So for a very long time, even for weeks, they didn't dare to talk to me, but they only talked to each other, not to me. And so I had to struggle with that, and I think a lot of other mentors had to struggle with that, what is the... the... the title that I represent." (21-year-old male, teacher of Hungarian and Ethics)

Big Brother Mentoring in the Let's Teach for Hungary Mentor Program

An important element in the mentoring relationship is therefore age-appropriateness. But it is also important to maintain appropriate boundaries. This is also expressed by the mentors themselves when they said, they need to find a balance between the different "roles". They often did this by putting into words what it is that a mentor is not (see above). They emphasized that they are neither teachers, nor students, nor parents, but more like a *Big Brother Mentoring role. This big brother role is someone* still respected by the mentee students, but at the same time is trusted and in *open, direct relationship with them.* This has a positive impact on the mentoring atmosphere (see Table 4). *Big Brother mentoring role* is therefore a type of mentoring relationship where the mentor-mentee relationship can be likened to a sibling relationship.

Table 4. The Big Brother Mentoring

Big Brother Mentoring

"I would call myself a **big brother** anyway. Someone who gives me a little bit of guidance, because they need me to guide them, but they don't feel, they have to obey me as if I were their teacher". (23-year-old female, English History teacher)

"Yes, that's more the way we approach it, because we feel that they don't specifically need another teacher, but rather someone to support them. And it's more of a **sibling role** than anything else." (20-year-old, finance and accounting student)

"We used to say big brothers. We are the big brothers." (20-year-old woman, finance and accounting student)

"Obviously better than having an adult beside them. We're a little bit closer in age obviously, we're separated by - I don't know - 8 years which is like an **older brother**, so **we understand each other better**." (22-year-old male, mechanical engineer)

Obviously within certain limits, but really I would say it's more like a **big brother** whom you can turn to with any problem (...) so it's better, that we can stand up for them as a **big brother**." (20-year-old woman, dietician)

"They're very nice, I've always really liked working with them (...) they can really treat us like big brothers and sisters and they really see that we want to help and now I'm having a feeling that they're letting us help." (20-year-old woman, dietician)

"But we shouldn't go from one extreme to the other, because essentially we have a friendly relationship, but we are not equals. So I'm a few levels above them in the hierarchy, but not as much as a teacher or an educator, so my place is somewhere between the two. I would say it's more like a **big brother** situation." (20year-old female, teacher of Biology and Maths)

Overall, reflecting on Miller's (2002) finding, during *Big Brother Mentoring* the traditional composition of the mentor's role at the top of the relationship pyramid in the hierarchy dissolves, and the participants are converging: not only in age but also in informality, digital skills, and vocabulary, both online and offline. This is also expressed **by the term big brother mentoring**, which is, therefore, a specific form of *peer mentoring*.

Internationally, there is a similar program called Big *Brothers Big Sisters of America (BB/BSA), which* was founded in 1904 and has grown to become one of the largest youth mentoring organizations. The program is run by volunteers over the age of 21 who mentor children aged 7-17. The identity of the program is based on volunteer participation, but the mentors themselves are adults who are mainly highly educated (Fejes et al., 2009: 44). In this respect, the concept we use is not the same as the American "*Big Brother*" mentoring concept, and the age range of the target group mentored is narrower (12-16 years).

Online Communication Platforms for E-Mentoring

Our second question was about the impact of the pandemic period (K2) on the mentoring scene. In this paragraph, we will focus on online mentoring platforms.

Communication in the online space has become very relevant in the context of telementoring. In the COVID-19 period, the online-offline ratios have been reversed - in favor of online. The predominance of digital presence has penetrated into online mentoring. Mentors shifted to online communication. Many variables influence the success of online communication. These will be examined by us below. Online communication can have different tools and platforms. Some allow instant messaging, such as Messenger, Facebook can be included, and some do not, such as email.

Based on the interviewees' responses, we have collected the contact platforms that students use or have tried to use most in their online mentoring. These were Facebook, Facebook Messenger, Instagram, Discord, Email, Skype, Zoom, Google Classroom (see Figure 1). It is worth noting that several options were tried by the mentors, but the social media interface proved to be the most reliable, including Facebook and Facebook Messenger, as well as Instagram (see Table 5 for reasons).

Figure 1. Communication platforms



Source: own editing

The mentors' responses show that in almost 100% of the cases, the online venue of communication is Facebook, Facebook Messenger, and the form of communication is asynchronous communication in writing. There are several reasons for this: not everyone has an e-mail account, but everyone has a messenger. In addition, the messenger is multifunctional: you can make a free video call without the need for a computer, as most phones already have this function. It is also easy to use. According to a recent survey (2018), 83% of young people use Facebook on a daily basis, making it one of the most popular social networking sites.

Table 5. Practical reasons for using Facebook and Facebook Messenger in mentoring

Availability

"99% of the time Facebook Messenger. At first, I tried to moot something else, but then we had a confrontation: one of them doesn't have a phone, the other one has a phone at his parents', but I could get him onto Messenger" (24-year-old man, architect)

Popularity

"Messenger video calling, because **they all have it already**. Everyone has a phone now, even if they don't have a roof on their house. That's why they have Facebook as well. It is much easier to keep in touch with them this way. Because they are not in that kind of environment, it's much easier to reach them. It's much easier to speak to them that way than to make them create their own zoom, skype, Webex, I don't know what else. I find it much more demotivating. It also makes it easier for the mentor to reach them because I can wait on the zoom for hours until they finally figure out how it works and that they should come anyway." (21-year-old male, environmental engineer)

Stability

"All the kids have a messenger, even if they don't have a Facebook, but they have a Messenger, although what was more stable and worked better for me from a private teaching point of view was Skype. Skype has never frozen for me, but everyone has messenger, that's for sure." (26-year-old woman, teacher of physics and maths)

Convenience

"I only used Messengers with them. I think the easiest way is to make a messenger chat group and put the kids in there. Nothing else needs to be done. Messenger has a call function, you can have a conversation, and I don't know anything else that would be necessary." (21-year-old male, history, and computer science teacher)

About the Advantages of Online Mentoring

The benefits of online mentoring are discussed below (K3). In terms of advantages, its cost-effectiveness, independence of time and place, ease of contact, and atmosphere of openness, which increases the likelihood of the mentees taking the initiative, are among the important ones (Perjés and Héjja-Nagy, 2018). It also provides greater opportunity for individualized, one-to-one mentoring, and for orientation to the individual needs of the participants (Thomson, 2010, cited in Siegle, 2003 and Perjés et al., 2018). It can mean ongoing availability and contact. It can also be family-friendly mentoring (see later Table 8). Based on their responses, students highlighted openness, saving travel time, and organizational issues (see Table 6).

Table 6 The benefit of online mentoring from the mentors' perspective

Benefits
Openness
en we started again in mid-February, I also went to their house once or twice, and then the online period

Then we started again in mid-February, I also went to their house once or twice, and then the online period came in when only that one person was active. **He was the only person I noticed** that he **became more open** with me as we kept moving forward." (26-year-old woman, biozoologist, and biology teacher)

"With personal mentoring, I think it's always the case that some of the team tend to be louder and vociferous than others, and maybe the quieter ones are a bit overshadowed. However, if mentoring takes place online, I don't think this kind of disadvantage really happens." (24, female, law and commerce and marketing student)

"The advantage is that **they really let you into their personal space** in the atmosphere of their family, and a further positive thing is that it saves you a lot of travel, and as a student, that is not the last aspect either, so you don't spend two or three hours a day traveling." (20-year-old female dietician)

Saving travel time

"Now, online education is good for me in this respect, **it saves me 4-5 hours of traveling** a day." (25-year-old female, English-Library teacher)

"The biggest challenge for me is that the bus leaves at 6 am... It's not the distance that's a problem, it's **the poor bus service**, even with transfers. The 57 km journey takes me 2 hours (!)." (22-year-old man, bioengineer)

"The main difficulty I would say is the travel because **it takes an awful lot of time** to get there and back" (22-year-old male, sports and recreation organization)

"We were able to keep in contact more often, it wasn't that I would go for a trip and it would take two hours, but that time was left for them and we could spend it together." (25-year-old female bioengineer) Organizational issues

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"On the other hand, it's much easier to solve it logistically, so it's much easier to turn on the phone at home
and call than to create time and opportunities to find the right place and the right time for everyone. It made
it a bit more flexible" (25-year-old woman, English-Russian teacher)

We tried to identify other benefits (K3) that emerged in a positive context during the interviews, such as the emphasis on individual mentoring, and differences in the frequency of communication and the mentoring participants.

Individual Mentoring

The primary focus of the program is on *group mentoring* (Bander et al., 2015: 6; Sipe, 2005), where several mentees are involved together. Students are assigned 3-5 mentors per person, with whom they work on a weekly basis. This does not preclude the fact that in the program they occasionally mentor students individually as well because this also plays an important role. However, online, the role of the dyadic (dual) relationship is more prevalent than group mentoring (Bander et al., 2015: 6). In fact, students' experience shows that in most cases group mentoring is transformed *into individual mentoring*. This is also due to the difficulty of bringing students "under one roof" online (see Table 7).

Table 7. The shift in emphasis of individual mentoring

Focus on individual mentoring

"I have tried, at least with the two boys, to write to them in a group, I have created one, but there is no response, however when I write to them separately, at least they respond." (20-year-old woman, teacher of biology and mathematics)

"I always had a group in face-to-face, and online I had a group once or twice a week, and I kept in touch with everyone individually." (25-year-old female bioengineer)

"Both are fine, but online is better and more feasible than custom." (47-year-old woman, maths and physics major, Ph.D. in law)

The benefits of individual mentoring

"Actually, it's obvious that this girl, for example, would not have been so open if we had stayed in the group. But in a group, you can develop completely different skills than individually. So in a group, there is still the fact that she has to cooperate with the others, for example, if the task is like that, we have done tasks like that. And individually, there is much more time to discuss his problems. Yes, yes. Because it takes much more time to open up in a group than individually." (26-year-old woman, biology teacher, zoologist) "The advantage is that we can really work in a very personalized, very ideal way." (23-year-old female, architect)

It is important to note that both individual and group mentoring are functional in the program, and both can be chosen by the mentors, but while the individual one is optional, the other, the group mentoring can be omitted on no account. Both have many benefits. Individual mentoring is a structured relationship that can better focus on the needs of the mentee (Rhodes, 2002). "In addition to group activities, some time spent on face-to-face meetings between mentor and mentee is also expected, which is intended to strengthen the personal nature of the relationship" (Gefferth et al., 2004:7). Students underline the importance of the mentor's ability to distinguish and to activate the shyer and more timid mentees as well. Some people have also experienced that it has helped to deepen the relationship, making it more confiding. But it is also important to mention here, that for example, in the case of extroverted people, a more relaxed atmosphere can be created in the community.

Table 8. Statement from mentors on the benefits of personal mentoring

About the benefits of personal mentoring

"And we've been working together for a long time, but the current pandemic situation certainly makes it difficult to work together and to maintain the relationship and to deepen it. Because a personal meeting or an excursion, a conversation can make a big difference. And now that we're exchanging messages online, it's completely different. It's harder." (21-year-old woman, special education)

"This trip itself was a great experience, especially for them, but also for me. They had a big dream to go to the fountain, and I took them there, to the park by Nagyerdő. Yes, and so the face-to-face mentoring sessions have been very enjoyable, there was a really good atmosphere during these occasions." (24-years-old law and commerce and marketing student)

Nonstop Communication –,, Always On"

Considering the characteristics of online mentoring, we found an interesting phenomenon. The constant active online presence makes mentor-mentee communication perpetual. In this sense, the phenomenon of "**non-stop communication**" is emerging; mentors are available at any time and respond relatively quickly to the mentee's request. Moreover, "**non-stop mentoring**" has also appeared as a new phenomenon. (see Table 9).

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Table 9. The phenomenon of nonstop communication and nonstop mentoring

Nonstop communication

"I think I was always available or I didn't mind that if somebody wrote something at, I don't know, eight o'clock at night, I was happy to answer. I think, as soon as they had time and they were actually in the proximity of the internet, the boys responded immediately." (25-year-old female, English-Library teacher)

"*I'm always available* because *I'm* at home. The children are also relatively accessible." (47-year-old woman, maths and physics major, Ph.D. in law)

"They hang on their phone all day, when I write them, 3 I've seen arrive from them anytime. It works anytime, from the time of the classes. They are always writing, so they are always available." (21-year-old male, history, and computer science teacher)

"When they have an idea, they either write me or to our little Messenger group. But I was told that it's not advisable to leave it like that, to merge mentoring with private life, but I don't think I have a problem if I have to answer a message on a Tuesday night." (21-year-old female, earth science)

"That was good, but now there's a phone, there's online education, there's remote mentoring, whenever he writes to me and I'm available, I write him back and say, 'Let's talk. If I'm busy, I always told them, listen, I can write back in twenty minutes, and then see you in twenty minutes. We were able to keep in touch more often." (25-year-old female bioengineer)

Nonstop mentoring

"If I had to mention one positive thing, I would say that **mentoring is a week-long process**." (21-year-old male, teacher of Hungarian and Ethics)

"We keep in touch through Facebook. That's the easiest. I made a group, then if they wanted to, they called me, if not, they didn't. I told them that I will be available at any time during the pandemic. But they were nice, they didn't call me after midnight, they just texted..." (22-year-old male, bioengineer)

"And so it can become a very continuous mentoring if the mentored are a little bit more open to it, but that's not always the case, and it would be much easier for me to maintain interest if we could talk face-to-face." (21-year-old male, teacher of Hungarian and Ethics)

"Well, actually the advantage is that it gives you **a continuous contact**, I think, because for example we've solved it all on messenger, on Facebook, actually it's really an advantage in the sense that **whenever there's a problem**, they can contact you." (23-year-old, male, geologist)

But non-stop mentoring, non-stop communication can also have their dangers.

Table 10. The dangers of nonstop mentoring

The dangers of non-stop mentoring

"The disadvantage is that it's really difficult to coordinate my own learning and I have to make sure that I don't put too much emphasis on them, that my whole day doesn't consist of what they do, how they do this or that, but that I really focus on myself, that's difficult, I think that's difficult" (20-year-old woman, third-year dietician)

Furthermore, it is important to note that those who started mentoring during the coronavirus period have an even more difficult situation.

Table 11. Starting mentoring in the period of the coronavirus

Mentoring only in distance mentoring

"So, it **can be a very big hassle for a beginner mentor to have** to deal with them online for two months, the first two months. And then the other one was when they announced online education in November, we were told by the university that we couldn't go out to the primary schools either, even though they were still operational." (20-year-old woman, second-year teacher of biology and mathematics) "- What has been the most challenging part of online mentoring for you?

- A: Well, that's how I started the previous semester with these two girls, online and not meeting them." (20-year-old female, dietician)

Family-friendly Mentoring

An interesting change can also be seen in terms of the participants in the communication, namely the phenomenon of parental involvement (Imre, 2017; Chee et al., 2020) was on occasion more prevalent during online mentoring. Their role is particularly important, as one of the mentors' main activities is career guidance support, and in this sense, the presence of parents is not a disadvantage. Not to mention the occasional "brother involvement" in the sessions. In this sense, online mentoring is also more family-friendly than traditional school-based mentoring (Herrera, 2004).

Table 12. Involvement of family members in online mentoring

Family involvement

"And that's how parents come in. I've been letting them in because there's no information I'm hiding or withholding from them. So now that relationship is also being strengthened on the parental side." (23-year-old male, architect)

"A positive experience is, (...) I have a mentee who often involves his brother in the sessions and sits him next to us at the computer. And he is a very, very cool little guy. It feels as if he would be a little my mentee. And that's when we used to have really good conversations, just a little bit relaxed in the heat of the game. **That's one of the things that remote mentoring has added to this**, because you probably wouldn't invite him to school and have him sit at the school desk among us. But it gave me a chance to get to know him." (21-year-old female, teacher of Hungarian and Ethics)

Online, the family is wandering around in the background, and it took me time to get used to it as well. *Everyone has extra persons in the background. Right?* "(26-year-old woman, psychology major)

"It's very interesting, on the one hand, it distances us from not being able to meet in person, but it also brings us closer. Because it would never have happened normally that they would let us into their house, into their dwelling." (20-year-old woman, dietician)

"There is always a **brother** present with my girls when we play and **it's actually positive for me**, he gets involved, helps the girls." (23-year-old female, psychology student)

The negative impact of communicational actors

They are at home, so their family can hear them on video chat, hence **they can't express their opinion about their family**..." (20-year-old female, dietician)

"For example, I managed to phone him once, but when we made the next appointment, he asked me if we could do it in writing because **he has very small siblings, some of whom are loud**. I was a bit worried that he wouldn't be as active." (20-year-old female, Biology teacher)

Communicational Barriers Threatening Online Mentoring

Contact, Willingness to Communicate, Activity

We were curious to see how online mentoring differed from traditional mentoring. What is important in this process is the mutual willingness of the participants to be in touch, as well as the fact who is the initiator of the contact in the online space. It is not enough if only the mentor wants the e-mentoring. So the success of the process also depends on the level of activity of the mentored person in the online space to a large extent. Mentoring requires mutual, simultaneous activity from both the mentor and the mentee. It is also a guarantee of its success and effectiveness. At first, we examined the factors that emerged as barriers to communication in

e-mentoring. For example, there was **the problem of getting in contact** and **the issue of communicational activity**, although the dialogue is important in mentoring, as it is an essential factor for effective and efficient joint thinking and creative productivity. In most cases, mentors reported at least one **passive or ''lost''** student with whom online contact proved unsuccessful. (see Table 13). There are many factors behind this (see Table 16 later on device/internet issues).

Table 13. Communicational barriers

The problem of establishing contact in the online space

"And another problem was that in my group there was a boy with autism whom **I had not been able to** reach in any way through online mentoring." (21-year-old woman, psychologist)

"A concrete difficulty. Let's see, in the current situation, I can't even talk to one of my students because **I** can't reach him. In the current situation, this is the current problem, in the older one it was to be able to engage them at all." (22-year-old male, sports and recreation organization)

Since I have started this online mentoring, I have experienced that it is very difficult to reach many of my mentees and I have even experienced a setback with some mentees. So it's a little bit like as if we were distancing from each other." (21-year-old male, teacher of Hungarian and Ethics)

The issue of communication activity

"There are three of them, and one of them is not very active when we're online, but he is when we meet face to face. (23-year-old woman, teacher of English and History)

"[In XY municipality] it was a bit more difficult (...) [Another fellow mentor] is also in contact with only one of the mentees, because the others are not involved, they are not active." (26-year-old female, biozoologist, and biology teacher)

"Then there was one girl who completed the whole process, the rest was like...nothing. Absolutely zero." (26-year-old woman, biology teacher, zoologist)

The question of willingness to communicate

"They need to be mentored online and that **they are not available**. I don't know how to help when there is nothing the contact person can do. You can tell them to reply, but **it absolutely depends on their conscience.**" (20-year-old woman, biology teacher)

"Well, the fact of reaching out to the children, if I write a message and a week later they haven't replied, obviously, I can't do anything about it in the online space, and by default if they don't want to reply they won't and it's very difficult to keep track of." (20-year-old female, dietician)

"And now we're at the point where **we have to beg them for being answered at all**, online. And there were occasions, when we had an appointment, for example, and I was sitting alone in front of the computer because no one came, and then they answer in one or two sentences, why not, and it's a bit harder to do that." (26-year-old woman, psychologist)

"First of all, they have a great, great power in their hands to reject a call or simply mute it with a single *flick of the finger*. So they sever your channel. That's tremendous power in their hands, and they use it in the blink of an eye." (22-year-old male, sports)

Interesting results were found on the issue of willingness to communicate, which on the one hand were also related to school attitudes. So those who were inactive at school were also inactive in mentoring, and it was not irrelevant, what kind of attitudes to online education was managed to develop by teachers in the lives of students. If they experienced school as a "summer vacation", then so they experienced mentoring, similarly. On the other hand, the fact that "**the internet has become the school**" should also be noted. (21-year-old woman, psychologist) This has meant that the leisure function of the online space has been relegated to the background and everything has been concentrated in one place (see above). In addition to overwhelming school responsibilities, mentoring can seem like an extra burden in a student's life, which they may find difficult to cope with. However, this does not necessarily result in passivity, but it is still an important background factor. As is the fact that mentoring minors is based on parental approval/decision, not necessarily voluntary participation: unlike mentors.

The other underlying important piece of information is that, unlike mentors, who are heavily accountable², mentoring is not a highly sanctioned activity for students; they receive neither a grade nor a scholarship. Therefore, for mentee students, strict adherence to the framework is not as important as for mentors. This is very evident from the mentors' reports (see Table 14).

Table 14. Background factors of willingness to communicate

Factors affecting willingness to communicate

"Maybe the kids felt that here in the online space they didn't have to take it so seriously; that whole mentoring thing." (25-year-old female, English-Library teacher)

"They didn't go to school, **there was no pressure**, they just hung around and didn't really want to do it. There were those who didn't want to realize at all that there will be trouble (...)." (22-year-old male, sport) "On the other hand, **they don't come as readily** to online discussions and programs as they do in person. **I** can't influence them that way. " (23-year-old male, geologist)

" [...] since we got into distance learning and remote mentoring, mentoring has become quite secondary in their lives. They come when they have time and they don't necessarily arrange their schedules in such a way to fit the mentoring process in. If something intervenes, unfortunately, it's not me and it's not the mentoring that comes first." (21-year-old male, teacher of Hungarian and Ethics)

"This period is more like a summer vacation for them. They see it as not having to go to school, not having to meet the mentor in person, and like they don't have to put so much energy into it to make it work and I think they see it as a holiday and everything is really a bit more relaxed." (21-year-old male, teacher of Hungarian and Ethics)

"The Internet has become the school, and I've been told by boys that they'd rather not turn on the Internet, because they know that's where the school assignments and homework come from, and then they can avoid it very nicely." (21-year-old woman, psychologist)

Other Factors Affecting Communication

Other factors may also be a problem, which can also stem from the specifics of online communication. For example, the lack of non-verbal communication (gestures, facial expressions), which can often be a barrier to informality, and some people find it difficult to open up to each other via the internet (see Table 15).

 $^{^2}$ On the tanitsunk.hu interface, mentors are obliged to document every week the mentoring activities they have carried out, covering 6 hours per week (with text and photos).

Table 15. Other factors affecting communication

Other problems during online communication Possible lack of nonverbal communication

"We don't see each other, I think it's important as well, that we are present. They can also interact with each other, we can see each other's reactions, gestures, this could be solved with a webcam, but for them, it might not be possible or I don't know, we don't use cameras, I don't force it." (21-year-old male, history, and computer science teacher)

The issue of openness

So it was harder to keep in touch with them in the online space and **it was harder for them to open up**." (25-year-old female, English-Library teacher)

Limitation of topics

"And on Facebook or even in a Messenger call, we can't necessarily delve so deeply into different emotional topics." (21-year-old male, teacher of Hungarian and Ethics)

The question of presenting a home atmosphere

"And some people don't even want their home environment to be visible." (21-year-old male, History, and Computer Science teacher)

Lack of mental state's change

"Well, you already had a place to go, where **you were able to undergo so to say some kind of mental state's** change, so, your thoughts were diverted to that you are going to prepare, you are going to conduct the mentoring session right now. And you're not sitting on the couch thinking "oh, the mentoring starts in 5 minutes...". So I think it's... and well, personally, it's completely different."(23-year-old, female, Human Resources (HR) consultant)

Background noise "Or, in fact, the background noise is very annoying." (20-year-old female student of finance and accounting)

While some found it more difficult for students to open up, there were also opposite experiences (see later). Personal, confidential conversations are not rare on the internet - often in consequence of anonymity or asynchronicity. Eszter Babarczy (2013:1.) speaks of "community-based trust" regarding the internet. This is extrapolated ³. Obviously, the attitude of the individual is also an important factor here; an introverted student may feel more confident online. In this sense, the online space can even establish the topic: it can make it more confidential, or vice versa - depending on the personality and needs of the mentee. Two interesting studies by Burgstahler and Cronheim (2001) found that the content of **electronic communication between peers** (mainly e-mail) is more likely to be **personal** than that of traditional mentor-mentee (senior-junior) pairs.

Problems with the Conditions of Communication

It is important to clarify that, unlike traditional mentoring, e-mentoring is an internet- and devicedependent activity. By its nature, it requires both mentors and mentees to have easy access to technology and to have the appropriate technical equipment (e.g. computer, laptop or phone, tablet or notebook). Access to these products is increasing around the world, but their necessity and availability can still be a challenge for some families. We were curious to see how the internet and digital equipment availability for the students participating in the program affected mentoring. In particular, these types of gaps in the lives of disadvantaged families emerged consistently as a gap that cut off the mentoring channels (see Table 16).

³ inference from the unknown

Table 16. Problems with the condition of online communication

Toolkit

"Well, the biggest problem is that **not everyone has the same technical conditions**." (24-year-old woman, teacher of Hungarian and Maths)

"So it was difficult because they were not kids from an advantageous background, not very rich kids, some of them didn't even have a phone. It was difficult to make a solution to do this mentoring, but the child doesn't have any means to do it." (22-year-old female Maths teacher)

"We're talking about disadvantaged students, where there is a **lack of equipment** and we can't give a quality lesson that would be enjoyable, or not enjoyable, but really meaningful, because unfortunately, everything needs equipment." (20 year-old-female, finance, and accounting major)

"The biggest help would have been if the children had proper equipment. And they're not only available through a parent or a sibling." (23- year-old female, HR Counselling major)

Internet as a condition

Some of them I couldn't reach at all at the beginning and I wrote to the form teacher to ask what's going on with them because they don't answer any of my messages, I even wrote them an email, I wrote them on Facebook and I called them and they didn't answer. And the teacher said, well, I shouldn't really try to contact him, because on the one hand his parents don't let him go to school because of the coronavirus, so he can't use the internet, and he doesn't have the internet at home." (21-year-old female, earth science) "I have mentor fellows who couldn't contact the children online because they didn't write back to them on Facebook or the children don't use Facebook, for example. You can get completely cut off from them, so in terms of contact and you can't really do anything about it if the child doesn't have the internet at home. No matter how good a mentor you are, you're not going to be able to solve that." (21-year-old male, history, and computer science education major)

"Children that age cannot be expected to be confident online." (20-year-old female, Biology teacher) "The quality of internet access is not so good, and the connection is sometimes intermittent or not everyone logs in because they think it's a bit more freewheeling. It's definitely a negative experience." (20-year-old female, finance and accounting major)

Parental sanctioning of internet access

"It was difficult because **I** had such a mentee who was forbidden from the use of the internet because of family problems, for example... They were not easy to contact, even when using the phone. That was the only option, so our relationship got strongly severed. I really regretted that, that I couldn't really do anything about that situation." (25-year-old female, English teacher)

Sharing a device or internet between family members

"So for an hour or two **if they can get access to a computer because there's one device in the family for five or six family members**. There are many cases where people don't log in, don't want to log in, or don't log in when we have an appointment." (21-year-old woman, jurist)

"I had such a mentee who didn't really have internet access at all. So it was a bit more difficult for him. Yet another of my mentee was communicating on his brother's Facebook account, actually." (24-year-old female, lawyer, and commerce and marketing student)

"Online communication didn't really work. There were technical reasons, like there was only one PC in the family and just at the very moment, the other brother was studying there." (22-year-old male, sport) "But let's just say that there are still students who are online much, much more, and there are those who are a bit harder to reach because it can be a problem that they don't have an internet connection, they might be chatting or writing from their sibling's or uncle's phone, and so they're less online for less time." (20-year-old female, finance and accounting student)

However, there were also those who found that, despite the mentees' poor family background, internet access and smartphone ownership appear to be emerging. This experience is in line with research conducted by HCSO (2018) as well, which found that 83% of households had an internet connection in 2018: "They live in a completely dilapidated house, but they have their iPhones and the latest Nike shoes... It's a must." (22-year-old male, bioengineer) However, there are still families where family members either share a device or have nothing to share. This can be an extreme disadvantage for a student in the COVID-19 period; both in terms of school and mentoring.

Mentoring Attitudes

Finally, we looked at the patterns emerging among mentors in their attitudes towards online mentoring. We could distinguish between five types: pessimist, hopeful, clueless/powerless, struggler, and optimist. The *pessimists* are the ones whose calculations have been badly thwarted by distance-mentoring, and they do not expect anything good from e-mentoring; they do not even see its benefits. The clueless and/or powerless are

those who feel they cannot cope with the situation without methodological help. A " relearning " would help them a lot. Some hopeful mentors are confident that the situation will soon be over, and this is what keeps them buoyant; that is why they do not perceive mentoring as a failure. *Strugglers* are also appearing and even though the transition is difficult, they are not giving up and are doing their best to make the online mentoring effective. Finally, there are the optimists, who find joy and beauty in online mentoring and can harness the benefits of the internet. They are very comfortable with online mentoring.

Table 17. Different types of mentors identified in online mentoring

Pessimist

"We already know that **this is a necessary solution**. So even if it doesn't have too many positive 'features, I can't do anything with it." (21-year-old male, teacher of Hungarian and Ethics)

"I think it's **terrible**, in my honest opinion. I prefer much, much more the sessions with personal contact rather than who, where, on what surface are, just maybe tens, hundreds of kilometers away from each other on video chat." (20-year-old female student of finance and accounting)

"So that's how we work, we work, but it's actually dead... it was dead." (26-year-old woman, biology teacher, zoologist)

"Quite frankly, it's not working. Because just as online education doesn't work, online mentoring doesn't work as well. It's not really anyone's fault. Just like in online education, the teachers try their best to share their knowledge and the students try to listen, but it's just not effective. In general it's not effective." (21-year-old male, environmental engineer)

"Well yes, the Covid, it has really crossed me, it really messed up my plans, and it's a really bad situation giving birth to a lot of labor, if I had known I must mentor online from the very beginning, I would rather not start it., (26, student of psychology)

"And online mentoring, I think... well, it's not an easy task, and it doesn't add much to the whole thing." (21-year-old woman, psychologist)

"All I can do is talk the hind leg off a donkey. And write to them. This channel itself, this online mentoring has gone very wrong for me..." (22-year-old male, sports)

"Well, it's a total failure because I feel that they don't really want it and the contact person and the parents don't help and **it's very difficult**. I thought it was going to be fun, but it's the complete opposite." (20, Biology teacher)

Powerless, clueless

"It doesn't really make sense a lot of the time, so unnecessarily via the internet, **I** don't really see the point and the way to develop them there." (24-year-old, fourth year of civil engineering major)

We mentors have not been provided with much guidance now on how to deal with the situation, and we only have that within us what we have learned about the face-to-face mentoring methodology." (27, first-year Ph.D. student in Education)

"Then there was a huge question mark: what am I going to do now? Because the theoretical education is completely ... not exactly completely different, but we were prepared for many different situations ... And so I say, now ... What am I going to do with these children?" (21-years-old, female, third year, psychologist student)

"I haven't achieved much more with them since then, so it's not worth that much, even though I'm trying". (20, Biology teacher)

Hopeful

"So now the boys are very hopeful that we can go somewhere this semester and then we can organize a good program." (25-year-old female, English-Library teacher)

"The reason I don't want to form an opinion on this yet is that, on the one hand, it's very early because we've only been doing this online education for a week and I sincerely hope that it will end after the next week. And the reason why I don't want to comment on it yet is that I haven't really been involved in it for a longer period, and I think there are initial difficulties everywhere." (20-year-old female, student of finance and accounting)

"I would say **I** was hopeful ... but obviously there's a natural fear in you about how things are going to turn out, how all of this is going to work." (22-year-old female, Hungarian and History teacher)

Struggler

"I sent them all these things, I pointed out to them several times that these are such videos that really explain the topic in a way, that they will be capable to understand it. But they simply didn't care. I didn't want to watch it together... or yes, occasionally we watched it together, but they weren't really paying attention at the time. Instead, he grabbed his phone, checked something on his phone, that sort of thing. Or actually, they played. Some kids started to play during the session." (22-year-old male, sports, thinking of becoming a teacher)

"I think so because a lot of people are complaining that one of the children is very inactive now during the distance-mentoring and can't contact the children at all, none of the children, and they haven't done anything since they've been at home. And I keep in touch with them intensively every week, I don't let it go cold, so to speak." (23-year-old woman, English, and History teacher)

"I tried to be creative as much as I could. I don't think I was creative enough. I really failed to show a great deal of creativity on the online platform. So what the internet allowed and what I found, so to speak." (23-year-old female, Human Resources (HR) consultant)

"Yes, yes, so I certainly tried as hard as I could, no matter what." (21-year-old female, psychology)

Optimist

"At that time, it was still face-to-face mentoring, it was harder to be in a room with the children, obviously it's an interesting phenomenon in the classroom if I have to deal with more children, but in the online space, working with two little girls, it's much easier, I can do it, that on one day I only talk to one of them, but then I can go deeper, I can be really specific, I'm able to personalize and tailor my advice to her. (20-year-old woman, dietician)

In general, I consider online or remote mentoring a good option. Because at this time I think any extra help can be good for the children in their studies or if they want to talk or complain. Because they are not in school on any day and therefore have less interaction. Mentoring can give them the extra attention that might be missing from their daily routine. If they have some spare time sitting at home, then they don't spend it in the wrong way, so to speak, because when we can occupy them at that time." (21 years old, special-needs education)

"I think it's great that we have this opportunity to mentor online (...). There are so many opportunities online that we can carry out mentoring in this manner." (23-year-old female, English-History teacher)

"The online mentoring would be great in the sense that if they had access to the internet or something they could use it to do these things because **otherwise**, **you can do amazing things online**, but the fact is that this pandemic has been happening for practically more than a year and we're locked in and everything is online." (23-year-old female student teacher with unknown major)

"I have no idea on what we can do offline that we can't do online. We watched film clips online this way but we also watched those offline likewise, just we watched them more times online. I can't think of anything that we couldn't have done there." (30-year-old man, teacher of Computer Science and History)

"I'm a computer science student myself, I was not afraid to make use of them and I can't say right now anything that made the online way better. I can't think of any right now, although I'm sure there are." (30-year-old English and Computer Science teacher)

We have illustrated the types mentioned above, and it seems that there are:

- Mentors with positive attitude: this includes optimists and hopefuls
- Mentors with negative attitude: these include pessimists and the powerless or clueless
- Mentors with coping difficulties: includes those who are struggling

Figure 2. Different types of mentors identified in online mentoring



Source: own editing

Further COVID-19 Waves

The sudden appearance and presence of COVID-19 is also an important factor in the mentoring process. We had interviewees who we were able to ask about their experience of mentoring during the second and/or third wave compared to the first wave. Typically, the tendency showed that they were much more prepared, much more ready for the situation, so they were not caught off guard so much (see Table 18).

Table 18. How prepared are you for remote mentoring in the event of further waves of the pandemic?

Readliness

"I think so. I have more experience both in mentoring and in education. It's become smoother, I think, and we can manage the situation better than we did last year, as it happened almost overnight, we didn't know suddenly how it was going to be, whether we could continue, what we were going to do, how to turn it all into a remote mentoring. But we are also finding more and more tasks and programs that can be carried out online. Unfortunately, it's been almost a year now, that this is the case. (...) Now it's much different for everyone, we're almost used to online education and the whole situation as well." (21-year-old woman, special-needs education)

"We didn't jump into the unknown now, we were prepared for this happening again. It was also the case here that we were no longer allowed to go out mentoring. Meanwhile, we have not yet had online education. So that's how we've done it from the beginning, and then we've run the online mentoring from September." (22-year-old woman, Maths teacher)

"Well... not more prepared, rather more experienced. Or, well, it's more or less the same thing. But it was more like, there was nothing new in it. I'm used to the way it works, that I have to talk to them online, give them 'advice' online, if they possibly need it." (25-year-old woman, Hungarian and Russian teacher)

The Rollercoaster Phenomenon in Mentoring

Mentoring can be compared to a rollercoaster phenomenon. We see from what we have seen so far that mentoring is a challenging task, and sometimes there are difficulties, and then the scales tip a little, but these difficulties are overcome by the mentors as much as they can. The **rollercoaster metaphor** of mentoring illustrates this challenging task very well (see Table 19).

Table 19. The rollercoaster metaphor

The rollercoaster phenomenon in mentoring

"Well, I think, it's like a **roller coaster** it's really this **once up**, **once down**, and I've learned a little bit that okay, now we're down and we have to wait and see when we come up (laughs). That helped me, not to leave the mentoring process, by the time I learned that that's how it works, because so many times I've actually thought about leaving it due to online. Words that come to mind are cheerfulness, patience, perseverance, connection, maybe love, because I really love my mentees, they're so nice and lovely." (26-year-old woman, psychologist)

"A double-edged weapon." (24-year-old woman, community organization)

"Well, it's intermittent. Sometimes I experience mentoring as a success, sometimes as a failure. So when it's harder to reach them, harder to initiate video chat because they don't want to join in and stuff like that, then obviously it's a bit of a failure, but otherwise, it's 90% success." (21-year-old female, Hungarian and Russian teacher)

Chameleon-mentor

This can be seen as an essential component of the challenging online mentoring process. The phenomenon of transitions/mobility between online and offline spaces can be important, as the net is one of the most important communication bases for young people today. It may also be worth exploiting the potential of "virtuality". Mentoring can also have an important educational effect in the electronic space. If only to consider that mentors allow students to connect to the internet with a specific purpose so that young people are not only exposed to negative digital stimuli but also learn about useful and safe sites through a network of relationships with a mentor. In terms of the returns to Internet use, we can categorize our online activity in two ways: on the one hand, it can be a creative/productive and/or a creation process, and on the other hand, it can be a consumptive activity (Huddleston 2019. 133.). In the former case, we create something of value in front of the screen that is utilized, in the latter case, we are using the net incorrectly. Mentoring is that as long as the mentor and the mentee are present together in a given online space, supervised, controlled internet consumption happens. In addition, the mentor can teach the student to develop skills such as self-regulation, appropriate knowledge organization, a critical approach to the validity of information content, etc. E-mentoring can also support the e-learning process.

However, it is also particularly important for students to be educated in digital awareness and to check the authenticity of the information, as this makes the content produced on the internet subject to selection criticism. The mentor often fills in these kinds of gaps. Not everyone is a good "digital citizen" (ISTE. NET-S, 2007,

quoted by Buda, 2020:41), which is defined as agreeing and embracing the principles of legitimate (legal), responsible, and safe ICT use and this is reflected in the practice of using digital technology. But mentors can help in this sense.

We are living through a period of COVID waves. Mentors need to adapt to these changing circumstances to maintain an active relationship with their mentees. According to Fegyverneki (2017), we believe that mentors should be chameleon mentors, who adapt to different *"environmental changes"* and operate well in both online and offline spaces. They are the ones who can adapt to the changing conditions of mentoring, always adapting mentoring to the current situation, condition, and needs.

Table 20. Responses to the question about how you would describe your role concerning the mentee

Chameleon-mentor

"Well, sometimes as a mother, sometimes as a big brother, sometimes as a friend, sometimes as an enemy. *It depends on the situation.*" (21-year-old female, Hungarian and Russian teacher)

"It's really some kind of a combination of a friend and a big brother and a teacher, and the role **depends** on, what they need. If they ask for help with the homework, you are a teacher For example, when it came to choosing a career, as a mentor, I thought that I want to show all the possibilities. Then we talked about one by one, what actually interests them, who likes monotonous work, who doesn't like monotonous work. Then I was like a big brother and said, "I don't think it's for you, I think it's for you. It was very difficult because I didn't know them." (24-year-old woman, teacher of Hungarian and Maths)

"Well, I try to be the kind of mentor that they need at that particular moment. Some days I totally take over the role of a teacher, some days I'm just a buddy and talk to them. So it's really tailored to their individual needs." (21-year-old female, English, and Hungarian teacher)

"That every child is different, every child needs a different kind of care, you have to treat each of them a little differently and be patient. That's very important." (second-year English and Library teacher)

"I'm trying. I'm not saying I always succeed or always succeed the first time, but **I'm quite adaptable**. I've had to improvise because something didn't go the way I planned, but I try to keep an eye on this." (25-year-old female, English, and Library teacher)

"Well, I think the ideal.... mentor is **the one who can best adapt to the child**, to the child's circumstances and develop a mentoring strategy based on that." (21-year-old female, English-Hungarian major)

Summary

The answers to our research questions are summarised below. Mentors were positive about the mentoring between students in the TM mentoring program; due to the closeness in age and informality, their relationship was often compared to a big brother / sister bond (Q1). We have seen that the pandemic period has had an extraordinary impact on mentoring, forced it into the online space (Q2). It was also pointed out that e-mentoring was sustainable in some cases and not in others; there were advantages and disadvantages (Q3, Q4), with the lack of access to equipment and/or internet identified as a cardinal problem (Q4). The advantages include the involvement of family members in the online mentoring (parents, siblings: parental and brother involvement), the saving of travel time and the logistical ease of organising the sessions (no need to find a separate location). It was also highlighted that there is non-stop communication and non-stop mentoring going on, which has the advantage of being sought out by the mentees when they really need the mentor's assistance, but on the other hand, the dangers of this have also been highlighted (it requires constant active alertness from mentors). Moreover, some mentees are not relegated to the background on the online platform, but express themselves even more openly in the virtual space. Overall, mentoring during the pandemic seems to have had both advantages and disadvantages. As a result, different types of mentors were identified (Q5); pessimistic, hopeful, clueless/powerless, struggler, and optimist. However, compared to the first wave, fortunately, we have seen a big improvement in mentors' attitudes towards online mentoring, they were no longer so surprised by the latest transition (Q6). Furthermore, our results clearly show the positive impact of online mentoring, and its difficulties are also discussed in detail in each chapter. Finally, we drafted the concept of the chameleon mentor, which was also reflected by the students in our research. A chameleon mentor can adjust adaptively to the different challenges of mentoring. Overall, we see that for conscious Internet consumers, digital-mentoring, also known as e-mentoring, is not necessarily a challenge, but rather a modern, innovative method that, with optimal use, can transform the mentor-mentee relationship and can give it a different form and content. However, the quality of work is not necessarily impaired by an online presence, especially if mentors are able to take advantage of the wide range of opportunities offered by the internet. Just as e-learning is stigmatized and perceived as low-quality education, and may be seen as a poor option (Hodges et al., 2020), mentoring is

an option whose role in finding new pathways should not be underestimated. A key advantage is that the online space integrates and engages all participants equally (Raufelder et al., 2012: 150.). In this sense, mentoring can be seen as an important extracurricular activity not only offline but also in the online space. The Let's Teach for Hungary mentoring program plays a major role in promoting mentoring culture. These can be important building blocks for schools, complementing the teaching while improving its quality.

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Appendix 1.

Annex 1. The gender, age, and degree of the students interviewed

1.	male	23	architect
2.	female	42	social work
3.	female	47	maths and physics major, Ph.D. in law
4.	female	27	mental health counseling major
5.	female	22	Maths and History teacher
6.	female	inaudible	chemical engineer
			law major, and commerce and marketing
7.	female	24	major
8.	female	21	English and Hungarian teacher

9	male	21	Computer Science and History teacher
2. 10	male	21	environmental engineer
11.	female	21	Hungarian and History teacher
12.	female	24	community organization
13.	female	23	English and History teacher
14.	. c.mulo	23	psychology
15.	female	26	Physics and Maths teacher
16.	male	30	English and Computer Science teacher
17.	female	23	teacher with an unknown major
18.	female	21	Hungarian and History teacher
19.	male	21	Hungarian and Ethics teacher
20.	male	22	mechanical engineer
21.	female	21	English and Ethics teacher
22.	male	22	sports and recreation organization
23.	male	22	sports, thinking of becoming a teacher
24.	male	22	graduate bioengineer
25.	female	21	earth science, geographer
26.	female	20	Biology teacher
27.	male	23	geologist
28.	female	20	dietician
29.	female	21	Hungarian and Russian teacher
30.	female	21	earth science major
31.	female	24	Hungarian and Maths teacher
32.	female	27	History and Ethnography teacher
33.	female	23	human resources counseling major
34.	female	21	psychology major
35.	female	21	law major
36.	female	25	bioengineer
37.	female	22	Maths teacher
38.	female	26	biozoologist and Biology teacher
39.	female	25	English and History Teacher
40.	female	26	Biology teacher, zoologist
41.	female	21	Special-needs education
42.	female	25	English and Library teacher
43.	female	26	psychologist (school psychologist)
44.	female	20	Biology and Maths teacher
45.	female	23	English and History teacher
46.	female	20	Finance and accounting major
47.	female	25	English and Russian teacher
48.	female	unknown	psychologist
49.	female	23	unknown major
50.	female	23	human resource (HR-) advisor



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