Language Learning Through Telecollaboration: A 21st-Century Approach

Aprendizagem de línguas através da telecolaboração: Uma abordagem do século XXI

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Abstract. Recent unprecedented global events, including emergency remote teaching, have led to an exponential growth of interest in telecollaboration among practitioners and researchers, evidenced, among others, by the growing number of publications devoted to this topic. Attention has been drawn to the number of promises associated with telecollaboration projects, in particular the cultural and linguistic ones. However, such complex and dynamic exchanges also have several limitations. Consequently, a significant number of parties might struggle to make sense of the vast body of knowledge available on the topic and might encounter difficulty in implementing such projects. To address this issue, this study adopts a meta-analytical approach and provides a synthesis of the recently published research on telecollaboration. The reviewed sample comprises 28 journal articles devoted to English as a lingua franca telecollaboration projects, published between 2016 and 2021. The results of these articles are presented in a consolidated and easily understandable manner that permits all interested parties to efficiently examine the newest findings of the literature and apply them accordingly in real-life conditions. This, in turn, facilitates the implementation of good practices and the organization of future telecollaboration exchanges.

Keywords: telecollaboration; virtual exchange; English as a lingua franca; metaanalysis; foreign language teaching

Resumo. Os recentes acontecimentos globais sem precedentes, incluindo o ensino remoto de emergência, levaram a um crescimento exponencial do interesse pela telecolaboração entre profissionais e investigadores, evidenciado, entre outros, pelo número crescente de publicações dedicadas a este tópico. Tem-se chamado a atenção para o número de promessas associadas aos projetos de telecolaboração, em particular as culturais e linguísticas. No entanto, estes intercâmbios complexos e dinâmicos têm também várias limitações. Consequentemente, um número significativo de partes pode ter dificuldade em compreender o vasto conjunto de conhecimentos disponíveis sobre o tema e encontrar dificuldades na implementação de tais projectos. Para abordar esta questão, este estudo adota uma abordagem meta-analítica e apresenta uma síntese da investigação recentemente publicada sobre telecolaboração. A amostra analisada inclui 28 artigos de periódicos dedicados a projetos de telecolaboração em inglês como língua franca, publicados entre 2016 e 2021. Os resultados desses artigos são apresentados de forma consolidada e facilmente compreensível, permitindo que todas as partes interessadas examinem de forma eficiente as mais recentes descobertas da literatura e

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as apliquem em condições reais. Isto, por sua vez, facilita a implementação de boas práticas e a organização de futuros intercâmbios de telecolaboração.

Palavras-chave: telecolaboração; intercâmbio virtual; inglês como língua franca; metaanálise; ensino de línguas estrangeiras.

Introduction

According to Belz (2003), telecollaboration (TC) involves the use of various online tools by physically separated students at various institutions for the purpose of developing their foreign language and intercultural skills (p. 68). Similarly, Guth and Helm (2010) state that telecollaboration is an institutionalized and online exchange between students from distinct countries, held to develop cultural and linguistic skills through various activities (p. 14). Telecollaboration can be divided into two main modes – synchronous and asynchronous – and each of them can be also either oral or written (Clavel-Arroitia, 2019). TCs using both synchronous and asynchronous modes are also quite common. Synchronous TCs can, for instance, take the form of video conferences, chats, or take place in virtual realities while asynchronous TCs are usually mediated by blogs, emails, or discussion forums (Clavel-Arroitia, 2019).

Telecollaboration has been gaining steady popularity since its establishment (Barbosa & Ferreira-Lopes, 2021). Figure 1 below presents the overall growth of studies devoted to TC over the years between 1995 and 2022 and searching only by the term "telecollaboration" in the Scopus database. Particularly in recent years, we can observe an exponential growth of studies devoted to TC (Barbosa & Ferreira-Lopes, 2021). Between 2018 and 2022 there were between 200 and 400 new articles on this topic per year. What is more, a significant number of papers devoted to TC were published during and after the COVID-19 pandemic, i.e., from 2020 onwards, when nearly all branches of education had to switch to emergency remote teaching, which, in turn, led to an increased interest in telecollaboration.

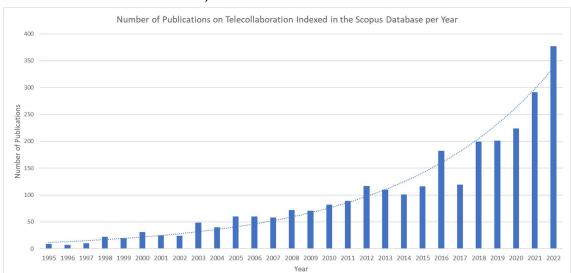


Figure 1. The Number of Publications on the Topic of Telecollaboration, Indexed in the Scopus Database Between 1995 and 2022, Both Inclusive

Having discovered this substantial rise in the number of publications on TC, I proceeded with implementing the idea of preparing a synthesis of the recently published primary studies on TC that will be beneficial for the field as well as all the new practitioners and researchers exploring TC, particularly as a result of the recent switch to remote teaching. To do this, I first searched for the already published secondary literature in the field of TC to find out what has already been reviewed. The findings of this search are presented in the following "literature review" section. There I summarize the core information and trends stemming from the past literature on TC. Then, I set off to present the methodology of my study, offering a detailed step-by-step description of the article retrieval process. Next, I present the findings of my synthesis, including a brief description of the quantitative results and several linguistic aspects of TC that stem from the qualitative analysis, which I later discuss. Lastly, I propose a set of conclusions that can be made on the basis of the obtained results. I end this paper with a list of references, including those of the journal articles that constituted the corpus of this study.

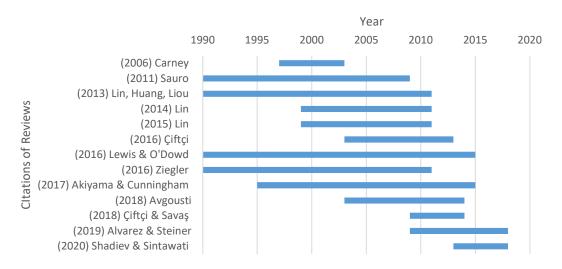
Literature review

As a part of the literature review, in particular, I investigated the timeframes, methodologies, and results of the past studies. Figure 2 below presents a visual summary of the 13 reviews available to me at the time of the investigation. Having discovered that there is a vast number of studies published after 2016 that have not yet been analyzed by means of secondary research, I proceeded with my study devoted to the studies published between 2016 and 2021, both inclusive. I chose the start year of the scope of my study (2016) precisely because of the above finding, while the end year (2021) was the last full year I could take into consideration given the time of writing. Interestingly, my calculations also showed that the number of studies on TC (n = 1150) published

within the first 20 years of TC (1995 - 2015) is nearly equal to the number of studies (n = 1179) on TC published in just six years thereafter (2016 - 2021). This highlights the recent growth of TC and, thus, the magnitude of the phenomenon that my study attempts to analyze and synthesize.

Figure 2. Timeframes of the 13 Past Reviews Included in the Literature Review of This Study

Timeframes of 13 Reviews Sorted Ascendingly by Their Publication Year



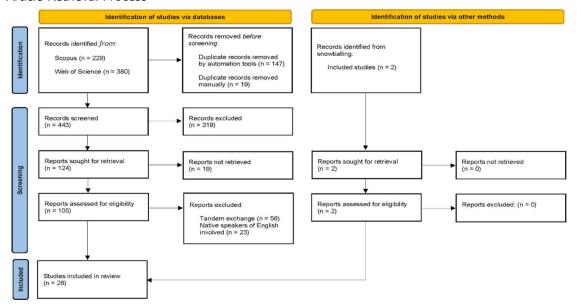
To offer a past-present literature comparison towards the end of this article, below I present the core findings of secondary research on TC published to date. To begin with, the reviews on TC typically report various good and bad practices as well as observations stemming from the empirical research and the conducted TC projects. Most of the available evidence is qualitative, with quantitative data being sparsely reported and analyzed. The vast majority of the past TC exchanges followed the tandem model and concentrated on a variety of topics and aims, with a noticeable presence of foreign language learning and intercultural exchanges. Past TC projects usually lasted for several weeks, although their duration varied significantly from each other, with TC sessions being held each week in most cases. According to the reviewed sample of syntheses, past TC exchanges were often medium-scale and involved dozens of participants in total, who frequently collaborated in pairs or small groups. While the older TC projects tend to be held asynchronously, with the progress of time and technology TC exchanges were more frequently organized synchronously. Past TC projects were also organized primarily between participants located in Europe and North America and held in English. The past syntheses highlighted also that the meticulous organization of TC projects is key to their success. Likewise, the reviewed studies agreed that the proper design and implementation of activities during the TC exchanges is of crucial importance and is closely related to students' satisfaction with such undertakings, and, thus, their learning gains. Here, the past studies indicated several specific concepts, for instance, the role of

feedback or reflective practices, whose proper employment is vital for the success of TCs. The reviewed syntheses also presented various potential advantages and disadvantages of TC projects and enumerated the areas and competencies that can be successfully boosted thanks to TC, such as learners' autonomy, communication skills, cultural knowledge, IT skills, language skills, or motivation.

Methodology

As the foundation of the methodology, I chose the guidelines of the PRISMA 2020 Statement (Page et al., 2021), commonly used in medical meta-analyses. Nevertheless, as the authors of the Statement point out, it can be successfully implemented in other areas, such as applied linguistics, as also suggested by Chong and Plonsky (2021). Figure 3 below outlines the steps I took during the article retrieval process.

Figure 3. A PRISMA 2020 Diagram (Page et al., 2021) Outlining the First Five Stages of the Article Retrieval Process



During the first stage, called "identification," I selected the databases in which I conducted my search for the relevant research articles. I chose Scopus and Web of Science since they are commonly considered to be the leading and largest multidisciplinary academic databases as well as providing good quality meta-data. Then, during a database search, I used 12 keywords that can be considered synonyms of TC in the literature, i.e., Collaborative Online International Learning (COIL), eTandem (or etandem), eTwinning (or e-twinning), Global Virtual Collaboration (GVC), Global Virtual Teams (GVT), Globally networked learning environments (GNLE), Intercultural Virtual Collaboration (IVC), Internet-Mediated Intercultural Foreign Language Education (ICFLE), Online Intercultural Exchange (OIE), Telecollaboration (TC), Teletandem, and Virtual Exchange (VE). The database search provided me with 229 studies in the case of Scopus and 380 in the case of Web of Science. All of the extracted studies were peer-

reviewed, which was already ensured by the selected databases. Additionally, all of them were journal articles, which is a commonly adopted strategy due to the inaccessibility of book chapters or since other sources are neither easily retrievable nor peer-reviewed. I aimed to ensure the replicability of my research which would be more difficult to do if I chose sources other than journal articles. As a result of merging the records obtained from these two databases, 166 studies in total were recognized as duplicates and, therefore, removed from the corpus. I conducted this phase of the review in the Mendeley reference manager.

Next, I entered the second stage of the process, namely the "screening" phase, during which I reviewed the titles, abstracts, and keywords of the remaining 443 studies. Due to the large number of available studies and their heterogeneity, I had to apply certain criteria to further narrow down the search and, thus, obtain a set of more homogenous articles. In total, I adopted seven inclusion criteria that the studies had to fulfill to be included in the final corpus of studies:

- 1) the study is written in English,
- 2) the study is a primary scientific literature,
- 3) the study was conducted in a formal educational setting,
- 4) the study reports on language learning,
- 5) the study reports on a TC project held between at least two geographically distant groups of participants of distinct nationalities and L1s,
- 6) the TC project utilizes at least one TC tool,
- 7) the study presents original passages of collected data.

After excluding 319 studies that did not fulfill all of these criteria, I was left with 124 studies. Out of them, I could not obtain the full text of 19 studies, which, as a result, had to be excluded. Consequently, I was left with 105 research articles. Then, I divided them into three categories, namely:

- 1) tandem exchanges, i.e., TCs between native speakers that aim to learn and practice each other's languages (n = 56),
- 2) English as a lingua franca (ELF) TCs, where English is the main language of the exchange between non-native speakers of English (n = 26),
- 3) exchanges in English but including some native speakers and, therefore, not being the "pure" lingua franca exchanges (n = 23).

Among all of them, I was only interested in English as a lingua franca TCs (ELFTCs), mainly due to the increasing interest of scholars in the ELF practice and since no secondary study in the field of TC focused specifically on this type of interaction.

The third stage of the process involved the implementation of a search-enhancement technique called "snowballing," meaning that I searched for additional suitable studies

among the references of the already included studies. As a result of this process, I found additional two journal articles, which, in turn, were added to the studies found through a database search. Consequently, in total, 28 studies formed the corpus which I later analyzed.

The analysis of the journal articles involved highlighting the important passages in the full texts, extracting them, and classifying the retrieved information "using a constant comparison method, [into] descriptive and conceptual categories [...] through initial coding, focused coding, and axial coding" (Chong & Plonsky, 2021) (p. 1030).

To analyze and synthesize this corpus of journal articles, I divided the extracted data into quantitative and qualitative. The quantitative data was primarily related to the characteristics of TC projects, such as their duration, used modes, the types of used TC tools, and the number of TC participants in different group arrangements, among others. On the other hand, the qualitative data concerned the findings, discussions (if applicable), and conclusions of the reviewed research articles.

Results

Due to space limitations, this article focuses on the portion of the qualitative results of my investigation related to language learning and its various aspects that became evident throughout the study. Nevertheless, to allow the readers a better understanding of the qualitative findings, I offer a summary of the quantitative results below.

ELFTC projects tend to last for around 10 weeks, nearly always are compulsory for their participants, and, in most cases, include both synchronous and asynchronous activities. The most commonly used TC tools include video-conferencing software, social media, and learning management systems, all of which are frequently used concurrently during the exchanges. ELFTC projects tend to include about 40 participants in total who often collaborate in small groups of up to five students. ELFTC exchanges tend to include around seven sessions that take place weekly and last for approximately an hour. Moreover, ELFTC projects tend to revolve around cultural topics. The participants of ELFTC exchanges are typically in their mid-20s, commonly come from Europe and Asia, and are mostly female. Their proficiency in English is frequently intermediate or upper-intermediate. Furthermore, ELFTC projects are generally bilateral and almost as often interregional as intraregional.

Notably, each section title is followed by a number of journal articles that report on the given aspect to allow readers to make their own decision regarding the existing body of evidence and, thus, facilitate future studies in under-researched areas. Each of the following categories was generated inductively during the review of the studies and their content.

Language Skills (n = 12)

Several journal articles argue that ELFTCs facilitate foreign language learning (Chen & Yang, 2016; Hagley, 2020; Sevilla-Pavón & Nicolaou, 2017; Smith & Keng, 2017) and have a positive influence over students' overall language development (Bueno-Alastuey & Kleban, 2016; Chen & Yang, 2016; Freiermuth & Huang, 2021; Grau & Turula, 2019; Kohn & Hoffstaedter, 2017; Scott-Monkhouse et al., 2021; Vahed, 2020). Moreover, based on the evidence provided by multiple journal articles, ELFTCs can improve particular linguistic skills of English learners (Demir & Kayaoğlu, 2021; Freiermuth & Huang, 2021; Jung et al., 2019; Sevilla-Pavón & Nicolaou, 2017), such as:

- 1) listening (Bueno-Alastuey & Kleban, 2016; Demir & Kayaoğlu, 2021; Freiermuth & Huang, 2021; Sevilla-Pavón & Nicolaou, 2017),
- 2) reading (Chen & Yang, 2016; Demir & Kayaoğlu, 2021),
- 3) speaking (Bueno-Alastuey & Kleban, 2016; Demir & Kayaoğlu, 2021; Freiermuth & Huang, 2021; Jung et al., 2019; Sevilla-Pavón & Nicolaou, 2017),
- 4) writing (Bueno-Alastuey & Kleban, 2016; Chen & Yang, 2016; Demir & Kayaoğlu, 2021; Dendenne, 2021; Sevilla-Pavón & Nicolaou, 2017; Smith & Keng, 2017).

Below I present the detailed findings related to the above language skills, except for listening in the case of which the reviewed journal articles did not offer any further information.

Reading (n = 4)

As far as reading is concerned, Demir and Kayaoğlu (2021) state that ELFTC participants appreciate the authenticity of the reading resources and their strong link to real-life applications (p. 18). On the other hand, Dendenne (2021) warns that the high presence of mistakes in the read texts is likely to limit students' comprehension of them (p. 169). Additionally, O'Dowd et al. (2020) claim that attentive reading is crucial during asynchronous ELFTCs (p. 165).

Speaking (n = 8)

The results of several reviewed publications claim that students substantially appreciate their ability to speak English in actual, real-life conditions with other learners during ELFTCs (Demir & Kayaoğlu, 2021; Scott-Monkhouse et al., 2021). As Demir and Kayaoğlu (2021) (p. 16-17) and Scott-Monkhouse et al. (2021) (p. 24) conclude, ELFTCs allow foreign language (FL) learners to diminish, or at least significantly reduce, their anxiety to chat with others which, in turn, boosts their confidence in their own speaking skills. Yet, Demir and Kayaoğlu (2021) (p. 16-17) and Scott-Monkhouse et al. (2021) (p. 24) suggest that large cohorts of learners stumble upon various obstacles along the way. In particular, Kohn and Hoffstaedter (2017), referring to the findings of their own ELFTC

exchange, highlight that learners are prone to facing various issues throughout their interactions, one of them being, for example, the proper delivery of certain words (p. 359). The example of the study by Gajek and Calderón-Quindós (2018), where the ELFTC participants criticized the insufficient amount of time being allocated to oral activities, suggests that students desire these kinds of activities to be vastly present during ELFTCs (p. 49, 50). As Jung et al. (2019) point out, FL learners typically have sparse opportunities to practice their target languages outside FL classrooms but even the inclass activities are frequently too distant from real-life conditions and situations that students can encounter in reality (p. 299). Hence, the crucial role of ELFTCs in changing this state of affairs and improving the speaking skills of FL learners, which, according to Scott-Monkhouse et al. (2021) and the participants of their study, constitutes one of the central advantages of ELFTCs, similarly to writing (p. 25). Nevertheless, even at the end of an ELFTC exchange carried out by Scott-Monkhouse et al. (2021), students admitted that they felt the need to continue mastering their oral skills (p. 25).

Writing (n = 11)

According to several journal articles, ELFTC participants are generally pleased with the opportunities to boost their writing skills in settings that closely mimic reality, such as ELFTCs (Demir & Kayaoğlu, 2021; Dendenne, 2021; Smith & Keng, 2017). Furthermore, a few journal articles conclude that learners appreciate the ability to practice writing during ELFTCs as it is purposeful and encouraging for them (Demir & Kayaoğlu, 2021; Dendenne, 2021; Smith & Keng, 2017). Moreover, students are frequently happy about the chance to obtain feedback (in a written form) from their peers (Demir & Kayaoğlu, 2021; Dendenne, 2021; Smith & Keng, 2017). Likewise, some of the studies collected in the corpus evidence that FL learners can write collaboratively during ELFTCs (Priego & Liaw, 2017; Sevilla-Pavón & Nicolaou, 2017; Smith & Keng, 2017), which, in turn, enhances their English knowledge (Smith & Keng, 2017) (p. 38, 40), and helps them to eventually become concise in their writing (Scott-Monkhouse et al., 2021) (p. 23).

A few of the reviewed articles report on potential problems related to writing during ELFTC exchanges. According to the participants of the journal article by Gajek and Calderón-Quindós (2018), their project included an excessive amount of writing and, consequently, was considered by them to be "impersonal" (p. 50). As a result, Gajek and Calderón-Quindós (2018) argue that learners might resent the fact that they are not able to establish any genuine relations with other project participants (p. 50). As Gajek and Calderón-Quindós (2018) further explain, forming more authentic relations can lead students to various cultural and linguistic gains (p. 50). Nevertheless, the participants of the study by Gajek and Calderón-Quindós (2018) note that writing tasks helped them to contemplate their involvement in the ELFTC project (p. 50). The learners involved in the study by Chen and Yang (2016) complained about the necessity to revise and improve their inputs numerous times to allow other ELFTC participants to understand them (p.

281). Similarly, Scott-Monkhouse et al. (2021) report that students frequently faced difficulties related to the use of various single-person verb forms, uniform implementation of capitalization and punctuation rules, as well as not using contracted forms (p. 20-21). The participants of an ELFTC project reported by Dendenne (2021) criticized the word limit set in the case of some of their writing activities (p. 166). On a related note, Vurdien and Puranen (2016) argue that descriptive writing assignments can be challenging for some learners (p. 46) while Freiermuth and Huang (2021) conclude that creating any written pieces during ELFTCs is redundant and, thus, not recommended (p. 202). Dendenne (2021) stresses that some students might be more teacher-dependent than others when it comes to writing because of their low expectations of their writing capabilities (p. 164). Lastly, Chen and Yang (2016) underline that implementing inadequate strategies concerning writing tasks, which lead the students to, for instance, using translation engines, can, in fact, be detrimental to their linguistic growth and writing skills (p. 281). Nevertheless, as Scott-Monkhouse et al. (2021) argue, students perceive the possibility to express themselves through writing as one of the biggest advantages of ELFTCs (p. 25).

Vocabulary (n = 7)

On top of the above findings concerning classic language skills, several journal articles inform us that ELFTCs can boost the vocabulary range of FL learners (Bueno-Alastuey & Kleban, 2016; Chen & Yang, 2016; Demir & Kayaoğlu, 2021; Dooly & Sadler, 2016; Jung et al., 2019; Sevilla-Pavón & Nicolaou, 2017). According to Jung et al. (2019), learners, in general, are keen on taking part in ELFTC activities which, in their opinion, help them to expand their vocabulary. In particular, Jung et al. (2019) argue that students enjoy frequent changes of topics during ELFTC projects since this enables them to expand their lexis (p. 300-301). Likewise, the study by Jung et al. (2019) suggests that vocabulary acquisition is greater when the topic of the given task is of learners' interest (p. 300-301). Furthermore, Dooly and Sadler (2016) state that, towards the end of their ELFTC, they observed their students articulating eloquent words and phrases, suggesting that they had acquired them over the course of the exchange.

On the other hand, among the jeopardies associated with vocabulary in ELFTCs, Chen and Yang (2016) point to the initially limited proficiency and, thus, limited vocabulary of FL learners, as one of the factors that can negatively impact their cooperation with other project partners (p. 281). On a related note, Kohn and Hoffstaedter (2017) highlight that some words and phrases can be problematic for certain learners, for instance, in terms of their understanding or pronunciation (p. 359). However, three other journal articles claim that ELFTCs can, in fact, positively impact students' pronunciation skills by significantly increasing the overall time spent speaking in a foreign language, among others (Bueno-Alastuey & Kleban, 2016; Demir & Kayaoğlu, 2021; Sevilla-Pavón & Nicolaou, 2017).

Foreign Language Enjoyment (n = 9)

Several of the reviewed studies report substantial learners' enjoyment resulting from their participation in ELFTC projects (Bueno-Alastuey & Kleban, 2016; Demir & Kayaoğlu, 2021; Dooly & Sadler, 2016; Freiermuth & Huang, 2021; Gajek & Calderón-Quindós, 2018). Similarly, a few journal articles enumerate various learners' positive perceptions associated with the English learning process that stem from their participation in ELFTC exchanges (Chen & Yang, 2016; Jung et al., 2019). Most of such opinions result from students' increased ability to practice English in ELFTC environments, in comparison to traditional FL classrooms (Chen & Yang, 2016; Jung et al., 2019). Moreover, Demir and Kayaoğlu (2021) (p. 25) and Dendenne (2021) (p. 164) underline that learners appreciate being involved in diverse activities during which they can collaborate with their peers. Likewise, according to Demir and Kayaoğlu (2021) (p. 25) and Dendenne (2021) (p. 164), students enjoy it when their proficiency in English is praised. Additionally, as Scott-Monkhouse et al. (2021) argue, ELFTCs can increase students' understanding of the role of emotions in FL learning and how to profit from them (p. 22).

Foreign Language Anxiety (n = 10)

Chen and Yang (2016) (p. 281-282) and Ke (2016) (p. 297) report that some learners may experience anxieties both prior to and during ELFTC projects, particularly if they have not been involved in such exchanges earlier. Moreover, several journal articles report that participation in ELFTCs can be difficult for introverted, shy, or withdrawn students (Bozdağ, 2018; Demir & Kayaoğlu, 2021; Freiermuth & Huang, 2021; Ke, 2016) who, as Kelsen and Flowers (2017) remind us, are likely to require special attention from ELFTC organizers (p. 158). Among specific concerns of FL learners associated with ELFTC exchanges, the reviewed journal articles enumerated fears that they might not be understood by their peers and the difficulties associated with communicating with other project members via an online link (Bozdağ, 2018; Demir & Kayaoğlu, 2021; Freiermuth & Huang, 2021; Ke, 2016). Notably, these issues were raised even when students' proficiency in English was high (Bozdağ, 2018; Demir & Kayaoğlu, 2021; Freiermuth & Huang, 2021; Ke, 2016). Nevertheless, as the example of a few journal articles shows, students' fears tend to diminish as ELFTC projects progress and they often turn into more positive emotions, such as excitement, which, in turn, can increase learners' confidence in communicating with others in the FL (Chen & Yang, 2016; Demir & Kayaoğlu, 2021; Jung et al., 2019; Ke, 2016). Ke (2016) argues that ELFTC exchanges are less stressful environments than other TC settings, e.g., those that involve the collaboration of native speakers (p. 292, 296). As Ke (2016) claims, this is because nonnative speakers are less likely to spot the errors of ELFTC participants than native speakers, which, in turn, reduces the anxiety related to making mistakes during communication in the case of ELFTCs (p. 292, 296). Similarly, Kohn and Hoffstaedter

(2017) argue that using English as the main language of ELFTC exchanges often makes them easier (p. 361). Ke (2016) also suggests that multimodality can contribute to lowering students' anxiety in ELFTC projects (p. 289). Moreover, Dendenne (2021) advocates that increased communication among ELFTC participants can be a sign that students are no longer afraid to communicate with others (p. 170). Scott-Monkhouse et al. (2021) also add that students appreciate the ability to learn how to fight and overcome their language block or ease anxieties associated with public speaking, particularly in online settings (p. 22, 24).

Negotiation of Meaning (n = 10)

Several journal articles provide evidence that negotiation of meaning occurs in ELFTCs (Dooly & Sadler, 2016; Scott-Monkhouse et al., 2021; Vahed, 2020). As Austin et al. (2017) state, ELFTC participants have to be highly creative when communicating their ideas (p. 100). Consequently, as Dooly and Davitova (2018) state, humorous situations commonly take place over the course of ELFTCs; however, they are a vital part of such exchanges and warrant their continuity (p. 232). According to Austin et al. (2017), negotiation of meaning can be facilitated through the use of gaze, gestures, objects, and signs, among others, during communication (p. 94-95, 97). A few of the reviewed studies also suggest that the use of specific TC tools, such as videoconferencing software and social media, during ELFTCs can support the negotiation of meaning (Austin et al., 2017; Kulavuz-Onal & Vásquez, 2018; Vurdien & Puranen, 2016). Due to the fact that making errors is a part of FL learning, a number of journal articles recommend focusing on the negotiation of meaning and ensuring that students can get their meaning across to their peers (Freiermuth & Huang, 2021; Ke, 2016; Kohn & Hoffstaedter, 2017).

Non-target language use (n = 8)

L1 Use (n = 4)

Even though English is the main language of ELFTCs, participants tend to use also other languages throughout such exchanges. One of them is their mother tongue or first language (L1). According to Austin et al. (2017), in ELFTCs, L1 is used mainly to make initial connections and introductions with partner students (p. 98-99). However, as Pouromid (2019) emphasizes, if the learners "do not share an L1, they make use of semiotic resources other than the verbal or linguistic encoding of information to make themselves understood" (p. 631). Here, Fuchs (2019) points to some risks associated with the excessive use of L1s in ELFTCs by the project partners. In particular, Fuchs (2019) points to situations where students use L1 primarily to communicate with other native speakers of that language, which can be overwhelming and frustrating to the other project members for whom the given language is merely another foreign language (p. 82). Further, Fuchs (2019) reports that allowing some learners to use their native languages to communicate during the project, had a detrimental effect on the whole

exchange, and, in particular, the collaboration between the international partners, which dropped significantly and had a negative impact on the overall ELFTC experience later on (p. 82). On the other hand, Kulavuz-Onal and Vásquez (2018) warn against sanctioning the use of L1 by ELFTC participants on several occasions, such as when it is used to provide a translation, a clarification, or inform about the language or the culture of the given student (p. 247-248). Moreover, Kulavuz-Onal and Vásquez (2018) note that conducting ELFTC exchanges only in English is not realistic nor feasible and, in fact, suggest that relying only on English for communication purposes would be against the multilingual nature of the contemporary world, and, in particular, the online environment (p. 253). Nevertheless, according to Kulavuz-Onal and Vásquez (2018), ELFTC organizers need to take into account that L1 use cannot be ubiquitous since its increased presence in students' conversations might lead them to mutual incomprehensibility (p. 247). In fact, Kulavuz-Onal and Vásquez (2018) cite this specific issue as the reason why ELFTC participants should primarily use English for their communication (p. 247). Consequently, Kulavuz-Onal and Vásquez (2018) suggest that L1 use should be monitored and rather limited (p. 247).

L3 Use (n = 4)

Communication in languages other than the target language and participants' mother tongues were also frequently used by students in their exchanges. Here, Dendenne (2021) (p. 161) and Gajek and Calderón-Quindós (2018) (p. 49) underline that both learners and teachers are keen on learning and using L3s throughout their collaboration with their foreign partners in ELFTCs, particularly if they have already studied these L3s before. Kulavuz-Onal and Vásquez (2018) report that during ELFTCs, L3s are primarily used to address the foreign project partners, particularly at the beginning and at the end of ELFTC sessions, as well as during more relaxed and informal moments of communication (p. 250, 251). According to Kulavuz-Onal and Vásquez (2018), other L3 uses in ELFTCs include, among others, accentuating the multilingual nature of the exchange, strengthening group bonds, and making compliments (p. 251). Ke (2016) concludes that using L3s helps ELFTC participants in building their relations and has an overall positive impact on the exchange, including its perception and effects (p. 293). Similarly, Kulavuz-Onal and Vásquez (2018) underline that ELFTC organizers should allow learners to use L3s during the exchanges since this reinforces the multilingual and cross-cultural nature of such undertakings and contributes positively to the multidirectional growth of ELFTC participants (p. 253). Additionally, Ke (2016) notes that students tend not to pay attention to the quality of their English production when they are using other FLs concurrently (p. 292). Here, Ke (2016) argues that the existence of such linguistic interrelations can lower learners' communication anxieties (p. 292), which can be perceived as beneficial for students' FLL process.

Concurrent L1 and L3 Use (n = 3)

Kulavuz-Onal and Vásquez (2018) report that L1s and L3s can be used concurrently for, among others, addressing specific groups of students, controlling interactions, and reinforcing learners' bonds (p. 252). Similarly, Kulavuz-Onal and Vásquez (2018) (p. 251, 253) and Porto (2016) (p. 404-405) argue that multiple languages can be used simultaneously to address the participants of ELFTC exchanges to allow them to make intercultural comparisons. According to Ke (2016), learners are aware of the benefits that can stem from using several languages to collaborate in ELFTCs (p. 292-293).

Translanguaging (n = 3)

According to Pouromid (2019), translanguaging is used in ELFTCs when students encounter a comprehension problem that cannot be solved using either linguistic or non-linguistic means (p. 633). What is more, Pouromid (2019) claims that when ELFTC participants are not positive whether their utterances were (fully) understood by their partners, they opt for translanguaging or ask their ELFTC organizers for assistance (p. 633). Ke (2016) underlines that, at first, ELFTC participants may find translanguaging strange, but they become accustomed to using it as the project continues (p. 292-293). Similarly, Ke (2016) argues that the use of English decreases as ELFTC exchanges progress and is substituted with L3 use and/or translanguaging (p. 288, 292-293).

English as a Tool of Communication (n = 7)

Numerous journal articles underline that English is used as a medium of communication in ELFTCs (Demir & Kayaoğlu, 2021; Scott-Monkhouse et al., 2021). As Freiermuth and Huang (2021) (p. 204) and Porto (2018) (p. 326) highlight, English plays a vital role in ELFTCs since it constitutes the only means of effective communication in such settings, thus bringing the students together, cementing their relations, and fostering their collaboration. What is more, Alghasab and Alvarez-Ayure (2021) (p. 12-13) and Porto (2018) (p. 326) argue that English is used to enhance mutual comprehension, learn together and from each other, and discuss similarities and differences between ELFTC participants. Similarly, Austin et al. (2017) (p. 98-99) and Dooly and Davitova (2018) (p. 233) add that various communication procedures, characteristic of the discourse of English, can be used to boost the relations of ELFTC participants.

English as a Lingua Franca Environment (n = 7)

Several of the reviewed studies, such as Demir and Kayaoğlu (2021) (p. 30), inform us that ELFTC participants feel safe and comfortable in such learning settings. Likewise, Bueno-Alastuey and Kleban (2016) observe that students are interested in watching how their international partners, also non-native speakers, use English (p. 156). What is more, Ke (2016) (p. 289, 292) and Scott-Monkhouse et al. (2021) (p. 23) argue that in

ELFTC contexts, learners generally do not focus much of their attention on linguistic correctness, which has both positive and negative consequences. Here, Ke (2016) and Kohn and Hoffstaedter (2017) argue that being understood by project partners is of key importance while making mistakes during communication is less relevant to the learners. As Ke (2016) explains, because of this state of affairs, learners can get a false impression regarding the development of their proficiency in the FL since, after all, they can successfully communicate with their partners, even with numerous errors along the way (p. 291). Moreover, a few journal articles report that ELFTCs can substantially motivate students toward FL learning, at the same time increasing their willingness to communicate in English (Dendenne, 2021; Ke, 2016; Kohn & Hoffstaedter, 2017). In particular, Kohn and Hoffstaedter (2017) find ELFTC environments to be less constrained and containing fewer linguistic norms than other settings which are more heavily guided by the rules of the native speakers (p. 361). Similarly, Demir and Kayaoğlu (2021) argue that FL learners prefer to collaborate with partners who are also non-native speakers of English precisely because of this distinctive feature and the fact that they too are prone to making mistakes when using English (p. 18-19). Further, Demir and Kayaoğlu (2021) claim that ELF arrangements, including ELFTCs, are likely to "reduce [students'] anxiety towards making errors" (p. 19), therefore, increasing their self-assurance levels and involvement during such exchanges (p. 19). On a related note, Kohn and Hoffstaedter (2017) note that the laid-back and informal character of ELFTC projects can positively add up to the construction of students' non-native linguistic personalities, which is often demonstrated through their exceptional ingenuity in language use and/or increased willingness to collaborate, among others (p. 361, 362). Kohn and Hoffstaedter (2017) stress, however, that the substantial linguistic growth of FL learners can only take place if other qualities, such as partnership, reciprocal understanding, and solidarity, are present in the given ELFTC project (p. 363).

Despite all the benefits attributed to the ELFTC environment, Dendenne (2021) reports that after taking part in an ELFTC project with non-native speakers, some students wished to take part in similar exchanges with native speakers (p. 169). This was primarily because, in the learners' opinion, non-native speakers did not constitute the ideal sources of English that they could learn from easily (Dendenne, 2021) (p. 169). In particular, Dendenne (2021) (p. 170-171) and Gajek and Calderón-Quindós (2018) (p. 49) enumerate unsatisfactory articulation, imperfect grammar, and poor lexical diversity, among others, as the key deficiencies of non-native speakers that FL learners perceive as undesirable and, therefore, discouraging from collaborating with such types of partners. Ke (2016) adds that such perceptions of students might be caused by the expectations set toward FL learners, namely, to produce native-like utterances in due course (p. 292).

Language Learner – Language User Transformation (n = 2)

According to Ke (2016) (p. 297) and Scott-Monkhouse et al. (2021) (p. 23), students' participation in ELFTCs accelerates their transformation from FL learners to FL users. Moreover, Ke (2016) argues that learners' involvement in ELFTCs can strengthen their "relationship with English" (p. 296). Ke (2016) stresses also that the identity construction process in an FL is rather arduous and lengthy and dependent on multiple individual differences of learners, including their self-confidence and perceptions of English as a language (p. 294, 296). Additionally, Ke (2016) enumerates several phenomena that might accompany such learners' transformation process, among which the central one is that students become capable of expressing themselves more directly in English, even in comparison to their mother tongues (p. 293-294). Notably, Ke (2016) adds that FL learners are often not mindful of such a change (p. 293-294). Consequently, Ke (2016) cautions ELFTC organizers to be aware of such a transformation among their learners, particularly those at the intermediate proficiency level when such change is the most likely to take place (p. 297).

Language and Culture (n = 4)

The evidence presented in a few studies suggests that learning language and culture can successfully and concurrently take place during ELFTC exchanges (Chen & Yang, 2016; Freiermuth & Huang, 2021; Jung et al., 2019; Vahed, 2020). According to Jung et al. (2019), despite the fact that language and culture can be considered as separate constructs, and their acquisitions seems to be independent, in ELFTCs, these processes appear to be reinforcing each other (p. 306).

Discussion

Given the considerable evidence collected from 28 individual RAs that formed the corpus of my study, it can be concluded that ELFTCs indeed facilitate FL learning. In terms of classic language skills, the key benefit associated with ELFTCs is the ability for FL learners to practice language production, which is highly appreciated by them. Consequently, ELFTC exchanges should include as many opportunities for oral interactions as possible. This is also due to students' limited opportunities to practice their target languages outside the FL classrooms. As far as writing skills are concerned, collaborative writing can be considered an ELFTC practice that is decidedly valued by its participants. Moreover, it is particularly advantageous for their FL development and involvement in such projects. Notably, students expect to receive feedback about their compositions and writing skills and, thus, such feedback should be offered to them whenever possible. In terms of reading, we can conclude that students should be given authentic reading materials to provide them with literature as close to real life as possible. What is more, it can be said that students can boost their knowledge about grammar, pronunciation, and vocabulary range during their participation in ELFTCs. When it comes to vocabulary,

it can be determined that ELFTCs allow FL learners to become acquainted with a substantial number of new words and phrases, which, in turn, is beneficial for their vocabulary growth. Results stemming from the reviewed journal articles that concerned grammar and pronunciation should be treated with caution since they were offered only by a handful of studies. Nevertheless, future studies should explore these aspects more in-depth.

As evidenced by several journal articles, ELFTCs can offer their participants much enjoyment. This constitutes an especially vital finding since the positive responses of the students are likely to transfer to their increased engagement and interactions in such learning environments. Consequently, this augmented contribution of the learners is likely to positively contribute to their linguistic growth. This can be considered a significant advantage of ELFTCs over traditional teaching approaches, which are often not sufficiently stimulating for learners and, thus, poorly engage them, in turn, leading the students to limited progress.

On the other hand, the fact that ELFTCs can evoke anxieties among some of their participants, as reported by a few of the reviewed studies, constitutes a potential disadvantage of such exchanges that has to be taken into consideration. Nevertheless, based on the findings on anxiety in foreign language learning contexts amassed over the years, it can be said that anxieties are an inevitable component of FL learning and they can only be minimized, but never fully eradicated (Dewaele & MacIntyre, 2014, 2016; MacIntyre & Gregersen, 2012; MacIntyre & Gardner, 1994; MacIntyre & Vincze, 2017). As a result, this aspect cannot be considered an exclusive risk associated with ELFTC projects since many other FL teaching approaches share it as well (Dewaele & MacIntyre, 2014, 2016; MacIntyre & Gregersen, 2012; MacIntyre & Gardner, 1994; MacIntyre & Vincze, 2017). However, what is promising in this regard and what is exclusive to this FL teaching approach is that various anxieties subside over time during ELFTC exchanges and, even more importantly, are converted into more positive emotions. Notably, in other FL settings, anxieties are frequently prevalent (Dewaele & MacIntyre, 2014; MacIntyre & Gregersen, 2012; MacIntyre & Gardner, 1994; MacIntyre & Vincze, 2017). What is more, the reviewed journal articles often regarded ELFTCs as less stressful environments than, for instance, other TCs which frequently involved the participation of native speakers whose presence was stressful for many FL learners. This is yet another noteworthy advantage of ELFTCs over other types of TCs. Notably, as confirmed by several reviewed journal articles, increased communication between ELFTC participants can serve as a valid benchmark that confirms students' lowering anxiety. This finding can be useful particularly for ELFTC organizers, serving as one of the means of monitoring the exchanges. Nevertheless, ELFTC instructors should always remember about and watch out for some anxious FL learners in their groups and proactively act against the negative consequences related to FL anxieties, for instance, through sensitizing students about what they can experience during ELFTCs.

Another crucial finding stemming from this study is that ELFTCs can facilitate the negotiation of meaning, which, in turn, can increase FL learning gains (Bohinski & Mulé, 2016; Clavel-Arroitia, 2019; Liu & Yang, 2022). As reported by the reviewed studies, it is mostly the tools used during the exchanges that determine the amount of negotiation of meaning. In particular, this was observable in the projects that utilized videoconferencing tools and social networking sites. Consequently, using these TC tools is advisable also in future similar exchanges. Moreover, from the reviewed journal articles we can conclude that ELFTC participants should, above all, focus on efficient communication with their partners rather than paying attention to their linguistic correctness.

As far as L1s, L3s, and translanguaging are concerned, the amassed results, allow us to conclude that ELFTC participants commonly use them for multiple, but often similar reasons, such as building relations, providing explanations, and greeting each other. As the reviewed studies show, learners' use of L1s, L3s, and translanguaging is beneficial for ELFTCs and students' perceptions of them. An unequivocal note for ELFTC organizers is that the use of L1s or L3s by ELFTC participants should not be penalized. This is primarily because, as the studies show, using L1s and L3s can, in fact, positively contribute to lowering learners' anxiety levels. Nevertheless, ELFTC organizers need to ensure that students use L1s and L3s rather incidentally and that for the majority of their exchanges they are using the target language that can be understood by everyone involved. Likewise, based on the negative examples stemming from the reviewed literature, ELFTC organizers should act against excessive L1 communication between native speakers of the same language involved in the given ELFTC since this can be detrimental to the interactions between the multinational groups of participants. Lastly, it can be concluded that the full picture of L1s, L3s, and translanguaging interplay in ELFTCs is not yet fully complete, hence, future studies should focus on these topics.

The analyzed findings of multiple ELFTC projects allow us to conclude that such environments are authentic, safe, and learner-friendly FL settings, all of which serve to their advantage. In particular, students appreciate the ability to work together for the same purpose, i.e., to learn and practice English. Moreover, in ELFTC settings, students can cooperate freely, without the worries about native speakers identifying and correcting all of their mistakes, which provides them with a sense of freedom, peace of mind, and room to grow. Certainly, such an arrangement has both its benefits and drawbacks with the main aspect being linguistic correctness, which can, in fact, be of lesser quality than in other TC settings involving native speakers. Yet, such remarks were rather incidental. Nevertheless, ELFTCs offer many other unequivocal benefits, for instance, they accelerate learners' FL growth, expose them to novel viewpoints, and increase their confidence in using English. Moreover, several journal articles agree that ELFTCs have a soothing effect on their participants, which, in line with the broaden-and-build theory and alike, allows them to reach higher learning gains (Csikszentmihalyi,

1988; Fredrickson, 2001, 2006; Fredrickson, 2013; Oxford, 2016; Seligman, 2002; Seligman & Csikszentmihalyi, 2000). Such gains, however, are dependent on multiple other components and, hence, are rather difficult to achieve.

Another distinctive advantage of ELFTCs is that they can substantially support FL learners in their transition to proficient English users. Here, ELFTC organizers should look out for increased easiness and openness of their students in communicating in the target language, which are evident signs of such a transformation. In particular, ELFTC organizers should be mindful of the existence of such an occurrence among intermediate proficiency learners and help them navigate through this process.

Lastly, the existence of concurrent cultural and linguistic development seems to be a naturally occurring phenomenon due to the substantial overlap of these two matters in the FL learning process. Since, based on the findings of this study, these two aspects appear to be developed separately yet strengthening each other, further investigation of their relationship is advised.

Conclusions

Given the above findings and discussion, it can be concluded that ELFTC exchanges constitute a valid FL teaching practice that responds to the demands of the 21st century. Due to the substantial number of language-related aspects in which ELFTC projects seem to surpass traditional FL learning contexts and offer more promising learning effects, ELFTC exchanges can be considered a valid supplement, or even an alternative, to typical FL learning approaches. In particular, according to the reviewed studies, ELFTC can be decidedly beneficial for boosting students' much-needed productive skills, i.e., speaking and writing skills, since such exchanges significantly increase the opportunities for FL learners to actively produce utterances in the given target language. Equally important are the augmented exposure to new vocabulary items and increased opportunities for negotiation of meaning, both of which are dominant characteristics of ELFTC projects. Importantly, ELFTCs are also engaging, safe, and enjoyable learning environments that appeal to and are highly appreciated by the learners. Nevertheless, it has to be borne in mind that, like all other teaching approaches, ELFTCs are also accompanied by some potential risks. In the case of FL learning, they mostly include various anxieties that students can experience as a result of being involved in such projects and interactions within them. There are, however, certain solutions that can alleviate these jeopardies and turn them into benefits over time.

The above findings are mostly in line with the results offered in previous similar reviews. Nevertheless, they offer a more detailed analysis of particular aspects of language learning in ELFTCs. Likewise, to the best of my knowledge, ELFTCs were analyzed on their own for the first time. Importantly, the above findings offer a good starting point and a point of reference for future studies, reporting on what has already been

discovered and what still requires further research, and aiming to set the directions for future investigations.

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