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Institutionalising English as a foreign language teachers for global sustainability: Perceptions of education for sustainable development in Turkey

Sezen Arslan ^a, Samantha Curle ^{b,*}

^a Department of Translation and Interpreting, Bandirma Onyedi Eylul University, Balikesir, Turkey

^b Department of Education, University of Bath, Bath BA2 7AY, United Kingdom

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ABSTRACT

In recent years, Education for Sustainable Development (ESD) has been emphasised, specifically in English language teaching. Therefore, investigating English as a Foreign Language (EFL) teachers' perceptions of ESD is a fundamental first step in developing effective EFL curricula and teaching policies. Consequently, this study delved into the English as a Foreign Language (EFL) teachers' perceptions of Education for Sustainable Development (ESD), examining its role in EFL teaching methodologies and identifying the challenges faced in integrating ESD within the Turkish educational context. In-depth interview data (IDI) was collected from 28 in-service Turkish EFL teachers. Utilising qualitative content analysis (QCA) with open, axial, and selective coding, we found out that Turkish EFL teachers' perceptions of ESD are multifaceted and shaped by the interdisciplinary nature of EFL teaching, which is fed by Content and Language Integrated Learning (CLIL). The findings showed that EFL teachers: (1) conceptualised ESD as being related to learning for sustainable practices addressing social, economic and environmental dimensions, and linked ESD to a lifelong learning process that should be implemented at all education levels and supported by critical thinking and problem-solving skills; (2) thought English classes provide ideal venues to teach multiple topics including sustainability, thus reported it as a key responsibility for them to instil in their students, and (3) felt that ESD has yet to be sufficiently reflected in EFL curriculum due to some obstacles such as narrow focus on ESD, limited contact hours of English and lack of parental awareness of ESD. The findings mainly emphasised the significance of an extensive and holistic coverage of ESD at all education levels through engaging and hands-on in-class activities. Further practical suggestions are also provided regarding how EFL teaching policies may be developed to better integrate ESD.

1. Introduction

Sustainable Development Goal 4 (SDG 4) relies on quality education and promotes lifelong learning opportunities (UNESCO, 2021). Since it focuses on Education for Sustainable Development (ESD), it is the driving force of sustainable development that empowers individuals with the knowledge and skills to create a peaceful and prosperous world. By fostering consciousness and awareness of sustainability, other SDGs are then attainable, such as climate change (SDG 13), good health and well-being (SDG 3), and gender

* Corresponding author.

E-mail address: smc20@bath.ac.uk (S. Curle).

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equality (SDG 5).

People worldwide have been facing some urgent problems, such as climate change, water scarcity, and poverty. In this sense, ESD is necessary to transform the world to guarantee sustainable lives (UNESCO, 2012). Therefore, there is a need for every country to redesign the curriculum (McKeown, 2002). ESD, being interdisciplinary by nature, can be integrated into all academic subjects and levels of education (UNESCO, 2010). In the last few years, the integration of ESD has been globally emphasised for several academic disciplines, from STEM to geography (see, for example, Li & Tsai, 2022; Meadows, 2020). However, ESD is not limited to such fields only. Language classes provide a context for both language learning and content knowledge, making them an ideal avenue for ESD (Sund & Gericke, 2020). This is because they provide a context for language learning as well as content knowledge. To maximise learning about SDGs through English as a Foreign Language (EFL), one strategy that can be adopted is Content and Language Integrated Learning (CLIL). This approach aims to teach a specific academic subject in a foreign language (Coyle et al., 2010). As a result, CLIL has become highly regarded for addressing sustainability issues, especially within the social sciences (Nijhawan et al., 2021). Therefore, the status of English as a global language, coupled with the growing concern for sustainability, has resulted in a substantial number of studies carried out globally within the realm of English language teaching (ELT) for ESD purposes (see, for instance, Belyaeva, 2017; Chaikovska & Levchyk, 2022; J.J. Jodoin, 2020; Sakamoto, 2011). These studies have shown that the CLIL approach of including ESD in teaching English is beneficial in enhancing content knowledge of SDGs and improving English skills.

Turkey has recognised the global trend of integrating ESD in language education and has emphasised the importance of achieving several SDGs by connecting with SDG 4. Its 2023 Education Vision, declared by the Ministry of National Education (MoNE), has suggested an interdisciplinary approach that focuses on the key issues of social and physical sciences for EFL teaching (MoNE, 2019). However, it is important to assess whether ESD is effectively integrated into EFL classes. To achieve this, it is necessary to explore EFL teachers' understanding of ESD and their perceptions of ESD integration in EFL teaching. Such research can help understand the current position of ESD in language education and improve its integration. Despite the popularity of ESD integration in EFL classes, many studies have been limited to determining how EFL teachers conceptualise and implement SDGs in ELT (Mambu, 2022). Furthermore, ESD studies in Turkey have mainly focused on pre-service teachers (Yilmaz-Findik et al., 2021). This study aims to fill this gap in the literature by seeking answers to the following research questions:

- (1) How do EFL teachers define ESD?
- (2) How important is ESD to EFL teachers?
- (3) Do EFL teachers think the integration of ESD in the EFL curriculum is sufficient?

We aim to advance the understanding of EFL teachers' conceptualisations of ESD and their thoughts on the extent to which ESD is reflected in the EFL curriculum in Turkey. Such an investigation would help develop EFL curricula, materials, teaching strategies and EFL teacher education programmes to achieve ESD integration. The study's findings are therefore essential in providing important implications not only for Turkey but also for international settings.

2. Literature review

2.1. Education for sustainable development

After the UN General Assembly recognised sustainable development in 1987, the parallel idea of using education to promote sustainable development started to be explored. As the concept of sustainable development grew from 1987 to 1992, ESD was first described and discussed by the United Nations (UNESCO, 2006). ESD refers to education for social transformation for building a more sustainable world; therefore, it goes beyond imparting knowledge of sustainability (UNESCO, 2012). It aims to equip the learners with the skills to address global problems through critical thinking and problem-solving. Then, the learners will be able to make informed decisions for all dimensions of well-being. Therefore, the idea that ESD is solely based on the environmental field is untrue. ESD should address society, economy, politics, and culture, which requires a holistic approach. For this reason, ESD has an interdisciplinary nature (Letouzey-Pasquier et al., 2023). To fight against world problems, knowledge from multiple disciplines needs to be employed. However, educational systems have yet to adopt this broader concept of sustainability (Venkataraman, 2009). Therefore, UNESCO developed the Global Action Programme on ESD in 2014. This framework offers insights into the implementation of ESD and focuses on expanding ESD across all educational levels (UNESCO, 2018). Thus, every nation needs to redesign its curricula to address the need for a more sustainable world (McKeown, 2002). In this manner, academic endeavours that emphasise the importance of integrating ESD in different disciplines have intensified, particularly in the last 5 years. These involve the incorporation of ESD in STEM and social sciences, such as mathematical education (Li & Tsai, 2022), physical education (Baena-Morales et al., 2023), geography education (Meadows, 2020), visual arts education (Pavlou & Kadji-Beltran, 2021), and EFL education (Authors, 2021).

The integration of ESD is critical for the students to develop an understanding of sustainability. Pauw et al.'s study (2015), which was conducted with secondary school students, showed that the adoption of ESD as a teaching approach developed their consciousness of sustainability. By engaging ESD in schools, the students could gain awareness of equities, social responsibility, and environmental justice. Similarly, Nayar (2013) asserts that, apart from environmental consciousness, implementing ESD improves other skills, such as communication and management. Thanks to these skills, learners can improve the conditions in society. Despite such benefits, teachers can have difficulties implementing ESD. Therefore, they may need some extra support with the help of ESD-oriented teaching materials, ESD partnerships and education on ESD (Waltner et al., 2020). Considering similar challenges, Kioupi and Voulvoulis (2019) developed the Systemic Framework. It establishes a link between the SDGs and educational outcomes. Also, it focuses on identifying

ESD pedagogies. Apart from that, the OECD developed a global competence framework that aims to support youth to help build a more sustainable world. Similarly, this framework supports practitioners in improving curricula, and teaching materials (OECD, 2018). Overall, ESD in education has gained momentum in the last decade with such several global initiatives.

2.2. Sustainable development goals and SDG 4

Ecosystem resources are being overexploited due to industrialization, technological development, and the increase in population, leading to exacerbated challenges such as poverty, inequality, and hunger (Maley & Peachey, 2017). To address these problems and ensure global prosperity, the United Nations established 17 SDGs to be achieved by 2030, which are universal targets tackling social, economic, and environmental issues such as justice, equality, climate change, and sustainable consumption (UNESCO, 2017). One of these SDGs, SDG 4 (Quality Education), aims to provide inclusive and equitable quality education and promote lifelong learning opportunities for all (UNESCO, 2017, p.18). SDG 4 focuses on improving education opportunities and access to education without discrimination. It also highlights the importance of ESD, which includes the necessary knowledge, skills, and attitudes learners should possess to promote a more prosperous world. Good quality education is essential for raising awareness of the challenges and problems the world is facing, making SDG 4 holistic and essential to accomplishing all the other SDGs (Bianchi et al., 2022). This study focuses on SDG 4 and its connection to ESD.

The implementation of educational activities to promote sustainability is closely linked to SDG 4. This goal is not confined to any particular educational discipline, as ESD is interdisciplinary (UNESCO, 2005a). ESD can be integrated into the curricula of various disciplines, including engineering and geography. However, teaching EFL is an ideal setting to promote ESD, as EFL classrooms can expose students to many topics related to sustainability (J.J. Jodoin, 2020). Therefore, sustainability-related issues can be emphasised in the EFL curriculum, as education is at the core of achieving a sustainable world.

2.3. English as a foreign language and sustainable development

To facilitate the implementation of the SDGs, communication is crucial in promoting collaboration and negotiation among governments and society members (GTZ Rioplus, 2006). Since language is recognised as a means of international communication (Zygmunt, 2016), foreign language education plays an important role. In this regard, foreign language education can be seen as a tool for promoting communication-oriented activities such as collaboration, discussion, and problem-solving (Bowden, 2010). English, being a lingua franca, is especially suitable for presenting, discussing, and making decisions about sustainability issues in EFL classes (Mohammadnia & Moghadam, 2019). Therefore, EFL classes are ideal for promoting sustainability issues and fostering communication, which is essential for achieving the SDGs.

Sustainability is falsely perceived as only relevant to environmental education (Breiting, 2009). This is a reductionist view of sustainable development, as it underestimates the ecological aspect of sustainability, which refers to the interconnectedness of economic, social, and environmental conditions at a global level (Bowden, 2010). With such a broader perspective on sustainability, language classes can integrate sustainability-related issues (Sund & Gericke, 2020). As a result, the learners can become aware of them and introduce solutions for a better world (J.J. Jodoin, 2020). Thus, research interest in integrating sustainable development into teaching EFL has grown. Despite this recent interest, few inquiries have been made to investigate how EFL teachers conceptualise and implement SDGs in ELT classrooms (Mambu, 2022). Only a handful of studies have explored EFL teachers' conceptualisations and perceptions of implementing sustainable development in ELT classes (M. Ganji et al., 2020; Kwee, 2021; Yilmaz-Fındık et al., 2021). For instance, Ganji et al.'s study (M. 2020) found that most of the Iranian EFL teachers in their study were unaware of the concept of sustainable development. These findings were echoed in Yilmaz-Fındık et al.'s (2021) study: Turkish pre-service EFL teachers had a limited understanding of sustainable development and could not link it to educational contexts, including language teaching. However, Kwee's study (2021) revealed that EFL teachers in Hong Kong were optimistic about implementing SDGs in their classes and firmly committed to this inclusion. Overall, the existing literature shows the need for further research and development in this field to ensure that EFL teachers have the necessary knowledge and skills to effectively integrate sustainable development goals into their language classes. This study makes an original contribution to knowledge by addressing this gap in the literature.

2.4. A pedagogical approach to integrating ESD in EFL teaching

One approach to integrating SDG teaching and learning into the EFL curriculum would be to take a Content and Language Integrated Learning (CLIL) approach. It involves teaching an educational subject in a foreign language (Coyle et al., 2010). The subject may be unrelated to language teaching, and the learners are taught through a target language to learn the subject content (Çetinkaya et al., 2015). CLIL has a "dual-focused teaching and learning approach" where content mastery and language learning can be improved simultaneously (Coyle et al., 2010, p.1). From this perspective, CLIL goes beyond traditional language teaching by combining language instruction with the study of various academic subjects. Interdisciplinary teaching forms the basis of CLIL (Darn, 2006). A CLIL lesson may include teaching science concepts, such as energy and resources, in a foreign language like English. It can thus be applied to ESD. In this way, sustainability concepts can be studied by practicing foreign language skills simultaneously. This symbiotic relationship between CLIL and ESD provides a holistic learning experience by promoting awareness and understanding of the ESD topics and improving language skills. Therefore, CLIL is a part of ESD (Ito, 2018; Knight, 2021).

Over the last few years, CLIL has become remarkably popular for addressing sustainability issues. Therefore, a considerable amount of research has been conducted to see whether/to what extent CLIL is effective in improving ESD. In doing this, particularly CLIL

through English has been used. For instance, in Jodoin's study (J.J. 2020), CLIL was incorporated into teaching SDG-related issues for tertiary-level students, such as pollution. The study illustrates the potential of the ELT discipline, built around some SDGs, to improve the students' content knowledge. Similarly, Belyaeva's study (2017) reveals the positive impact of CLIL on not only tertiary-level students' improved knowledge of SDG issues, including waste management and water quality but also their English language skills. Also, Chaikovska and Levchyk (2022) integrated CLIL into teaching SDGs related to poverty, health, and quality education through English language teaching practices such as discussions, group work, and presentations. The researchers concluded that CLIL effectively improves their understanding of SDGs in tertiary education. Apart from that, there are also other studies where CLIL is used for teaching SDGs at a low level of education. For example, Sakamoto's (2011) study shows some examples of involving SDG-related practices about the environment in EFL lessons for elementary and high schools. The study points out that CLIL is a practical approach to teaching SDGs as it promotes learning and awareness. Overall, through CLIL, learners can be exposed to English in different settings, which enhances language skills and content knowledge related to sustainability issues.

Although CLIL has demonstrated positive outcomes in integrating SDGs into EFL curricula, there is a limited amount of literature on the use of CLIL for this purpose in Turkey. For example, Çetinkaya et al. (2015) have shown that there is a lack of research in this area. Therefore, it is crucial to examine Turkish EFL teachers' comprehension of ESD and their perspectives on incorporating SDGs in the EFL curriculum. This study, therefore, fills this research gap.

2.5. Sustainable development in EFL teaching in Turkey

Turkey has made significant strides in promoting sustainable development by integrating it into national policies and educational systems. The concept of sustainable development was first introduced in the National Development Plan in 1992, and a set of national sustainable development indicators was subsequently developed (Turkish Ministry of Development, 2016). In 2016 and 2019, Turkey prepared Voluntary National Reviews (VNRs) following the adoption of Agenda 2030, which reported on the country's progress towards sustainability. The VNRs revealed that Turkey had undertaken numerous sustainability-related projects and practices and had taken notable actions to address poverty, inequalities, and vulnerability (United Nations, 2019). Furthermore, Turkey has developed its 2023 Education Vision, which prioritises the achievement of many SDGs through a connection to SDG 4 (MoNE, 2019). The vision also emphasises the importance of prioritising universal values that promote people's well-being and should be integrated into the curriculum to bring about transformation and change.

Turkey also emphasised the importance of foreign language learning in its 2023 Education Vision and stated that an interdisciplinary approach nurtured by the core issues of social and physical sciences should be adopted for EFL teaching (MoNE, 2019). Therefore, referring to the similar interdisciplinary nature of ESD (UNESCO, 2005b), EFL education in Turkey then needs to cover sustainability-related issues. Considering this, however, there needs to be more research that attempts to explore the integration of sustainable development in Turkish EFL settings. Few were conducted with the pre-service EFL teachers' thoughts on integrating sustainability issues in EFL classes (Akyüz, 2019; Kumlu, 2022). The findings from these studies illustrated that pre-service EFL teachers favoured such integration. Similarly, EFL instructors' perceptions of integrating sustainability issues in EFL classes were also explored (Akban & Yavuz, 2020). They found that Turkish EFL instructors had positive perceptions about integrating global issues in EFL classes. Only one study examined the integration of SDGs in the high-school EFL curriculum within the Turkish context and revealed a limited representation of them (Authors, 2021). Such studies can inform curriculum developers and policymakers about operationalising SDGs in EFL classes. However, considering the limited literature about EFL teachers' conceptualisations and implementation of SDGs (Mambu, 2022), this present study, therefore, expands the line of research by investigating Turkish EFL teachers' conceptualisations of sustainable development and their thoughts on whether/to what extent ESD is integrated into EFL teaching.

3. Methodology

3.1. Research design

This study used qualitative content analysis (QCA) as the research methodology to investigate the views and understanding of Turkish EFL teachers regarding Education for Sustainable Development (ESD) by exploring their perspectives on its importance and relevance in the context of English language teaching. This study is specifically grounded in QCA analysis, which functions as the methodological approach and the analytical framework (Schreier, 2012). QCA was chosen due to its effectiveness in the systematic transformation of substantial amounts of textual data into a comprehensive, detailed, but manageable dataset that represents the participants' various perspectives (Hsieh & Shannon, 2005). This approach is particularly effective in revealing the relationship between ESD and EFL in the context of CLIL. By using QCA, this study provides an in-depth exploration of participants' perspectives, experiences and conceptualisations regarding ESD and its integration in language education through content-based instruction. This is significant as the ESD concept is relatively recent and has not been extensively investigated from the EFL teachers' vantage point, particularly in the Turkish context. Consequently, the contextual understanding derived from this study can inform curriculum developers and policymakers. Such insights include knowledge and skills to integrate ESD in EFL teaching, good practices and effective strategies that the teachers think are essential, the dimensions the EFL teachers associate with ESD, and obstacles to integrating ESD.

3.2. Context

English is the only foreign language that is compulsory to learn in Turkey (Kirkgoz, 2007). This means that it is taught to all primary, lower, and upper secondary school students. English is not compulsory at the pre-school level of education. Despite this, some preschools offer English to students if they have English teachers. All schools from primary to upper secondary in Turkey are supposed to follow the English curriculum that the Turkish Ministry of National Education has officially approved. However, in addition to following this national curriculum, Turkish private schools have a certain autonomy in creating and broadening the English curriculum. They have the flexibility to enhance the curriculum by adding different English-related topics and increasing the number of lessons. Overall, considering the status of English as a compulsory subject within the Turkish educational system, a novel opportunity presents itself to integrate ESD into ELT by using the content-focused approach characteristic of CLIL. In this sense, the study shows how EFL teaching goes beyond traditional language instruction to promote ESD.

3.3. Participants

In this study, 28 in-service EFL teachers volunteered to participate in semi-structured interviews. Convenience sampling was used to obtain the sample based on teachers' availability and willingness to participate (Lavrakas, 2008). This form of sampling was used because the researcher (the first author) knew the participants from their network of personal contacts. By establishing trust-based relationships with participants, it was assumed that the data collected would provide deep, in-depth insight (McConnell-Henry et al., 2010). Nevertheless, the limitation of using convenience sampling needs to be recognised. This non-probability sampling technique may have led to bias in the data, as the sample may not truly represent the target population (Lavrakas, 2008). Thus, it is recommended that future studies on this topic recruit a large number of participants randomly to include a more representative sample and be able to better generalise to the population.

Further details about the EFL teachers recruited include:

- Twenty-four participants were female, and four were male.
- Participants' ages ranged between 23 and 54 ($M = 31.8$).
- All participants were Turkish, spoke Turkish as their first language, and English as a foreign language.
- Participants had between 1 and 16 years of teaching experience.
- Twenty-two respondents taught at state schools, and six taught at private schools (pre-school $n = 1$; primary school $n = 3$; lower secondary school $n = 9$; upper secondary school $n = 15$).
- Twenty-four participants had *yet to* receive any training on sustainable development; four *had* received some form of training (courses and workshops) on sustainable development.

3.4. Data collection

3.4.1. Semi-structured interviews

Data were collected using in-depth, semi-structured interviews. All participants took part in a semi-structured interview in Turkish, each lasting 30 min. All 28 interviews were transcribed verbatim and translated by the first author (a native Turkish speaker). They were then translated back to Turkish by a second translator who was bilingual in Turkish and English. The translations were compared to ensure accuracy. Any discrepancies were discussed and resolved.

Findings are reported using participant numbers, such as T1 and T2. Stringent ethical procedures were followed; university ethical approval and informed written consent from each participant were obtained. The semi-structured interview protocol was piloted with five participants of similar characteristics. The pilot process results showed no changes to the interview protocol. The final version of the interview protocol is provided in [Appendix A](#).

3.5. Data analysis

This study employed QCA to investigate EFL teachers' conceptualisations of ESD and their thoughts on whether/to what extent ESD is integrated into EFL teaching. This approach allowed the researchers to analyse the textual data obtained from the semi-structured interviews by connecting the findings with the overarching principles of CLIL. Based on QCA, inductive analysis was used to explore the data and derive the themes (Thomas, 2006). This analysis was conducted by two researchers in several steps, as guided by Kuckartz (2014). First, each researcher read the translated transcripts several times to become familiar with the content of the data by highlighting the important parts. Second, they initially coded the data by developing broader categories. Third, codes with similar characteristics were synthesised into refined categories. Following this, open, axial, and selective coding were used, respectively, for each transcript (Saldana, 2015). Finally, the two researchers compiled, refined and categorised the codes into themes (see [Table 1](#) for examples of the coding scheme).

To ensure accurate data interpretation, the first author coded the transcripts and then re-coded the transcripts after a month's interval. This process led to a high degree of intra-rater reliability ($k = 0.95$). All of the transcripts were also coded by a second researcher, and a very good degree of agreement between the coders was found ($k = 0.92$; Landis & Koch, 1977). For the validation of the study, member checking (i.e., participant validation; participants were asked to check and verify the data as organised by the researchers) was conducted for half of the participants (Charmaz, 2014).

4. Results

4.1. English as a foreign language teachers' definition of education for sustainable development

To answer the first research question, data analysis focused on how EFL teachers conceptualised ESD. Investigating teachers' conceptualisations of ESD can help better understand how they defined it and find out whether they had any misconceptions about ESD. Teacher responses were grouped under two themes: (1) *Learning for sustainability* ($n = 20$) and (2) *Lifelong learning* ($n = 8$).

4.1.1. Sustainable development as learning for sustainability

Twenty participants conceptualised ESD as being related to learning for sustainable practices such as taking action to protect ecological balance, people's well-being, and economic development. For example, T21 said: *"It means focusing on climate change, economic equality, innovation, sustainable consumption, and peace and justice to improve the lives of future generations."* This comment summarised T21's definition of ESD, addressing learning about environmental, economic, and social sustainability. Echoing T21, T18 defined ESD as focusing mainly on ecological balance and said: *"It is an educational approach that aims to make future generations aware of responsible consumption because there are limited resources in the world."* T3's comment focused on people's well-being: *"It is education for creating what is needed to keep the world in peace and to live in prosperity"*. Referencing the economic dimension of ESD, T14 said: *"It means economic growth. If you educate people on sustainable development, you could guarantee the future of the countries as people can make informed decisions about economic activities."*

Overall, the participant teachers in this study made definitions by linking ESD to multiple layers such as responsible consumption, justice, climate change and economic growth. They provided diverse definitions and perspectives to ESD as their conceptualisations revolved around social, economic and environmental dimensions of sustainability.

4.1.2. Sustainable development as lifelong learning

Of the 28 participants, eight participants related ESD to lifelong learning. They said ESD learning is not restricted to any particular level of formal education. For example, T23 emphasised that ESD is a continuous learning process: *"It is lifelong learning that updates itself continuously because the global issues are always changing. Each individual should receive ESD."* Similarly, T1 also remarked: *"ESD refers to becoming open to new learning experiences by following the latest international developments on sustainable practices."*

Likewise, T2 expressed: *"We have just fought with Covid-19. We understood the importance of health and social equity during those days. Later, Turkey was also confronted with mucilage. So, the World is constantly changing. New challenges happen. ESD is like a precaution against these challenges. Everyone needs it to become informed about global issues and necessary actions."*

The participant teachers' perspectives encourage learning by addressing world problems to transform society for a more sustainable world. Other interviewees also offered different viewpoints on the issue as they highlighted ESD as lifelong learning, focusing on inclusive education. T23 said:

"It means lifelong learning by enabling equal education opportunities for everyone regardless of their identities so that everyone can have the chance to learn throughout their life." T16 echoed this: *"ESD is a broader concept that addresses everyone from all walks of life; therefore, it should include learners of all age ranges."*

To add, the participants emphasised that ESD should exist at all levels of education; however, some stated that ESD should be combined with critical thinking and problem-solving skills. For example, T10 said: *"ESD should be supported by critical thinking. Then, learners can analyse the complicated global issues that they face during their lifetime."* T5 similarly emphasises the significance of problem-solving by saying: *"The world is getting more challenging. To understand and solve world problems, we need to think critically about them and develop our problem-solving skills."*

To conclude, teachers thought that ESD should be inclusive and exist in any period of one's entire life, regardless of age. They asserted that such an approach supports reinforcing the ability of learners to thrive in a changing world. Therefore, they suggested for EFL education that ESD be included in all levels of education, from kindergarten to higher education. While doing this, they added that critical thinking and problem-solving skills should be emphasised to adjust to the rapid pace of global problems.

4.2. The importance of education for sustainable development for English as a foreign language teachers

The second research question focused on how important ESD is to EFL teachers. The data showed that all participants recognised the importance of ESD. Two themes were identified about this given importance: (1) *the status of English as a lingua franca* ($n = 20$) and (2) *the advantage of teaching multiple topics in English* ($n = 12$).

4.2.1. The status of English as a lingua franca

Participants stated that ESD is necessary due to the eminent status of English as a lingua franca (ELF, $n = 20$). They noted that English is a universal tool that can be used to create awareness of sustainability issues. They also contended that English should be used to take the initiative to address these issues by facilitating interaction between people from diverse settings. For example, T27 said that knowing English can allow the learners to address global issues:

"Sustainability is a global issue, not specific to any country. Similarly, English is not an asset of any country. It is global. To address global issues, English can be effectively used. Therefore, as an EFL teacher, it is of utmost importance for me."

Likewise, T16 believes that English is a remarkable asset in the field of sustainability and it can promote opportunities for taking part in international collaborations and contribute to solving sustainability problems.

"If you know English, you can have a chance to attend international sustainability projects where you can collaborate with people from different regions. Thanks to English, you can take the initiative to solve sustainability problems and make your voice heard."

Finally, T19 emphasises that English facilitates access to a vast majority of Internet content about sustainability issues and contributes to becoming aware of them.

"A big amount of internet content is in English. When somebody knows English, they can follow the latest sustainability issues across the world and increase awareness of them."

Although all participant teachers were aware of the position of English as the world language for promoting ESD, several of them ($n = 7$) indicated that they needed to be equipped with the necessary knowledge and skills for using ESD in English teaching. For example, T12 and T22 responded:

"I think English can be used to focus on global issues. It is a perfect international channel. However, we first need to know more about SDGs and local and global sustainability practices. After we get informed about them, we can integrate ESD through such a primary language."

"ESD is especially important to an EFL teacher as it is the language of science and education across the world. By using English, students can access several sources about sustainability. However, EFL teachers should also help them. Therefore, teachers should expand their knowledge about the principles of sustainable development and personal responsibilities. Then, English serves better for ESD purposes."

Overall, the participants' comments illustrate that ESD is critical to EFL teachers, as English as a lingua franca provides a venue for exposing learners to sustainability issues. Although all of the participants appreciated the value of English as a world language to promote ESD, some also reported that they need to be supported with certain knowledge and skills concerning ESD to incorporate it effectively by using English. This support includes providing the EFL teachers with sustainability practices, individual responsibilities, SDGs, and local and global developments.

4.2.2. Advantages of teaching multiple topics in English

Another theme from the data was the '*advantage of teaching multiple topics in English language teaching*' ($n = 12$). Some participants noted the diverse nature of teaching English and the ability to incorporate various topics into English language teaching. They thought this was an advantage because they could focus on different content and cater to all ages and proficiency levels while developing awareness of sustainability issues. They noted ESD as being vital to them as it has the potential to address sustainable practices. For instance, T13 explained: *"In terms of the nature of my job, I can organise my teaching around different themes through language skills. This makes me pay particular attention to ESD."* T26 mentioned they are attentive to ESD because: *"When teachers teach English, they can focus on different topics from greetings to healthy habits. Therefore, I find it important for EFL teachers to address sustainability themes."* Similarly, T4 also said that *"ESD is important to EFL teachers because sustainability topics can be integrated into the EFL courses by using English as a medium. This enables flexibility for EFL teachers and becomes an advantage as the learners may have the chance to practice the language skills through sustainability content."*

To conclude, EFL teachers in this study recognised the significance of ESD. They expressed this significance through the potential of EFL courses to address ESD. They remarked that the EFL courses could provide the necessary knowledge and skills for the learners to become informed about sustainability, as they thought EFL courses were flexible and adaptable for the integration of sustainability topics.

4.3. Sufficient integration of education for sustainable development in the English as a foreign language curriculum

The third research question examined what teachers thought about the integration of sustainable development in the EFL curriculum. The data revealed that all teachers ($n = 28$) thought ESD needed to be sufficiently reflected in the curriculum. Some participants agreed that ESD was often covered superficially and limited to addressing topics often related to the environment, education and the economy. T13 explained with a holistic view of ESD: *"Not all ESD subjects are covered. For example, the most referenced ESD subject is global warming. However, ESD is not that narrow. It includes many subjects."* Echoing T13, T2 also described the representation of ESD as limited by saying: *"It [EFL curriculum] is generally limited to covering environmental issues and responsible consumption."* Similarly, T6 said: *"The representation of ESD seems to focus on values education in the EFL curriculum. This is not an adequate representation of ESD."*

Apart from the limited representation of ESD in the curriculum, some participants also stated that the curriculum needs to encourage learners to participate actively in sustainability-related activities. These can include reading related texts, encouraging collaborative projects, and engaging in campaigns where learners can recognise and reflect on sustainability issues and develop possible solutions. For instance, T28 asserted: *"The EFL curriculum should guide students to prepare posters and conduct projects about sustainable development to motivate them."* Echoing this, T7 said: *"Sustainable development subjects should be covered in the curriculum explicitly."* They agreed that English language course content should be structured in a purposeful way to overtly direct students' attention to ESD activities.

Several participants noted that any ESD in the ELT curriculum was most likely to occur at either the secondary school or senior high school levels of education, with little mention in primary and pre-schools. Participants thought that ESD should also be covered in the lower grades. For instance, T4, who works at a preschool, explained:

"The reflection of ESD in the preschool education EFL curriculum is important as it is the first stage where the learners get familiar with English. Therefore, it would be an opportunity to include SD issues at this stage to create awareness of them." Likewise, T26 added: "Contrary to the high school curriculum, ESD is slightly focused on primary school EFL curriculum. Thus, it should also be emphasised in primary school EFL curriculum, as it is important to develop consciousness about sustainable practices at younger ages."

In addition, participant teachers noted some obstacles to the integration of ESD into the EFL curriculum. One of the main obstacles mentioned was the limited contact hours of the English course. As T20 put it, *"This causes us to cover ESD topics superficially because we*

need to rush the topics.” T8 also said, “English courses are perfect settings for teaching ESD, but the class time is limited. Should I handle ESD or rush to cover all required topics to prepare my students for the examination during such limited class time?” Apart from constrained class hours, another most frequently mentioned obstacle was parents’ expectations of English education. T17 explains this as: “Parents generally focus on higher scores; so, they may not understand the importance of ESD in EFL classes.” For this reason, T10 called out to school administration and said: “School administration should inform and educate parents about the significance of ESD in English classes.”

Overall, the EFL teachers in this study agreed that ESD is not reflected sufficiently in the EFL curriculum. They thought that the curriculum had a narrow focus on sustainability by addressing certain issues, such as environmental problems and values education. This focus was also reported to be specifically limited to secondary or high school education, with less emphasis on minor degrees. They also indicated that the EFL curriculum is insufficient for drawing the learners’ attention to ESD activities. Therefore, they suggested that a variety of methods and participative activities should be added to the EFL curriculum to provide an ESD context where the learners could be actively engaged. Apart from that, several other participant teachers mentioned some obstacles, such as constrained English class hours and parents’ lack of awareness about the need to support ESD. They expressed the desire that the same degree of importance should be given by the parents to the effective integration of ESD into the EFL curriculum.

5. Discussion

5.1. English as a foreign language teachers’ definitions of education for sustainable development

The present study sheds light on the conceptualisations of ESD among in-service EFL teachers. They view ESD as closely linked to learning sustainable practices that promote sustainable well-being for the world. The teachers emphasised the importance of focusing on topics such as global warming, responsible consumption, equality and education. This result is encouraging, as it indicates that teachers were somewhat familiar with the ESD concept and its coverage. Earlier research conducted by [Aye et al. \(2019\)](#) showed that in-service teachers, including English language teachers, are probably to employ ESD teaching techniques if they are more informed about the concept of ESD. Therefore, the more knowledge the teachers have about ESD, the more likely they will become committed to using ESD in their teaching.

Besides, similar to previous research by [Borg et al. \(2014\)](#), the findings of this study also revealed that the participants’ ESD conceptualisations were related to social, economic and environmental dimensions of sustainability. This conclusion shows that they had a sophisticated ESD understanding, providing a fundamental starting point for integrating ESD. As proposed by [UNESCO \(2012\)](#), ESD does not only rely on environmental issues but also considers social and economic sustainability issues. In this sense, the participants’ conceptualisations are essential in guiding the researchers and practitioners to develop EFL curricula. Therefore, a holistic view of ESD should be adopted in the EFL curricula through emphasising the interconnectedness of social, economic and environmental dimensions of ESD.

To add, this study pointed out that EFL teachers linked ESD to lifelong learning, as they believed ESD helps individuals adapt in a constantly changing world. This finding aligns with [Yilmaz-Fındık et al.’s \(2021\)](#) study, where pre-service EFL teachers closely associated sustainable development with the well-being of societies and lifelong learning. This extends our understanding of in-service EFL teachers’ conceptualisations of ESD, highlighting the importance of ESD as a lifelong learning process. These results of the study have important implications. First, since ESD was perceived to be a lifelong learning practice by teachers, this finding suggests that ESD is necessary for everyone and thus goes beyond scientific disciplines, including EFL education ([Breiting, 2009](#); [Sund & Gericke, 2020](#)). In this sense, ESD has an interdisciplinary nature ([UNESCO, 2010](#)). It is therefore essential to develop an EFL curriculum that supports the learners to become lifelong learners and addresses global issues. The learners can then adopt more responsible practices.

5.2. Perceived importance of incorporating ESD for EFL teachers

The results of this study indicate that all EFL teachers acknowledged the significance of ESD and agreed that it was their responsibility to teach it in the language classroom. They believed that ESD was linked to globalisation and the global position of English as a lingua franca. [Sundh \(2016\)](#) also supported this idea and emphasised the importance of English in discussions related to global sustainability. The participants in the study stated that English is widely used internationally and can be a valuable tool in disseminating information and best practices about sustainable development. This finding indicates that EFL teachers are eager and dedicated to teaching ESD. EFL teachers’ dedication shows a perfect alignment with the CLIL approach which combines language learning through subject-specific content ([Coyle et al., 2010](#)). Therefore, this finding has significant implications for curriculum developers. They could then add ESD goals to EFL curricula so that learners could see the relevance of English courses to sustainability issues. Also, learners could develop their English proficiency along with their knowledge of sustainable development. As suggested by [M. Ganji et al. \(2020\)](#) and [Tavakkoli and Rashidi \(2020\)](#), ESD could be an important addition to language classes.

Another interesting finding is that although ESD holds significance for EFL teachers, they also argued that EFL teachers need to know more about sustainability to effectively integrate ESD by using English. This finding emphasises the need for teachers to receive training on sustainability and ESD since they need to become updated on the latest sustainability practices and their integration into the EFL classes. Thus, EFL teacher education curriculum developers should design programmes particularly developed to enhance the teachers’ knowledge and skills in ESD. These programmes could include topics, such as the United Nations framework of SDGs, sustainability principles, and effective approaches and techniques for incorporating ESD in the EFL curriculum.

Also, some teachers emphasised the importance of critical thinking and problem-solving for ESD at all educational levels. This finding is similar to that of [Neelaveni and Kothagattu \(2020\)](#), who highlighted the important role of critical thinking and

problem-solving for ESD in English language education. Hence, EFL education needs to include project-based activities because these implementations necessitate analysing complicated sustainability issues and suggesting solutions to them. An example project can be to search for and suggest alternative approaches for producing low-cost healthy food and present the ideas through a poster or a video (Barber, 2023).

Additionally, some of the teachers in this study reported that teaching sustainability through English provides them with an opportunity to address various topics. They believed that ESD was essential for them, and their role was not limited to teaching English language skills but also to incorporating sustainability issues into their lessons. This understanding is consistent with the CLIL approach, which emphasises the integration of language learning with subject-specific content (Coyle et al., 2010). In this case, the content includes sustainability topics. Previous studies have also shown that CLIL can effectively address sustainability issues. For instance, studies by Belyaeva (2017), Chaikovska and Levchyk (2022), J.J. Jodoin (2020), and Sakamoto (2011) have demonstrated that incorporating ESD into teaching English using the CLIL approach can positively impact students' content knowledge and English language skills. Therefore, these findings underscore the crucial role of EFL teachers in integrating sustainability issues into their lessons and contributing to ESD.

5.3. Sufficient integration of education for sustainable development in the English as a foreign language curriculum

Firstly, the EFL teachers in this study thought that the integration of sustainable development into the EFL curriculum was needed in each grade. They maintained that ESD was addressed superficially and limited to specific topics, including the environment, education and economy. This finding mostly aligns with Authors (2021), who argued that there is a limited representation of ESD in Turkish high school curricula revolving around issues including the environment, health, and equality. It is also in parallel with Härkönen (2020), who pointed out that the ESD topics in the Finnish secondary school curriculum include education, equality and multiculturalism. Therefore, this finding shows that more attention needs to be given to integrating sustainable development throughout the EFL curriculum. Therefore, curriculum developers could consider adopting the United Nations' SDG framework as a guide to sufficiently reflect various sustainability issues in EFL teaching.

Secondly, some of the teachers in this study also reported that more sustainability-related activities should be used. These activities could include projects and campaigns that engage learners in hands-on, experiential learning, allowing them to actively participate in and contribute to efforts towards sustainable development. This finding corroborates the results of Anyolo et al.'s (2018) study. The researchers argue that experiential methods, such as discussions, observations and fieldwork, are not generally used in integrating ESD. They maintain that teachers prefer more conventional methods, including lectures and question-answers. These findings highlight the importance of shifting away from conventional methods and using more effective strategies for incorporating ESD into their instruction. Therefore, curriculum developers should design more activities specifically produced for ESD. Such activities may include interactive exercises, real-world case studies, and hands-on projects that help learners improve the skills and knowledge needed to address sustainability issues.

Thirdly, several participants in the current study believed that ESD should be incorporated into the ELT curriculum at all levels of education, not only secondary and senior high school levels. They argued that ESD should also be involved in primary and preschool education since it is a significant opportunity to raise awareness of sustainability issues early on. Participants mentioned that it is essential to include ESD in the preschool EFL curriculum as it is the first stage where learners get familiar with English.

The conclusions of this study differ from those of Akbana and Yavuz (2020), who argue that the appropriate context for addressing sustainability is EFL prep schools with learners of B1 level English at least. Similarly, Mohammadnia and Moghadam (2019) explain that it may not be suitable to incorporate sustainability-related topics at lower levels from a linguistic perspective because the needed vocabulary and grammar to discuss those topics can be advanced. However, they also maintained that these themes should be excluded from basic-level textbooks. Therefore, this study's finding provides a fresh perspective on addressing sustainability issues in the basic-level EFL textbooks. The inclusion of ESD content in lower grades could enable EFL teachers to lay the groundwork for sustainability consciousness. They could introduce some fundamental sustainability issues and implement small-scale projects based on SDGs. In this sense, supportive school management could positively influence teachers' implementation of SDGs, particularly in K-12 schools (Kwee, 2021).

Finally, the teachers in this study mentioned that English class hours should be extended to better address ESD. Also, they recommended that parents' lack of awareness about the need to support ESD should be increased. These findings have significant implications for curriculum developers and policymakers. First, the current EFL curriculum should be revised to allocate more time for the incorporation of ESD topics. Second, policymakers should consider organising workshops with parents or creating teacher-parent partnerships to communicate with them about the importance of ESD (Sleurs, 2008).

6. Conclusion

The present study investigated the in-service Turkish EFL teachers' perceptions of ESD. The findings derived from this investigation showed that teachers have multifaceted perceptions of ESD. They understood it to be closely linked to learning about sustainability. This may include learning about equality, responsible consumption, global warming and education, which would help the learners adapt to a constantly changing world. They also linked ESD to lifelong learning by emphasising its place in EFL teaching at all educational levels. Additionally, this study illustrates that teachers' perceptions of ESD were shaped by the interdisciplinary nature of English as English classes provide advantages of teaching multiple topics, including sustainability. This commitment is in line with the holistic learning principle of CLIL, which extends beyond conventional language teaching to include sustainability issues. Teachers

could then develop their learners' language proficiency through covering various sustainability issues, which would give the learners a more integrated language learning experience.

Consequently, they believed that integrating ESD into their lessons was crucial to creating awareness about sustainability issues; therefore, they saw ESD teaching as a part of their responsibilities. However, the participant teachers argued that ESD needs to be reflected sufficiently in the EFL curriculum, as they reported it to be falsely recognised as an extension of environmental education. Thus, they thought ESD should be handled holistically by actively engaging the learners through projects. To do this effectively, English class hours should also be extended to enable the EFL teachers to handle the ESD topics in depth.

Based on the findings of this study, ESD should be integrated into the EFL curriculum more holistically rather than being falsely recognised as just a branch of environmental education (Bowden, 2010). Therefore, the curriculum should include various SDGs, from equal education to clean energy. In this way, the learners could delve into several debates about sustainability, which would help them adjust to a fast-changing world. While doing this, student-centred and problem-based implementations should be used to engage the learners actively with the ESD (Bekteshi & Xhaferi, 2020; J.J. Jodoin, 2020). Providing hands-on and real-world practices, such as projects and campaigns, would be helpful. Additionally, ESD should be given a place in lower grades, such as pre-schools and primary schools. This will help instil a consciousness of sustainability at an early age. Since young learners may become open to new ideas and, therefore, more receptive to learning about sustainability, the inclusion of ESD in lower grades helps them become more conscious of the future world. Apart from creating awareness among the learners about ESD, parents should also be involved in the process. Therefore, parents should be educated on the importance of ESD through workshops and presentations.

Although this study provides EFL teachers' conceptualisations and perceptions of ESD with a connection to its integration into the EFL curriculum and has important implications for curriculum developers, we must acknowledge its limitations. First, this study was based on participants' perceptions; further investigations are needed to determine the teachers' experiences and actual practices of ESD in EFL classes. Therefore, additional data collection techniques such as observations, reflective journals, or portfolios can provide a further understanding of teachers' classroom implementations of ESD.

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Declaration of competing interest

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Appendix A. Interview protocol

1. What does Education for Sustainable Development mean to you?
2. Is Education for Sustainable Development important for you as an English as a foreign language teacher? Why/Why not?
3. Do you think the integration of Education for Sustainable Development in the English as a foreign language curriculum is adequate? Why/Why not?

Table 1

Examples of the coding scheme.

Open coding	Axial coding	Selective coding
Education for protecting the planet		
Informing students about future risks in the environment	Education and teaching about sustainability	Teaching for sustainability
Updating one's knowledge		
Being open to learning and improvement	Improving oneself	Lifelong learning
Equal opportunities for learning for all ages		

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