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THE SUSTAINABLE DEVELOPMENT GOALS IN THE TURKISH ENGLISH LANGUAGE HIGH SCHOOL CURRICULUM

This study examines the representation of the Sustainable Development Goals (SDGs) in the English language syllabus and English language senior high-school textbooks in Turkey. The learning objectives associated with these SDGs are also investigated. The syllabus and the textbooks including Teenwise, High School English 10, Silver Lining and Count Me In were examined. Semi-structured interviews were also conducted with 11 high-school English teachers to gain further insight into the place for SDGs and their related learning objectives in the English language high school curriculum. Results showed that the syllabus has a low frequency of SDGs and that there is a tendency in the textbooks to include the theme of health; related to the SDG of Education for Sustainable Development (ESD). It was also found that the learning objectives set for ESD are mostly cognitive-oriented. Interviews revealed that teachers favour the incorporation of a variety of SDGs in textbooks. They believe that prioritizing sustainability in textbooks can help secure a more sustainable future for learners. Implications of this for pedagogy are discussed and elaborated.

Keywords*: English Language Teaching (ELT), Sustainable Development Goals (SDGs), Textbook Analysis, Turkey*

INTRODUCTION

The United Nations (UN) stated that between 2005-2014 is the Decade of Education for Sustainable Development and claimed: "Education alone cannot achieve a more sustainable future; however, without education and learning for sustainable development, we will not be able to reach that goal" (UNESCO, n.d). In 2015, the UN General Assembly announced the Sustainable Development Goals (SDGs). Among the SDGs, the fourth one is that of 'Quality Education'. This is stated to be a vital foundation for sustainable development. The programme '*Education for Sustainable Development'* (ESD) was therefore developed to equip learners with the necessary knowledge and skills to maintain these SDGs (United Nations, 2017).

ESD is meant to be taken on globally so that learners across the world develop an awareness of ESD-related practices. That said, little research in the field of education has been done on ESD. If ESD research continues to be dominated by researchers from environmental science, ESD will likely produce limited implications for pedagogical improvement (Breiting, 2009). This implies that ESD is not limited to environmental education but covers a much broader field. Therefore, this study focuses on the representation of ESD in foreign language syllabi and textbooks. In doing so, it investigates senior high school EFL textbooks and syllabus to find possible evidence of SDGs. High school EFL teacher interview data also reveal teachers' thoughts and perceptions of embedding SDGs in these materials. Throughout this study,

attention is paid to the implications for curriculum/material developers on the inclusion of SDGs in learning content.

BACKGROUND

Sustainable Development Endeavours across the Globe

The world population is projected to increase by 2 billion people from 7.7 to 9.7 billion in 2050 (United Nations, 2019). This rapid growth of the world population poses challenges for providing food, freshwater, land, energy, and other resources for human survival. Non-renewable resources are finite and will one day be depleted. For this reason, the United Nations (2017) developed the 2030 Agenda for Sustainable Development which consists of 17 goals. These are:

1. *No poverty*
2. *Zero hunger*
3. *Good health and well-being*
4. *Quality education*
5. *Gender equality*
6. *Clean water and sanitation*
7. *Affordable and clean energy*
8. *Decent work and economic growth*
9. *Industry, Innovation and Infrastructure*
10. *Reduced inequalities*
11. *Sustainable cities and communities*
12. *Responsible consumption and production*
13. *Climate action*
14. *Life below water*
15. *Life on land*
16. *Peace, justice and strong Institutions*
17. *Partnerships for the goals*

The UN states that this is a "call for action by all countries – poor, rich, and middle-income – to promote prosperity while protecting the planet. They recognise that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities while tackling climate change and environmental protection" (United Nations, 2017, p. 3). The aim is to achieve these goals by 2030.

Apart from the UN's agenda, with the growing awareness of sustainability, many environmental events (*e.g. The Santiago Climate Change Conference, 2019; The 7th Digital*

Earth Summit, 2018; World Environmental Education Congress, 2017; The UN Conference on Sustainable Development, 2012; The World Summit on Sustainable Development, 2002) have been organized around the world in the last decade. These events aim to provide opportunities for people to think deeply about the global issues that have been raised, and to envision the future. All efforts are made to inform everyone from all walks of life; to enable them to make the right choices and produce immediate outcomes. To make the world a better place for future generations, all individuals around the world should be aware of the merciless face of the current global circumstances and change the way they think and behave. Therefore, education is at the heart of sustainability in highlighting the key concepts for global problems and concerns.

Sustainable Development Policies in Turkey

Turkey has been supporting sustainable development policies since 1992 when it released the '10th Development Plan'. This addressed the economic, social, and environmental aspects of sustainable development by paying special attention to an agenda of international collaborative practices to be met by 2030 (Turkish Ministry of Development, 2016). Turkey, as a founding member of the OECD, prioritizes the SDGs to ensure '*no one left is behind'* so the country promotes collaborations with other countries to address the needs of least-developed countries (OECD, 2018).

Turkey also strives to develop an awareness of sustainability in educational practices. The Turkish Ministry of National Education announced the 'Education Vision' which includes the educational objectives set to be accomplished by 2023. One of the objectives is to develop human dignity and humanistic values (MoNE, n.d), which calls for more investment to ensure quality education (SDG 4), gender equality (SDG 5), decent work (SDG 8), and to reduce inequalities (SDG 10).

Turkey has an increasing population coupled with rapid urbanisation, which may pose challenges for sustainable development. Besides the current global pressure of climate change, at a local level, Turkey is in a tenuous geographical location and often experiences natural disasters such as avalanches, floods, landslides, and earthquakes (Gurer & Ozguler, 2004). Awareness therefore needs to be raised, not only at a global level, but also a local level. The presence of SDGs in the syllabus and textbooks may be an excellent way to introduce global/local challenges and solutions to Turkish students. This study therefore sets out to investigate whether and to what extent SDGs are reflected in the Turkish EFL textbooks syllabus. As well as EFL teachers' thoughts on the integration of SDGs in the textbooks and syllabus.

Education for Sustainable Development

Education plays a key role in promoting sustainable development. However, guidance is required for the integration of sustainable development in educational practices. In line with this thinking, interviews conducted with English instructors in studies by Chatzifotiou (2006) and Abozaied (2018) emphasised the urgent need to provide guidelines to teach Education for Sustainable Development (ESD). Therefore, the approach of ESD is necessary to promote SDGs. ESD explicitly explains the learning objectives in a way that integrates and implements SDGs in an educational setting (United Nations, 2017). These learning objectives are categorised into three domains: 'cognitive', 'socio-emotional', and 'behavioural'. The cognitive objectives aim to enhance the content knowledge of SDGs such as explaining the term of poverty, or reasons for climate change. The socio-emotional domain addresses social competencies that empower the application of SDGs through communicative skills. Discussing an aspect of sustainability with peers or collaborating with people for a global problem is an example of this domain. As for behavioural objectives, these involve actions taken for extending SDGs into real-life, e.g. implementing campaigns for sustainability endeavours. Inspired by the ESD approach, apart from investigating the SDGs in high school EFL textbooks and syllabus, this study also explores learning objectives associated with the SDGs. It is key to know which learning objectives are addressed in the SDGs as this will enhance the SDG content in materials.

Sustainable Development in Language Textbooks

Textbooks are critical for language teaching (Richards, 2001) but they also need to focus on global issues apart from language instruction. As Risager (2020) states: "Language textbooks are not only tools for learning a specific language, they also serve as windows to the world" (p.12). Similarly, Jodoin and Singer (2019) argue that the content in EFL textbooks is amenable to promote ESD; thus, SDG-informed content can be used as a resource to provide meaningful and authentic practices. However, the analysis of several language textbooks shows the lack of ESD-related focus in their content (UNESCO MGIEP, 2017). For example, Jodoin and Singer (2020) examined Japanese university EFL textbooks which rely heavily on environmental themes; therefore, the researchers investigated the textbooks to fully understand whether the environmental content addresses SDGs. The findings showed that Japanese EFL textbooks failed to incorporate ESD content to promote SDGs despite the environmental topics included. Similarly, Al-Jamal and Al-Omari (2014) investigated 10th grade EFL textbooks in terms of the ecological themes and found that the textbooks lacked such themes. Apart from environmental themes, other themes were also investigated in EFL textbooks. For instance, Gebregeorgis (2016) scrutinized 9th grade Ethiopian EFL textbooks in terms of peace values and found that although peace values were included in the content, there was gender-stereotyping throughout the textbook, which contradicted peace values.

Therefore, the textbooks failed to represent gender equality, SDG 5. To conclude, studies of EFL textbooks have shown that textbooks provide a limited portrayal of SDG-related themes/activities.

In Turkey, English is the only compulsory foreign language that all students need to study (Kirkgoz, 2007). The value in such analysis relates to the emphasis placed on English language learning in Turkey. The textbooks (as analysed in this study) have been approved by the Turkish Education Board. All state high schools in Turkey are supposed to use them as their main source of English language teaching material (MoNE, 2009). No other materials are officially approved. As SDGs are meant to be embedded into all aspects of the curriculum, the first port of call to search for evidence of this is in the EFL curriculum are these officially approved textbooks. These textbooks may contain ESD components embedded within the content so that learners may be informed of the issues and values that underpin sustainability. Thus, the analysis of these textbooks is necessary and relevant. Although previous studies have examined the content of Turkish EFL textbooks, no studies have examined the senior Turkish high school EFL textbooks and syllabus through an SDG lens. Therefore, this study makes an original contribution to knowledge by providing evidence for this field of study.

METHODOLOGY

In this study, the following research questions are addressed:

(1) Are SDGs represented in the senior high school EFL syllabus?

(2a) Are SDGs reflected in the main content of senior high school EFL textbooks? Do teachers think these should be reflected in the main content of the textbooks?

(2b) To what extent are the learning objectives (cognitive, socio-emotional, and behavioural objectives) set for SDGs evident in the textbooks? Do teachers think SDGs should be reflected in the learning objectives of the textbooks?

To seek answers to these research questions, the Turkish high school EFL syllabus and textbooks were investigated. Also, interviews with high school English teachers were conducted to find out their views about the integration of SDGs in the high school curriculum.

Turkish High School EFL syllabus

The Turkish high school EFL syllabus is a written document provided by the Turkish government and it can be downloaded from the government website (MoNE, 2018). In the

syllabus, ten different themes for each grade are included. It is stated in the syllabus document that the syllabus was prepared in accordance with the Basic Law of National Education (MoNe, 1973).

The syllabus was developed by recognizing principles of the Common European Framework of Reference for Languages (CEFR). Therefore, language proficiency indicators were designed as A1, A2, B1, and B2. Accordingly, 9th-grade students are supposed to start at Level A1 and proceed to A2 while 10th-grade students are to achieve a proficiency level moving from A2 to B1. On the other hand, progress from B1 to B2 is expected for 11th grade and, finally, B2 and B2+ levels are mainly targeted in the 12th grade (MoNe, 2018).

Turkish Senior High School EFL Textbooks

Four Turkish high school EFL textbooks were sampled for this study:

(1) *Teenwise* (1st edition, 2019) for 9th grade
(2) *High School English 10* (1st edition, 2018) for 10th grade
(3) *Silver Lining* (1st edition, 2019) for 11th grade
(4) *Count Me In-* (1st edition, 2019) for 12th grade

Each textbook is used for the mentioned grades only. For example, Teenwise has no other series for 10th, 11th, and 12th grades. High school EFL textbooks were chosen because the cognitive level of high school students was assumed to be relevant to consider a larger variety of content for sustainability compared to primary and junior school learners. The second reason is that these textbooks were selected as they have been introduced recently into the EFL syllabus.

Semi-Structured Interviews

After the analysis of the syllabus and textbooks, follow-up semi-structured interviews were held with a group of high school EFL teachers (*n*=11) to further understand whether/to what extent SDGs are to be included in EFL textbooks and syllabus. All of the participants taught English courses in Turkey and used the investigated textbooks. Written consent was provided by the interviewees to participate in this study. The piloting of the semi-structured interview protocol revealed that no changes to the questions were necessary (see Table 1). Interviews were held in the participants' first language, Turkish.

[Table 1]

Data Analysis

A qualitative content analysis approach was taken to investigate the EFL syllabus, textbooks, and semi-structured interviews. To explore whether/to what extent SDGs were reflected in the syllabus and textbooks, the SDG framework suggested by the UN was employed as it is a comprehensive guide that was developed by surveying millions of people across the world (United Nations, 2017). The framework consists of learning objectives, suggested topics, and learning approaches identified for each SDG. A priori coding was therefore employed (Elliot, 2018) to categorize the codes based on the SDG framework by the UN. First, the high school EFL syllabus and textbooks were investigated to explore the presence of each SDG in their content.

In the UN framework, it is stated that SDGs have accompanying objectives: these are cognitive, socio-emotional, and behavioural objectives. They imply that ESD is an integral part of sustainability because they show the skills and competencies one must own to accomplish SDGs (United Nations, 2017). Once it was established that the textbooks included SDGs, they were analysed a second time to look for the learning objectives as set for each SDG. In this way, by analysing the learning objectives, it was aimed to investigate to what extent ESD is promoted in the textbooks. To facilitate the coding process, the learning objectives, suggested topics, and sample methods listed for each SDG were considered in the course of analysis.

A sample coding sheet was created and used to analyse the SDGs and SDG-related learning objectives (See Table 2). Frequencies of the components in the textbooks were noted. As some components fell into more than one SDG and/or learning objective, they were counted separately.

[Table 2]

For reasons of clarity and reliability, two independent researchers were hired to help with the classification of the SDGs and learning objectives. Based on the model of Miles and Huberman (1994), inter-coder reliability was estimated and found to be 89.5%.

Additionally, interview data were analysed to reveal the high school teachers' thoughts on the incorporation of SDGs in the EFL syllabus and textbooks. All 11 interviews were transcribed and translated by the first author (a native Turkish speaker). Content analysis was applied to investigate the interview data (Creswell & Clark, 2017), which were checked by two field experts and the inter-rater reliability was calculated as 90.9%, which indicates a high level of reliability (Miles & Huberman, 1994).

RESULTS

1. Are SDGs represented in the senior high school EFL syllabus?

To answer the first research question, the high school EFL syllabus document was investigated and the findings concerning the representativeness of the SDGs are illustrated in Table 3. Accordingly, six out of ten themes do not involve any SDGs with four themes dominating; Themes 3, 4, 6, and 8.

[Table 3]

Theme 8 contains most of the SDGs and includes issues related to understanding health problems, emergencies, environmental problems, and the use of alternative energy systems. Overall, out of 17 SDGs, only six of them were reflected in the entire syllabus. It can, therefore, be concluded that there is a limited representation of SDGs in this syllabus.

Nevertheless, interview findings showed that (n=11) teachers thought that SDG 5-Gender Equality (n=4), SDG 10-Reduced Inequalities (n=4), and SDG 4-Quality Education (n=3) were appropriate for high school level; hence advocating their use in the high school EFL syllabus. They noted that if equality could be achieved all around the world, no one would be excluded due to gender, religion, and disability and inclusive education thus could be promoted. They, therefore, thought that the inclusion of equality content may be beneficial in raising awareness of this issue for high school students.

2a. Are SDGs reflected in the main content of senior high school EFL textbooks? Do teachers think these should be reflected in the main content of the textbooks?

In response to the second research question, the investigation of the EFL textbooks revealed the following results (see Table 4):

[Table 4]

SDG 3 (*Good health and well-being*) had the highest frequency of appearance in the textbooks (n=78), implying that the activities throughout the textbooks were mostly related to staying physically/mentally healthy. Negative effects of cyber games were also introduced. The interview data revealed that only 3 out of 11 teachers said SDG 3 was already reflected in high school textbooks and that it was appropriate for the high school level. All of them agreed that health and well-being are quite important for the individual and population and that it served well for the high school level since the high school students are in puberty and need to be informed about health issues.

SDG 11 (*Sustainable cities and communities*) had the second-highest frequency (*n*=53) including activities about natural disasters, emergencies, safety, cyberattacks, and environmental solutions. SDG 10 (*Reduce inequality within and among countries*) was also found in the activities (*n*=31) addressing gender equality, animal rights, and disadvantaged groups. The textbooks included SDG 16 (*Promote just, peaceful and inclusive societies*) in 21 activities; thereby containing information and tasks related to protection and violation of human rights. It is important to note here that SDG 2 (*Zero hunger*), SDG 8 (*Decent work and economic growth*), SDG 9 (*Industry, innovation, and infrastructure*) SDG 14 (*Life below water*), and SDG 17 (*Partnerships for the goals*) did not appear at all. However, interview data interestingly revealed that a vast majority of the teachers (9 out of 11) thought that SDG 8 should be included in the textbooks. Some responses included:

"This is useful for raising the consciousness of child labour." (T5)

"It is important for students to be informed about indecent work conditions and unemployment problems. (T6)

"It is vital for high schoolers as they are prospective agents for the economy so they should be informed about occupational choices." (T7)

A further 8 participants mentioned that SDG 9 should also be incorporated into the textbooks as they noted it is crucial for the development of the country and for students to become aware of such innovations. The following interview excerpts illustrate their thoughts about SDG 9:

"It is important because we are preparing the students for business life." (T2)

"The students should be informed about manufacturing activities; this is vital for the development of Turkey." (T3)

"It should be reflected. These young people will engage in industrial activities in the future, it is a must to raise awareness of it. This will add value to the country's development." (T4)

Surprisingly, the qualitative analysis carried out for the textbooks shows that there were fewer activities found concerning SDG 5 (*Gender equality*), however, according to the interview data, nearly all teachers (8 out of 11) indicated that the high school textbooks should reflect SDG 5 to respect human dignity. They stated:

"It should be in the textbooks to prevent gender stereotyping. (T1)

"The concept of equality in society can be adopted for everyone." (T7)

"Gender equality must be voiced in textbooks in a way that attaches importance to the women's economic empowerment." (T8)

The interview data revealed that teachers favoured a variety of SDG incorporation into EFL textbooks. The majority of them reported that they are aware of these SDGs and would like to inform their students about them. They also noted cultivating SDGs via textbooks might be fruitful to raise awareness of the challenges that students might face in the future.

When the overall results are taken into account, it is seen that the textbook *Count Me In* for 12th-grade largely contributed to ESD (*n*=147) and this was followed by the textbook *Silver Lining* for 9th-grade (*n*=45). The SDGs were not distributed in the textbooks in a balanced way; while some of them were overemphasized, others appeared to be ignored.

2b. To what extent are the learning objectives (cognitive, socio-emotional and behavioural objectives) set for SDGs evident in the textbooks? *Do teachers think SDGs should be reflected in the learning objectives of the textbooks?*

All of the SDGs present in the textbooks went through another round of qualitative content analysis to find out how learning objectives are distributed across all SDGs. First, the representation of learning objectives in the activities with SDGs is presented in Table 5:

[Table 5]

As shown in Table 5, the textbooks mainly contained cognitive-oriented learning objectives (*n*=184) and there seemed to be little emphasis on socio-emotional learning objectives (*n*=69), this included communication to foster SDGs. There is very little representation of the behavioural aspect (*n*=4), which implies that fewer activities were offered to transfer ESD into learners' real lives. However, the interview data illustrated that the majority of the participants (9 out of 11) argued that three of these objectives could not be separated from each other and that that they were all important. For example, one teacher said:

"Each of them is dependent on one another. In our daily lives, we first know, then we feel, and finally, we act upon something." (T1)

This excerpt draws an analogy with OECD's competency framework (OECD, 2016) that claims knowledge, skills, and values are core competencies leading someone to act. That said, to demonstrate an action, one should have developed faculty and complementary skills.

Other participants also thought that learning objectives for SDGs are interrelated and each of them is needed to transfer conceptual understanding into action, as illustrated in the following excerpts:

"Knowledge feeds skills, skills feed the behaviour change". If one of them is missing, then we cannot instil our students with true awareness and we cannot achieve SDGs". (T7)

"If we aim to educate our students to become sustainable citizens, knowledge alone is not enough. The students should know how to apply that knowledge and act for their global responsibilities". (T9)

"Three of them are equally essential. Without any one of them, the desired impact cannot be achieved." (T11)

They thought that sustainable education cannot be achieved when the textbooks rely heavily on knowledge about the sustainable content rather than involving the skills and competencies necessary for communicating, negotiating, collaborating, and taking steps for a sustainable world.

After presenting the distribution of the domains of learning objectives, the SDGs across three learning objectives are mapped out to see which SDG serves which domain(s). This is shown in Table 6.

[Table 6]

Table 6 reveals that the cognitive domain was more prominent in the textbooks (*n*=184). The themes with the cognitive domain were attributed to SDG 1 (*No poverty*), SDG 3 (*Good health and well-being*), SDG 4 (*Quality education*), SDG 5 (*Gender equality*), SDG 6 (*Clean water and sanitation*), SDG 7 (*Affordable and clean energy*), SDG 10 (*Reduced inequalities*), SDG 11 (*Sustainable cities and communities*), SDG 12 (*Responsible consumption and production*), SDG 13 (*Climate action*), SDG 15 (*Life on land*), SDG 16 (*Peace, justice and strong institutions*). Thus, the textbooks aimed to introduce the principles and concepts related to those SDGs, suggesting the acquisition of knowledge on those topics such as listing the clean energy sources, solutions for certain health problems, and principles of human rights. They mainly aim to enhance the understanding of the SDG itself.

The majority of socio-emotional learning objectives (*n*=21) were in SDG 3 (*Good health and well-being*). Similarly, SDG 11 (*Sustainable cities and communities*) and SDG 7 (*Affordable and clean energy*) contain socio-emotional-oriented learning objectives. The content of these SDGs is used as an issue-centric context for the students to identify the problems (e.g.

wasting energy sources), work in groups to provide solutions for them, and develop empathy through role-playing and drama (e.g. changing roles for asking/receiving advice for health).

 Only SDG 7 and SDG 11 had the behavioural aspect of learning objectives which asked the learners to demonstrate what they learn through their actions (e.g. preparing a poster about safety)

To conclude, although the interview data revealed teachers supported an interplay among all learning objectives, the analysis shows that the cognitive dimension was overemphasized and other socio-emotional and behavioural competencies of SDGs were neglected.

DISCUSSION AND CONCLUSION

SDGs in the Senior High School EFL Syllabus

This study set out to explore the presence of SDGs in the senior high school EFL syllabus. The findings show that there was little emphasis on SDGs in the high school EFL syllabus document. However, it is stated in the syllabus that it was restructured in 2018 and this new version focuses on values in education including justice, responsibility, honesty, and respect (MoNe, 2018) compared to the previous syllabi. This also bears a strong relationship with the Basic Law of National Education (MoNe, 1973) that states the objectives and principles of the Turkish national education system including sustainability issues such as education equality, inclusive education, quality education, education for democracy and scientific education. However, there is still a need to clarify and refine the embedding of the SDGs by making explicit how these relate to the local as well as global contexts, which is important for accomplishing Turkey's 2023 Education Vision. Thus, the themes in the syllabus need to include ESD outcomes and provide guidance on what components are required to reflect SDGs in the subject content.

The significance of SDGs in an educational curriculum has been discussed in the literature (Anyolo, Karkkainen, & Keinonen, 2018; Hays & Reinders, 2020; Laurie, Nonoyama-Tarumi, Mckeown, & Hopkins, 2016). For instance, Anyolo, Karkkainen, and Keinonen (2018) interviewed senior high school teachers, and the findings revealed that teachers favoured the integration of ESD in the school curriculum. They believed ESD knowledge would contribute to a better future for their generation of students. Hays and Reinders (2020) stated that a separate curriculum should be developed promoting sustainable learning so that learners can learn '*sustainable ways of living'*. Similarly, Laurie, Nonoyama-Tarumi, Mckeown, and Hopkins (2016) document the reports of educational practitioners from 18 countries based on interview data about their views on ESD integration in academic subjects. Accordingly, the findings showed that ESD offers appealing and authentic content for students and that it gives more meaning to the curriculum. These findings are also

supported by the results of the interviews in this study which illustrate the importance of ESD in the curriculum because it is a vital component for accomplishing SDGs. Therefore, SDGs should be included in the curriculum.

SDGs in the Senior High School EFL Textbooks

This study also aimed to examine the SDGs in senior high school EFL textbooks. The findings showed that each textbook reflects at least two SDGs; interestingly, *Count Me In* for the 12th-grade textbook include the most. This could be related to the proficiency level; since B2 and B2+ levels are targeted for learners in the 12th grade, more sustainability themes might have been incorporated into these books (Mohammadnia & Moghadam, 2019). This highlights a limitation though that the SDG framework developed by UN (2017) is probably applicable to B2 and B2+ levels as the content analysis in this study shows that 12th-grade textbooks (B2/B2+) have most of the SDGs.

Additionally, SDG 3 (*Good health and well-being*) was the most recurrent theme in the textbooks. That is not surprising when the age of the learner is considered. As the target audience of the books is adolescents, their physical and mental health is of crucial importance. This content could foster greater awareness by teens of certain topics such as good/bad habits, addiction, recovery, and healthy lifestyle choices. This is also voiced by the teachers during interviews; all of them attached importance to health and they agreed that the textbooks should cover this concern for adolescents' well-being.

The findings also showed that the other emphasized SDGs were SDG 11 (Sustainable cities and communities), SDG 10 (*Reduced inequalities*), SDG 16 (*Peace, justice, and strong institutions*). These highlight precautions taken for natural disasters, safety, gender equality, animal rights, and protection of human rights. This resonates with Harkonen's study (2020) which investigated EFL textbooks in Finland and found that human rights content including education, equality, democracy, safety, and security were covered. It is also in parallel with Mohammadnia and Moghadam's study (2019) where they analysed Iranian EFL textbooks in terms of sustainable content and pointed out that sustainability themes were not distributed equally and the themes including culture, natural disasters, life diversity, and natural resources were among the most common content.

As there is often a symbiotic relationship between syllabus and textbooks, considering the amount of representation of SDGs in the high school EFL syllabus, it is unlikely to find a variety of SDGs in the textbooks. Thus, it is significant to say that there is a noticeable absence of several SDGs in the textbooks for the 9th, 10th and 11th grades. Although the main

aim of the textbooks is to improve English language skills, the textbooks could still benefit from weaving further SDGs into the content to foster sustainability competences (Jodoin & Singer, 2020). Thus, incorporating a variety of SDGs in each grade-level textbook could foster in students a holistic view of ESD.

SDGs in the Learning Objectives

Another aim of this study was to find out how the learning objectives are distributed across all SDGs in the textbooks. The findings reveal an overemphasis on the cognitive aspect of the SDGs in the textbook activities. The main aims of the activities included; knowledge growth by promoting thought, comprehension, and interpretation. This substantial focus on cognitive orientation may indicate the wider belief that enhancing knowledge is the key to understanding the terms and concepts related to ESD. These findings were echoed in Jodoin's study (2019) in which he analysed EFL textbooks and found evidence of sustainable-related content; however, *value and belief* formation was ignored. Additionally, Jodoin and Singer (2019) introduce the framework for ESD integration into EFL. Accordingly, to accomplish a behavioural change through forming values and beliefs associated with ESD, EFL content should be informed by SDGs. For value formation and creating an awareness of sustainability issues, cognitive-oriented SDGs alone are not sufficient. This is also in line with Borve's investigation (2019) of EFL textbooks to find out to what extent the sustainability content promotes critical and meaningful learning. The results showed that the focus was on knowledge but the aspect of transferring the knowledge into actions was neglected. However, the purpose is not only understanding the sustainability issues but also to deal with them, to act on them individually/collectively (UNESCO, 2003). Thus, our recommendation would be to take a holistic view by introducing cognitive, socio-emotional, and behavioural aspects to improve knowledge, skills, and behaviours that facilitate sustainability. This implies that all aspects of learning objectives set for SDGs should be incorporated into EFL textbooks in a balanced way.

PEDAGOGICAL IMPLICATIONS

This study highlights that SDGs should be overtly integrated into the language syllabus to promote awareness about sustainable development; thus, learning objectives/outcomes, possible topics, activities, and techniques can be offered in a separate section in the syllabus to provide a reference for the textbook developers.

Furthermore, this study reveals that while certain SDGs are aligned in the textbooks, some others remain untouched. There is not a general and common framework for ESD integration in the textbooks, thus, the educational authorities take a bottom-up approach to implementation (Bagoly-Simo, 2013). However, ESD integration does not mean creating content from the scratch but reorienting the topics in a way that allows for ESD-related

practices (UNESCO MGIEP, 2017). Therefore, it is suggested that EFL textbooks' themes be adapted to cover a large variety of SDGs to enable a holistic understanding of ESD. For instance, a cluster of interconnected SDGs (e.g. poverty and hunger) can be offered together in the same topic to increase the representativeness of SDGs in the textbook content.

This study also shows that textbook developers should establish a balanced representation among the learning objectives of SDGs in the textbooks. In addition to cognitive development, the scope of the activities can be extended to activate socio-emotional and behavioural development. To empower the development of these ESD competencies, the learners can be introduced to sustainability topics and problem-based issues (e.g. climate change) through either a chapter or a vignette where certain facts related to the issue are given, which will contribute to students' understanding. Additionally, the textbooks can include participatory and community-based opportunities where the learners are encouraged to establish collaboration with the local/international experts or stakeholders out of school to solve real-life sustainability situations (UNESCO MGIEP, 2017). Thus, field trips, group/project work might be used to encourage interaction among learners, as this could be related to the sustainability practices of volunteer work, enterprise, and campaigning, which is useful for the application of their knowledge and active engagement.

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TABLES

Table 1. *Semi-structured Interview Protocol*

1. Do you know what the Sustainable Development Goals (SDGs) are?
2. Do you think the SDGs are embedded in the EFL high school textbooks? If yes, which ones? If not, which ones should be reflected?
3. Which SDG/SDGs do you think would be most appropriate for high school level students in Turkey? Why?
4a. Do you think the SDG about 'good health and well-being' is important?
4b. Do you think good health and well-being is an important topic for students to learn at this age? Why or why not?
5. Do you think the SDG about 'decent work' is important to be included in high school textbooks? Why or why not?
6. Do you think the SDG about 'industry and innovation' is important to be included in high school textbooks? Why or why not?
7a. There are 3 learning objectives introduced for SDGs. These are: cognitive, socio-emotional and behavioural objectives. Which one(s) do you think are important? Why?
7b. Which one(s) do you think should be included in high school textbooks? Why?

Table 2. *Sample coding sheet for analysis*

Coding date:

Name of the coder:

Name of the textbook	Name of the theme	Activity no & page	Coding (Specify SDG no & domain of learning objective(s)
Student's book			
Workbook			

Table 3. SDGs in the Learning Outcomes

Grade	Theme 1	Theme 2	Theme 3	Theme 4	Theme 5	Theme 6	Theme 7	Theme 8	Theme 9	Theme 10	Total
9th:	0	0	0	0	0	0	0	SDG 3; SDG 11	0	0	2
10th	0	0	0	0	0	SDG 12	0	0	0	0	1
11th:	0	0	0	0	0	0	0	0	0	0	0
12th:	0	0	SDG 5; SDG 10	SDG 11	0	0	0	SDG 7; SDG 11	0	0	5

Note: SDG 3: Good health and well-being
SDG 5: Gender equality
SDG 7: Affordable and clean energy
SDG 10: Reduced inequalities
SDG 11: Sustainable cities and communities
SDG 12: Responsible consumption and production

Table 4. SDGs in textbooks

SDG no.	9th-grade textbook *(f)*	10th-grade textbook *(f)*	11th-grade textbook *(f)*	12th-grade textbook *(f)*	Total *(f)*
1	0	0	0	4	4
2	0	0	0	0	0
3	23	9	21	25	78
4	0	0	0	9	9
5	0	3	0	4	7
6	0	3	0	4	7
7	0	8	2	13	23
8	0	0	0	0	0
9	0	0	0	0	0
10	0	0	4	27	31
11	22	1	11	19	53
12	0	0	0	7	7
13	0	0	0	2	2
14	0	0	0	0	0
15	0	0	0	12	12
16	0	0	0	21	21
17	0	0	0	0	0
Total	**45**	**24**	**38**	**147**	**254**

Table 5. *Distribution of learning objectives*

Category	Subcategory	Frequency
	Cognitive domain	184
SDGs	Socio-emotional domain	69
	Behavioral domain	4

Table 6: Domains of each SDG

SDG no	Cognitive domain	Socio-emotional domain	Behavioral domain
1	5	0	0
2	0	0	0
3	57	21	0
4	8	1	0
5	7	0	0
6	5	2	0
7	10	11	2
8	0	0	0
9	0	0	0
10	24	7	0
11	40	13	2
12	3	4	0
13	1	1	0
14	0	0	0
15	6	6	0
16	18	3	0
17	0	0	0
Total	**184**	**69**	**4**