

Integrating Sustainability into Curriculum in Vietnamese Schools: Challenges from Teachers' Perspectives

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ABSTRACT:

Sustainable development is a global goal that calls on all countries to participate in the process of ending poverty, protecting the environment, and ensuring peace and prosperity for everyone. This is also the call of the United Nations (UN) to Vietnam and UN members in general. In the Vietnamese context, sustainable development goals can be described as ensuring quality education, openness, and equity; and improve lifelong learning opportunities for everyone, at all levels of education in Vietnam. However, integrating sustainability into the curriculum has been a challenge for teachers and educators in schools. This study employed a mixed methods approach to examine teachers' perspectives of sustainability in education and the challenges they may encounter when integrating sustainability into the existing curriculum in Vietnamese schools. Data were collected through survey and semi-structured interviews with in-service teachers at different school levels in Vietnam. The findings can contribute teachers' voices in terms of their understandings of sustainability in education and the difficulties in practice. Thus, pedagogical implications can be suggested to boost the process of education for sustainability in Vietnam.

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1. INTRODUCTION

Sustainability is a crucial measure for ensuring survival in our rapid-changing world. Sustainability has emerged as a paramount global challenge, garnering significant attention from nations worldwide as they strive to transition toward a more sustainable and resilient future. However, the process of sustainable development is being hindered by the rapid growth of the world economy, causing many environmental problems, such as climate change and loss of natural resources. These problems need to be acted on quickly and globally for the sake of future generations. One of the most feasible solutions lies in education, which plays an important role in helping people understand and move toward sustainable development. Education is key to dealing with future challenges and finding a new path toward sustainable growth (Bertschy et al., 2013; Leal Filho et al., 2015; UNESCO, 1997). Through education, people can acquire the knowledge and skills needed to solve current and future problems. Education for Sustainable Development (ESD) is a strategy that helps learners make informed decisions and act responsibly toward the environment, economy, and society. This strategy is a tool that empowers learners to make more reasonable decisions and responsible actions for the environment, economy, and society for both the present and future (Rieckmann, 2017). ESD has been widely recognized since UNESCO formally introduced it in 1992 (Leicht et al., 2018). Today, ESD is widely used in educational systems around the world.

In Vietnam, sustainability has also gained attention in schools due to the United Nations' Sustainable Development Goals (SDGs), highlighting quality education and lifelong learning (UNESCO, 2020). These goals aim to create fair and inclusive learning environments for building responsible global citizens. However, sustainability seems to remain as an unfamiliar topic in the field of teaching English as a Foreign Language (EFL) as the existing EFL curriculum mainly focuses on students' language skills and communication skills only (Le & Do, 2013). Also, it is a challenge to integrate sustainability into the EFL curriculum due to the lack of understanding of sustainability in education and rare availability of materials on this topic (UNESCO, 2017). What is more, the prescribed curriculum is also not flexible, giving very little chance for teachers to integrate sustainability into the curriculum (Duong, Hoang, & Bui, 2021). These challenges have obstructed the realization of sustainable development goals in education.

This article presents the results of an investigation into EFL teachers' perspectives on sustainability in education and the challenges they face when integrating sustainability into the EFL curriculum with some recommendations on how to involve sustainability in EFL classrooms in Vietnam.

2. LITERATURE REVIEW

2.1. Definition of Sustainability

Sustainability is a varied concept that consists of the environment, the economy, and society well-being for both present and future generations. Sustainable practices aim to improve well-being in all these areas for long-term development, to avoid damaging the environment and to use resources wisely to maintain a healthy balance (Merrill, 2018). Brundtland (1987) adds that, sustainability is about meeting today's needs while making sure future generations can also meet theirs. These perspectives together emphasize the nature of sustainability as a balanced practice, integrating environmental, economic and social aspects towards long-term progress.

2.2. Definition of Education for Sustainability (EfS)

In the face of growing global challenges such as climate change, social inequality and economic instability, Education for Sustainability (EfS) has emerged as a vital framework to equip individuals with the tools and mindsets needed to effectively address these complex issues. EfS is the process by which educators teach individuals the values, opportunities and choices each of us has to develop as an informed, independent, responsible and active agent of change in an effort to contribute to the future of our society and ecological systems (Sterling, 2010). Thus, it is a transformative learning process that engages and equips students, teachers with the knowledge, attitude, skills and values necessary to contribute and safeguard environmental, social and economic well-being, for both the present and future generations.

2.3. Definition of Education for Sustainable Development (ESD)

Education for sustainable development (ESD) is an educational program that helps individuals and societies understand and solve challenges of sustainability. ESD provides people, communities and governments with the knowledge and skills needed to live in ways that respect the environmental, social and economic dimensions of sustainable development (Reid, 2002). In addition, ESD focuses on enhancing the quality of the environment and the quality of life. It also helps a more equitable economic growth for sustainability. In such a program, teachers are to help students comprehend complex sustainability issues and equip them to face societal challenges (Hungerford, 2009). Therefore, ESD plays an essential role in promoting a sustainable future by empowering individuals to make informed decisions and to act responsibly.

2.4. Education for sustainability – A framework

Education for Sustainability (EfS) helps people gain skills, motivation, and support to use their knowledge for sustainable development. EfS focuses on improving environmental education by aligning it with sustainability goals. Many organizations see environmental education as the base for EfS and have created plans to support it (UNESCO, 2017). A common goal is for governments to work together on shared policies and programs for sustainable education (Tilbury, 2011). This cooperation encourages people to take action for a sustainable future, guided by frameworks like the one shown in Figure 1.4.1 (Chang, Kidman & Wi, 2020). EfS combines education and collaboration to build a more sustainable world.

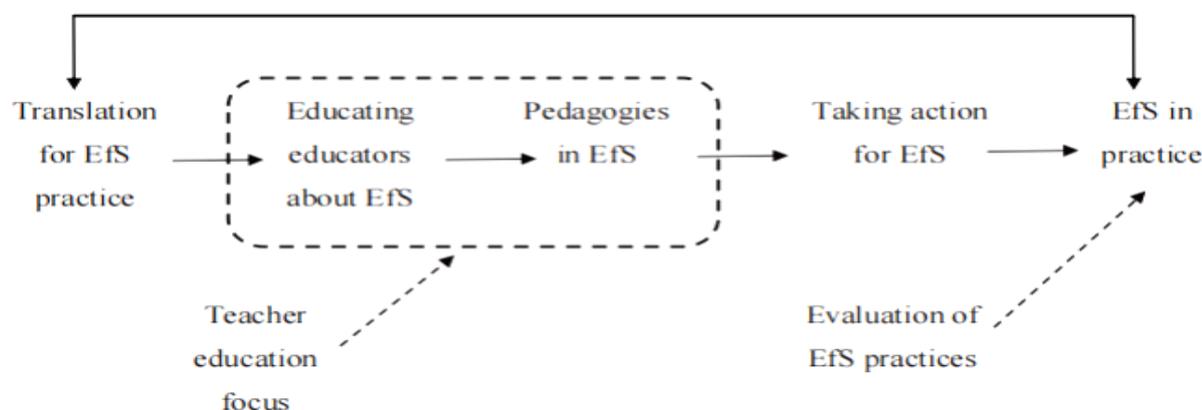


Figure 1.4.1 The EfS framework.

2.5. Challenges in Educating for Sustainability

Educating for sustainability faces several challenges, such as the use of traditional teaching methods, reductionist approaches, a focus on standardized testing, crowded curricula, and a lack of external support. Firstly, one major challenge in teaching sustainability is the dependence on traditional teaching methods, relying on one-way communication, where students are

passive listeners rather than active participants (Blumstein & Saylan, 2007). This type of teaching can worsen sustainability problems by encouraging simple and isolated thinking that does not address the complex nature of sustainability (Orr, 2004; Williams, 2008; DuPuis & Ball, 2013). Students, therefore, struggle to use their knowledge to solve real-world sustainability challenges. To address this, teaching strategies need to become more interactive and dynamic.

Secondly, education systems often overlook the importance of sustainability and only focus more on specialized subjects rather than the connected thinking needed for a sustainable future. In the field of teacher training, the focus is to promote a mechanical view of science that does not match the necessity of sustainability education (Orr, 1991; Nolet, 2009). Moreover, schools and universities typically focus on special knowledge instead of the broader, interconnected thinking that sustainability requires. Hence, a more integrated curriculum is necessary to fill this gap and promote a deeper understanding of sustainability.

Thirdly, the pressure on achieving high scores in some educational systems also creates a barrier to sustainable education. Preparing students for tests has resulted in prioritizing factual and procedural knowledge rather than the critical thinking and experiential learning required for sustainability (Marzano, 1990). As a result, innovative teaching methods are hardly been used to help students gain a deeper sustainability in education. If testing remains unchanged, sustainability education risks can be ignored in favor of more test-oriented teaching and learning.

Fourthly, the prescribed curriculum is compulsory in some education systems, leaving very few chances for any sustainability topics. Teachers have to meet a growing number of standards, making it impossible to fit sustainability into an already fully-scheduled program (Stir, 2006). Besides preparing students for tests, educators must also provide them with skills for future jobs, which leaves even less time for sustainability education (Wheeler & Byrne, 2003). Reforming the curriculum to be a more sustainability inclusive one is believed to be an effective way to solve the problem.

Finally, the lack of external support from universities, NGOs, and businesses can hinder sustainability education. According to Wheeler & Byrne (2003), sustainability is not often included in teacher training programs, leaving teachers unprepared to teach the topic. In addition, businesses may create financial barriers, such as charging schools for recycling services, which discourages sustainable practices. Thus, to improve sustainability education, cooperation between schools and outside organizations is crucial.

2.6. Teachers' Perspectives on Sustainability

Many teachers are not familiar with the key concepts of sustainable development. Vukić (2019) found that most high school teachers did not know much about important sustainable development documents, though they still understood their responsibility to teach sustainability. This shows the need for better training and resources to help teachers understand and teach sustainability in the classrooms. What is more, teachers have different opinions on how to integrate sustainability in the curriculum. Cross (2019) found that teachers in Trinidad and Tobago believed postcolonial issues made it harder for the country to achieve sustainable development, and they also had different ideas about whether sustainability should be taught in specific subjects. Next, teachers had various approaches to bringing ethics into natural science lessons as part of sustainability (Sadler et al., 2006). In addition, some teachers did not see a link between ethics and science, while others thought it was not their responsibility to include ethical concepts. Thus, there is a need for clearer guidelines on sustainability education.

Teachers also perceive that the lack of collaboration between teachers of different subjects holds back the effective implementation of sustainable teaching methods. According to Dimenäs and Alexandersson (2012), secondary school teachers believed that sustainability principles were being taught by others in different subjects. However, when they interviewed those teachers, they realized that no one was taking responsibility. This shows that using a subject-specific approach without communication between teachers can lead to gaps in teaching sustainability. Therefore, teachers need to ensure that sustainability concepts are fully integrated into the curriculum by working together.

2.7. Related studies

In recent years, the prominence of integrating sustainability into the curriculum in schools has got substantial scholarly attention, reflecting a growing recognition of its potential to form language teaching practices and integrate sustainability in education. It has become increasingly evident that the exploration of sustainability is not only shedding light on the challenges of integrating sustainability but also redefining EFL teachers' perspectives on integrating sustainability into the EFL curriculum. Thus, several studies of teachers' perspectives, and challenges about the integration of sustainability into education, and factors that can enhance sustainability integration have been conducted in the world as well as in Vietnam.

The integration of sustainability into education has experienced some ups and downs around the world. Anyolo, Kärkkäinen & Keinonen (2018) found that Namibian senior secondary school teachers often see ESD as a means to raise environmental awareness and link sustainability to educational activities. In another research, the successful implementation of sustainability education in the Basque Autonomous Community relies on motivated teaching staff, good leadership, and support from school authorities. Besides, experiential activities and extracurricular engagements show positive outcomes in sustainability education (Agirreazkuenaga, 2019). Parry & Metzger (2023), on the other side, identified key barriers to implementing sustainability education.

They found out that the content-based testing, unpolished staff, fragmented curriculum and financial issues can hinder the effective application of sustainability in schools.

In the Vietnamese context, Nguyen (2018) confirmed that geography teachers in Vietnam hold diverse perspectives on sustainability integration, shaped by their professional training and societal context. This study also found out a significant disconnection between UNESCO's sustainability concepts and teachers' views on the topic. Similarly, Nguyen et al. (2022) examined the perspectives of pre-service elementary teachers in Vietnam, revealing that teacher training programs inadequately address sustainable development, leaving pre-service teachers with only a moderate understanding of sustainability. Moreover, Pham et al. (2023), investigated curriculum reforms in Vietnam, discovered that while teachers encountered difficulties in adapting to the new curriculum, sustainability was not explicitly addressed. These studies demonstrate that while teachers acknowledge the importance of sustainability, they face considerable structural and pedagogical problems. Comparably, Kieu, Singer, and Gannon (2016) explored the barriers to integrating sustainability in Vietnamese schools, pointing out issues such as the top-down pedagogical approach and a lack of enough resources.

Despite the existing research, there remains a gap in understanding the perspectives of EFL teachers on sustainability integration in Vietnam. Most studies in the world as well as in Vietnam have focused on general challenges faced by teachers in levels of school, neglecting the specific challenges that EFL teachers face in incorporating sustainability into their curriculum. Additionally, although previous research has identified general barriers such as pedagogical limitations and gaps in the curriculum, the unique challenges of aligning sustainability with language education, especially in teaching English, have not been completely examined. To fill the gap, the study aims to investigate EFL teachers' perspectives on integrating sustainability into the EFL curriculum in Vietnam and to explore the challenges that teachers face when integrating sustainability into the EFL curriculum.

3. METHODOLOGY

A mixed methods design was employed in this study aims to investigate EFL teachers' perspectives, explore the challenges that teachers face when integrating sustainability into the EFL curriculum, and help the Vietnamese education system move closer to the United Nations Sustainable Development Goals. In addition, a mixed methods research design is a procedure for collecting, analyzing, and mixing both quantitative and qualitative methods in a single study or a series of studies to understand a research problem (Creswell & Clark, 2017).

Participants of this study were EFL teachers who worked at various school levels in Vietnam from kindergartens, primary schools, secondary schools, high schools to colleges, and universities. The teachers were selected from urban and rural schools to ensure diverse perspectives on the integration of sustainability into education. A total of eighty-nine EFL teachers participated in the survey, and five EFL teachers were chosen for follow-up semi-structured interviews. According to Creswell & Clark (2017), participants were selected through stratified random sampling and purposive sampling. Stratified random sampling was used to select thirty-one primary school teachers from various schools in Vietnam for the questionnaire. For semi-structured interviews, purposive sampling was employed to see if participants were chosen based on their relevance to the research objectives.

Moreover, the main data collection instruments (questionnaires and interviews) were used in this study. These instruments were chosen as they could be the suitable means of collecting, analyzing, and investigating during the study. Questionnaires are one of the primary sources of data in any research. According to Green and Salkind (2003), a questionnaire is a useful tool in educational research since individuals can use it. Questionnaires were designed to gather quantitative data on teachers' understanding of sustainability, their integrating sustainability into the curriculum, and the challenges they are facing. Following the survey, semi-structured interviews were conducted with five EFL teachers to gain a deeper understanding of their perspectives, and challenges in applying sustainability in their teaching. According to Turner III (2010), these interviews were basically conversations between the interviewer and the interviewee that were conducted for a specific purpose. The interviews lasted 20 - 30 minutes each and were conducted face-to-face or online. The time of interviews depended on participants' availability.

Finally, the data collected from questionnaires, interviews, and audio recordings was examined carefully and qualitatively to find out EFL teachers' perspectives and the challenges of integrating sustainability into the EFL curriculum in Vietnam. Thematic analysis methods were used to find themes and describe patterns in the text data (Braun & Clarke, 2012). The participants were handed out questionnaires designed for the selected EFL teachers to define EFL teachers' perspectives, and the challenges of integrating sustainability. Then, the collected data was comprehensively analyzed to answer the two research questions of the study by using SPSS software (version 26.0) to analyze the data from the survey. Next, descriptive statistics included mean, standard deviation, and frequency distribution to summarize EFL teachers' perspectives, and the challenges of integrating sustainability into the EFL curriculum. Moreover, all interview data was processed using thematic analysis. The data on interviews was transcribed verbatim and then analyzed and coded. After preliminary coding, different sources of data were compared to see if consistent patterns emerged and were combined to depict a more comprehensive picture. The data from the interviews was analyzed according to themes, following these steps. First, interview transcripts were read through. Next, all excerpts of similar codes relevant to the interviewees' perspectives and challenges of integrating sustainability were categorized differently. The last one, based on the codes,

results on themes were identified. The researcher coded interview data and deduced themes. All excerpts that were used as direct quotes in presenting the study results were translated from Vietnamese into English.

4. FINDINGS

4.1. Findings from the questionnaires

Section one of the questionnaire with forty-four items presents EFL teachers' perspectives on integrating sustainability into the EFL curriculum in Vietnam, and the challenges that teachers face when integrating sustainability into the EFL curriculum. These items are divided into four clusters: (1) the concept of sustainability, sustainable education, and ESD, (2) the importance of ESD, and integrating sustainability education into teaching, (3) the challenges in sustainable development education, and in teaching sustainability in schools, and (4) integrating sustainability education into the curriculum.

A *Descriptive Statistic* was run to examine the mean and Std. Deviation score of the concept of sustainability, sustainable education, and ESD with the following results.

Table 4.1: Descriptive Statistics of the concept of sustainability

Concept	N	Mean	Std. Deviation
...including environmental, economic and social well-being for present and future.	89	4.07	0.95
...improving welfare to ensure long-term development.	89	4.13	0.94
...meaning little or no harm to the environment.	89	4.12	0.96
...emphasizing the wise use of resources to maintain balance.	89	4.13	0.89
...meeting the needs of the present without compromising those of future generations.	89	4.09	0.87
Valid N (listwise)	89	4.11	0.93

Table 4.1 shows that the overall mean and Std. Deviation score of the concept of sustainability. Overall, many people show their views on sustainability at a high level ($M = 4.11$, $SD = 0.93$). This means everyone strongly agrees with the concept of sustainability and the respondents are very much different. It is interesting to say that "...*emphasizing the wise use of resources to maintain balance.*" is ranked at 4.13 (the highest level). This shows that people strongly agree that sustainability emphasizes the wise use of resources to maintain balance. Next, the values of the Std. Deviation is around from 0.87 to 0.96. This also means that respondents' ratings about the concept of sustainability are very different. Thus, it can be ended that teachers completely agree with the concept of sustainability.

Table 4.2: Descriptive Statistics of the concept of sustainable education

Concept	N	Mean	Std. Deviation
...helping students understand values, opportunities, and choices.	89	4.21	0.82
...encouraging each individual to become a responsible agent of change.	89	4.19	0.88
...calling for active efforts for the future of society and ecosystems.	89	4.19	0.86
...being a transformative and engaging learning process .	89	4.21	0.75
...equipping learners with the necessary knowledge, skills, attitudes, and values.	89	4.31	0.78
...contributing to protecting environmental, social and economic welfare for present and future generations .	89	4.26	0.81
Valid N (listwise)	89	4.23	0.81

The table below gives information about the overall mean and Std. Deviation score of the concept of sustainable education. Overall, many people show their opinion on sustainable education at a high level ($M = 4.23$, $SD = 0.81$). This means everyone strongly agrees with the concept of sustainable education and the respondents are nearly the same. It is interesting to say that "... *equipping learners with the necessary knowledge, skills, attitudes, and values.*" is ranked at 4.31 (the highest level). This shows that people strongly agree that sustainable education equips learners with the necessary knowledge, skills, attitudes, and values. Next, the values of the Std. Deviation is around from 0.75 to 0.88. This also means that respondents' ratings about the concept of sustainable education are very near the same. Therefore, it can be concluded that there is a similar rate among the respondents, and teachers completely agree with the concept of sustainable education.

Table 4.3: Descriptive Statistics of the concept of ESD

Concept	N	Mean	Std. Deviation
...providing the skills and motivation to apply knowledge for sustainable development.	89	4.18	0.83
...improving the educational environment through the sustainable development goals.	89	4.21	0.85
...equipping them with the knowledge, skills, values, and attitudes needed to address global challenges.	89	4.21	0.87
...playing an essential role in achieving the Sustainable Development Goals.	89	4.22	0.77
...encouraging creativity and effective problem solving.	89	4.13	0.83
Valid N (listwise)	89	4.19	0.83

Table 4.3 shows that the overall mean and Std. Deviation score of the concept of ESD. Overall, many people show their views on ESD at a high level ($M = 4.19$, $SD = 0.83$). This means everyone strongly agrees with the concept of ESD and the respondents are nearly the same. It is interesting to say that “...*playing an essential role in achieving the Sustainable Development Goals.*” is ranked at 4.22 (the highest level). This shows that people strongly agree that ESD plays an essential role in achieving the Sustainable Development Goals. Next, the values of the Std. Deviation is around from 0.77 to 0.87. This also means that respondents' ratings about the concept of sustainable education are very near the same. Hence, it can be finished that there is a similar rate among the respondents, and teachers completely agree with the concept of ESD.

Table 4.4: Descriptive Statistics of the importance of ESD

Importance	N	Mean	Std. Deviation
...preparing individuals and societies to address sustainability challenges.	89	4.06	0.90
...equipping you with the knowledge and skills needed to live sustainably.	89	4.19	0.85
...focusing on improving the quality of environment and life.	89	4.18	0.83
...supporting equitable and sustainable economic growth.	89	4.17	0.80
...building a harmonious society between economic, social, and environmental factors.	89	4.20	0.94
Valid N (listwise)	89	4.16	0.87

The table below gives information about the overall mean and Std. Deviation score of the importance of ESD. Overall, many people rate the importance of ESD at a high level ($M = 4.16$, $SD = 0.87$). This means everyone rates the importance of ESD at a very high level and the respondents are nearly the same. It is exciting to say that “...*building a harmonious society between economic, social, and environmental factors.*” is ranked at 4.20 (the highest level). This shows that ESD has a very large importance in building a harmonious society between economic, social, and environmental factors. Next, the values of the Std. Deviation is around from 0.83 to 0.94. This also means that respondents' ratings about the importance of ESD are very near the same as well as very different. Thus, it can be concluded that there is a various rate among the respondents, and teachers think ESD is very important and necessary.

Table 4.5: Descriptive Statistics of the importance of integrating sustainability education into teaching

Importance	N	Mean	Std. Deviation
...helping students understand environmental, economic and social issues.	89	4.26	0.79
...encouraging critical thinking and positive contributions to society.	89	4.30	0.78
...achieving the United Nations Sustainable Development Goals.	89	4.06	0.88
...developing communication skills and global citizenship.	89	4.15	0.82
...promoting connections between subjects.	89	4.21	0.83
Valid N (listwise)	89	4.20	0.82

Table 4.5 shows that the overall mean and Std. Deviation score of the importance of integrating sustainability education into teaching. Overall, many people rate the importance of integrating sustainability education into teaching at a high level ($M = 4.20$, $SD = 0.82$). This means everyone rates the importance of integrating sustainability education into teaching at a very high level and the respondents are nearly the same. It is interesting to say that “...*encouraging critical thinking and positive contributions to society.*” is ranked at 4.30 (the highest level). This shows that integrating sustainability education into teaching has a very large importance in encouraging critical thinking and positive contributions to society. Next, the values of the Std. Deviation is around from 0.78 to 0.88. This also means that respondents' ratings about the importance of integrating sustainability education into teaching are very near the same. Therefore, it can be ended that teachers appreciate the importance of integrating sustainability education into teaching, especially critical thinking and positive contributions.

Table 4.6: Descriptive Statistics of the challenges in sustainable development education

Challenge	N	Mean	Std. Deviation
...depending too much on traditional teaching methods .	89	3.79	1.03
...lacking of integration of sustainability into the education system.	89	3.80	0.93
...pressuring on high marks hinders sustainable education.	89	4.00	1.08
...pressuring an overloaded curriculum hinders the inclusion of sustainable content.	89	4.02	0.97
...lacking of support from universities and relevant organizations on sustainability education.	89	3.83	1.06
Valid N (listwise)	89	3.89	1.01

The table below gives information about the overall mean and Std. Deviation score of the challenges in sustainable development education. Overall, many people show their opinion on the challenges in sustainable development education at a high level ($M = 3.89$, $SD = 1.01$). This means there are challenges in sustainable development education at a very high level and the respondents are very different. It is fascinating to say that “...pressuring on an overloaded curriculum hinders the inclusion of sustainable content.” is ranked at 4.02 (the highest level). This shows that pressuring an overloaded curriculum hinders the inclusion of sustainable content and has a very large impact on sustainable development education. Next, the values of the Std. Deviation is around from 0.93 to 1.08. This also means that respondents' ratings about the challenges in sustainable development education are very different. So, it can be concluded that the challenges in sustainable development education have a very large impact.

Table 4.7: Descriptive Statistics of the challenges in teaching sustainability in schools

Challenge	N	Mean	Std. Deviation
...teachers have a great influence on students' understanding of sustainability.	89	3.99	0.94
...teachers have mixed opinions about integrating sustainability into the curriculum.	89	3.97	0.94
...teachers in subjects without collaboration make it difficult to teach sustainability.	89	3.76	1.02
...teachers are unfamiliar with the concepts of sustainable development.	89	3.73	1.07
...students have limited understanding of sustainability .	89	3.90	0.99
Valid N (listwise)	89	3.87	0.99

Table 4.7 shows that the overall mean and Std. Deviation score of the challenges in teaching sustainability in schools. Overall, many people show their opinion on the challenges in teaching sustainability in schools at a high level ($M = 3.87$, $SD = 0.99$). This means there are challenges in teaching sustainability in schools at a very high level and the respondents are very different. It is fascinating to say that “...*teachers have a great influence on students' understanding of sustainability.*” is ranked at 3.99 (the highest level). This shows that teachers have a great influence on students' understanding of sustainability and have a very large impact on teaching sustainability in schools. Next, the values of the Std. Deviation is around from 0.94 to 1.07. This also means that respondents' ratings about the challenges in teaching sustainability in schools are very different. Hence, it can be finished that the challenges in teaching sustainability in schools have a quite large impact.

Table 4.8: Descriptive Statistics of integrating sustainability education into the curriculum.

Integrating sustainability education	N	Mean	Std. Deviation
Organize the presentation related sustainability in the classroom.	89	4.09	0.83
Organize discussion groups on sustainable solutions in the classroom.	89	4.01	0.86
Invite speakers or experts to talk about sustainability.	89	3.93	1.02
Organize field trips.	89	4.13	0.88
Teach students how to sort waste, recycle and reuse at school.	89	4.12	0.85
Create pictures, posters, illustrations or videos about sustainable living.	89	4.13	0.83
Participate in community campaigns.	89	4.21	0.78
Set up a “sustainability corner” in the classroom.	89	4.09	0.89
Valid N (listwise)	89	4.09	0.87

The table below gives information about the overall mean and Std. Deviation score of integrating sustainability education into the curriculum. Overall, many people rate the effectiveness of the activities used to integrate sustainability education into the curriculum at a high level ($M = 4.09$, $SD = 0.87$). This means the effectiveness of the activities used to integrate sustainability education into the curriculum is at a very high level and the respondents are near the same. While “*Participate in community campaigns*” is ranked at 4.21 (the highest level), “*Invite speakers or experts to talk about sustainability*” is rated at 3.93 (a quite high level). It is fascinating to say that “*Participate in community campaigns*” is ranked at 4.21 (the highest level). This shows that the activity (*Participate in community campaigns*) is the most feasible. Next, the value of the Std. Deviation (*Invite speakers or experts to talk about sustainability*) is at 1.02 (a high level). This also means that respondents' ratings about (*Invite speakers or experts to talk about sustainability*) are very different. Thus, it can be concluded that the activity (*Participate in community campaigns*) is the most feasible and it can carry out at schools.

4.2. Findings from the interviews

The last section of the interview data reveal participants' perspectives of EFL teachers on incorporating sustainability into the EFL curriculum in Vietnam, along with the challenges they encounter in doing so. Four themes are identified as (1) perspectives on sustainability and integrating sustainability in teaching, (2) integrating sustainability into teaching, (3) challenges in integrating sustainability in teaching, and (4) suggestions for improving sustainability integration in teaching.

4.2.1. Perspectives on sustainability and integrating sustainability in teaching

When asked about their understanding of sustainability, four of the five participants answered that it related to the environment, economic and society which everyone develop something without affecting them. The two extracts below illustrate their views.

“...it is related to the economic environment, including the national economy, local economy...” (Participant 1, line 17-18).

“...developing something without affecting natural resources, and related to environmental protection, socio-economic development...” (Participant 2, line 14-15).

In addition, they showed their views about ESD. Both five participants answered that ESD is commonly understood as a teaching approach that promotes awareness, positive attitudes and practical actions towards sustainability. The three extracts below are examples that illustrate their views:

“...educating students about environmental protection awareness...” (Participant 2, line 19)

“...students can develop community awareness...” (Participant 2, line 21)

“...a teaching method that not only provides knowledge but also develops positive attitudes and behaviors towards protecting the social environment and the economy...” (Participant 4, line 20-22)

Finally, all participants agreed on the important role of sustainability in education. They emphasized that integrating sustainability can raise students' awareness of their responsibility to the environment and society. Examples of these views are presented below.

“...critical thinking and soft skills in problem solving.” (Participant 2, line 32- 33)

“...play a very important role in teaching because it will directly affect the learning process of learners, especially lifelong learning...” (Participant 3, line 27-29)

4.2.2. Integrating sustainability into teaching

The integration of sustainability into the curriculum varied among participants. Participant 1 shared that sustainability was sometimes incorporated into lessons through related topics “...they learned vocabulary about planting trees, or they traveled to places with forests, I would integrate at the end how they protect the environment, or how they can use recycled items...” (Participant 1, line 54-56). Next, participant 2 emphasized the use of group work to facilitate discussions on topics related to sustainability and

explained “...I let students work in groups because I want them to be able to share their opinions with their friends...” (Participant 2, line 47-48). The last one, participant 5 described guiding students to discuss environmental pollution and climate change, ending with designing a poster to present their ideas “...work in groups and discuss issues such as environmental pollution and climate change...” (Participant 5, line 37-38), and “...I let the students design a poster to present ways to protect the environment.” (Participant 5, line 39-40)

4.2.3. Challenges in integrating sustainability in teaching

All participants identified a number of challenges in integrating sustainability into their curricula. The most frequently mentioned issues were time constraints and curriculum overload. For example:

“...Time may not be enough because a lesson or a teaching period is limited by time...” (Participant 2, line 65-66)

“...pressure to give them high scores...mainly teach more academic content and the programs are also fixed...” (Participant 5, line 74-75)

“...I said it takes time but the pressure, for example, on your academic scores, if you spend too much time doing projects...” (Participant 3, line 87-88)

“...there is no test content about sustainability in the test, so it is really the pressure on achievement.” (Participant 3, line 91-93)

4.2.4. Suggestions for improving sustainability integration in teaching

Five participants suggested that there is a need for better support for teachers to effectively integrate sustainability. Thus, they called for more training opportunities, curricular adjustments, and resources focused on sustainability education. Examples of these views are presented below.

“...the publisher can put in pictures or on a PowerPoint file...” (Participant 1, line 127-128)

“...must have a source of documents, for example, related documents...” (Participant 2, line 93)

“...increase one or two periods so that students have time to study and practice this knowledge.” (Participant 3, line 122-123)

“...in-depth sustainability training, rich learning materials...” (Participant 4, line 79-80)

“...I think we should also include sustainability in the assessment system, build assessments for students to score to encourage them to participate more actively in sustainability topics.” (Participant 5, line 108-110).

5. DISCUSSIONS

5.1. EFL teachers' perspectives on sustainability and integrating sustainability into the EFL curriculum in Vietnam

As shown in the descriptive statistics, teachers strongly agreed with the key concepts of sustainability, sustainability education, and ESD. This is consistent with existing literature that highlights the importance of educators' beliefs and attitudes in the effective implementation of sustainability education (Cheung, 2020; Vukic, 2019). In addition, teachers recognized the importance of sustainability as a comprehensive concept that encompasses environmental, economic, and social aspects. This understanding is related to definitions provided in the literature such as Brundtland (1987) and Sterling (2010). Furthermore, the study emphasizes the growing recognition among EFL teachers of the importance of sustainable development education in shaping responsible global citizens is increasingly recognized by English as a second language teachers. This is related to studies such as Kieu (2016) and Nguyen et al. (2022), which emphasize Vietnamese educators' awareness of the importance of sustainable development.

The findings also show that EFL teachers in Vietnam generally had positive views on integrating sustainability into their curricula. They recognized the importance of sustainability as a comprehensive concept encompassing environmental, economic, and social aspects. This understanding is related to definitions provided in the literature such as Brundtland (1987) and Sterling (2010). Finally, the study emphasizes the growing recognition among EFL teachers of the importance of sustainable development education in shaping responsible global citizens is increasingly recognized by English as a second language teachers. This is related to studies such as Kieu (2016) and Nguyen et al. (2022), which emphasize Vietnamese educators' awareness of the importance of sustainable development.

5.2. The challenges that EFL teachers face when integrating sustainability into the EFL curriculum

The findings reveal that EFL teachers face significant challenges in integrating these concepts into their curricula. Time constraints and overloaded curricula are the most pressing issues. As noted by several participants, current educational frameworks pressure teachers to focus on academic content and high test scores, which often pushes sustainability topics to the margins. This is consistent with the literature, which highlights the harmful impact of standardized testing on inclusive and innovative teaching approaches (Marzano, 1990).

Additionally, the reliance on traditional teaching methods can be considered as an obstacle in the process of sustainability integration. This is in line with Blumstein and Saylan's (2007) findings that teachers may have difficulty adopting the more interactive and participatory approaches required for effective sustainability education. This challenge is further compounded by a lack of support from educational institutions, which often do not provide adequate resources or training for teachers to implement

sustainability education effectively (Wheeler & Byrne, 2003). Moreover, interviews further revealed that teachers often felt isolated in their efforts to teach sustainability, with limited collaboration across subject areas to lead to gaps in students' understanding of sustainability.

However, some teachers pointed out that integrating sustainability concepts into teaching remains challenging due to insufficient clear guidance and coordination between subjects. This issue differs from previous studies such as Kieu (2016) and Nguyen (2018), which have not emphasized this aspect much. In addition, a notable challenge that Vietnamese English teachers mentioned was the pressure from an overloaded curriculum, which prevented them from integrating sustainability content into their teaching. Many teachers highlighted that time constraints and the pressure to achieve high grades made it difficult for them to devote time to sustainability-related projects. This content has not been highlighted in previous studies such as Nguyen et al. (2022) and Pham et al. (2023), which might focus more on factors like a lack of materials or external support. Moreover, there were no findings that indicated that any teachers did not value sustainability in education. On the contrary, most teachers recognized the importance of sustainability education and believed that integrating sustainability into teaching was necessary.

5.3. Implications

The findings have identified several challenges in terms of sustainability integration into EFL curriculum which can be served as a base for recommending the pedagogical implications. Lacking understanding of sustainable concepts and sustainability in education is one of the obstacles of the integration process. The problem can be solved in better training for pre-service and in-service teachers. As for teacher trainees, the curriculum for teacher education in universities should be sustainability included. This aspect should be added as a required objective in the program to provide teacher trainees with the knowledge and skills necessary to effectively integrate sustainability into their teaching. These programs should include both sustainability concepts and teaching strategies that encourage critical thinking and active student engagement. For in-service teachers, sustainability development including sustainability in education should be a part of professional development programs through training courses from standardized professional development model to individuals' life-long learning in self-directed one. Moreover, providing access to relevant resources and materials will also help teachers feel more confident in integrating sustainability into their lessons.

Another challenge discovered from the findings is the rigidity of the prescribed curriculum. Both quantitative and qualitative data have indicated that although teachers generally support the integration of sustainability in their teaching practices, they concern about time constraints, curriculum overload, and the test-based focus. While waiting for a comprehensive curriculum renovation from the top level of management, teachers can actively incorporate contents of sustainable development during 'the Project' lesson after each unit or make use of the time frame for local education in the Vietnamese National General Curriculum 2018. Teachers should realize that each of them is an educational innovator, contributing in the process of sustainable development through each lesson they have, or a single activity they organize.

The empirical data also reveal that teachers have difficulty in integrating sustainability into the classroom because of limited availability of relevant materials and a lack of interactive and dynamic teaching methods. Thus, the development of sustainability related teaching materials and assessment tools is essential to support teachers in implementing these topics. Establishing a collaborative network between educators, NGOs, and educational institutions can also facilitate the sharing of resources and best practices. Besides, it is necessary to organize site-based training courses about curriculum allocating, lesson planning, and appropriate activity guiding, which can help teachers implement these concepts and teaching strategies effectively in their classrooms. In addition, schools should also encourage collaborative teaching methods such as lesson study. This allows teachers to share best practices and innovative strategies for integrating sustainability into their subjects. More training should be made for in-service teachers about how to carry on experiential learning as indicated in the Vietnamese National General Curriculum 2018. This approach allows students to learn by doing, spending time out such as field trips, discovery journeys or guided experiments. By doing so, sustainability development will definitely not only remain as theoretical concepts but become students' habits, beliefs and attitudes.

5.4. Limitations

Although this study provides valuable insights, some limitations need to be acknowledged. Firstly, although the sample size is sufficient, it may not fully capture the diverse perspectives of all EFL teachers across Vietnam. Secondly, the use of self-reported data from questionnaires and interviews may introduce bias because participants may provide responses that appear to be socially acceptable. Finally, the study focused primarily on teachers' perspectives, which may overlook the opinions of students and educational policy makers to have a broader understanding of the issues.

6. CONCLUSION

This study explored the integration of sustainability into the English as a Foreign Language (EFL) curriculum in Vietnamese schools, examining teachers' perspectives and the challenges they face. The findings showed a strong agreement among teachers on the importance of sustainability education. The mean scores for various concepts related to sustainability, sustainability education and ESD were quite high, indicating a strong consensus on the necessity of these concepts in the curriculum. Teachers

emphasized the importance of equipping students with the knowledge, skills and attitudes needed to address sustainability challenges, and highlighted the role of education in promoting awareness and responsible citizenship. However, the study also identified a number of challenges that hinder the effective integration of sustainability into teaching activities. Time constraints and curriculum overload emerged as the most significant barriers, with teachers expressing concerns about the pressure to focus on academic achievement and standardized testing. In addition, lack of support from educational institutions and insufficient training opportunities further complicate efforts to integrate sustainability into the curriculum. Thus, these challenges demonstrate a disconnection between the perceived importance of sustainability education and its actual implementation in schools. The findings somehow have aligned with the broader goal of the United Nations' Sustainable Development Goals (SDGs) in promoting quality education and lifelong learning opportunities in Vietnam. Once being aware of the importance of sustainability education, teachers are expected to act to realize the integration of sustainability into their curriculum which plays a vital role in fostering responsible citizenship and community engagement among students, encouraging them to think critically about their roles in creating a sustainable future.

Based on these findings, several recommendations can be made for both practice and future research. Firstly, educational institutions should consider revising curricula to allow for more flexible time allocations to sustainability topics without compromising academic content. Increasing the number of class periods dedicated to these subjects could provide teachers and students with the time needed to engage deeply with sustainability issues. Secondly, professional development programs should be implemented to train teachers in effective strategies for integrating sustainability into their teaching. Such programs could include workshops, resources, and collaborative opportunities that promote the sharing of best practices among educators. Finally, future research should explore the specific challenges faced by ESL teachers in different regions of Vietnam and identify effective strategies for successfully integrating sustainability education. After adopting these recommendations, Vietnam's education system can contribute to achieving the United Nations Sustainable Development Goals, empowering students to become responsible global citizens.

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