Education for Sustainable Development: Mapping Socio-legal and Eco-cultural Sustainability Topics in English Learning

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Abstract. This research aimed to identify socio-legal and eco-cultural values through the participatory mapping (PM) of local wisdom in supporting Education for Sustainable Development (ESD) in higher education, which can potentially be applied to English as a Foreign Language (EFL) learning. The research involved 14 English students at a private university in Bali, Indonesia. The participants were selected to take part in participatory mapping (PM) with community members at a remote village. The results of this study are documented in two major findings. First, with their collective knowledge gained from PM, the English students were able to identify socio-legal and eco-cultural values and utilize them contextually in their report writing. Second, undertaking participatory mapping prior to completing writing tasks in their EFL course could help students to better express their ideas and strengthen their English writing skills. The insertion of two aspects of sustainability in the EFL tasks involved incorporating local values into EFL learning. Through English students experiencing PM prior to completing their writing task, EFL learning can be conducted more authentically with the students paying greater attention to the local culture and values. By exploring socio-legal and eco-cultural sustainability as the core activity of PM in this research, the study contributes to our understanding of the way in which the integration of local values into EFL activities in Indonesia makes a tangible contribution to ESD.

1. Introduction
Learning at all levels of education must be directed towards making a continuous contribution to sustainable life and development. Stakeholders must make the creation of a beneficial learning design their greatest concern (Jayantini et al., 2022a; Purandina & Sari, 2022; Suastra et al., 2017). The need to strive towards sustainable life and development must be brought into every field of study, including foreign language learning (Choi, 2019; de la Fuente, 2021; Prabawani, 2021). In the case of language learning, opportunities must be given for students to express critical thinking regarding the socio-cultural phenomena, environmental issues, and all aspects of life relating to the dynamics of the community and sustainability (Iakovos, 2011; Vdovina & Gaibisso, 2013). Critical thinking can help students to increase their participation in society by communicating more effectively (Vdovina & Gaibisso, 2013). Schools and universities should focus on providing quality education that takes into account the students' backgrounds (Komisi Nasional Indonesia untuk UNESCO [KNIU], 2014). This can be done by integrating learning activities that align with the knowledge and cultural values of the community, including the aim of living a sustainable life by seeking to understand the local wisdom on which people's lives are based (Sriartha et al., 2017; Surata et al., 2015).

In EFL learning, the efforts towards integrating sustainable development can be made by incorporating community values into the teaching materials, topics for students to discuss or present, and texts to analyse or write. In the Indonesian context, such integration can be achieved through participatory mapping, by involving the relevant stakeholders (Surata et al., 2014). To maintain the values of living sustainably with people from different backgrounds in the archipelago, lecturers, teachers, and students in Indonesia can work with local communities to establish a contextual learning atmosphere that results in an analytical study (Jayantini et al., 2023; Siska et al., 2021). This may be done by selecting particular topics that promote awareness of the local culture, social life, and the environment. Within the EFL classroom, all of these issues must be incorporated into English language learning activities (Nur, 2013; Suwastini et al., 2020). The exploration of socio-legal and eco-cultural sustainability may become an emerging topic that generates a greater demand for the development of more contextualised and authentic learning methods. With regard to environmental issues and sustainable development, integrating various aspects and values of local people's daily lives adds potential values and contextual topics that enable language learning to contribute to ESD (de la Fuente, 2021; Prabawani, 2021; Purnamasari & Hanifah, 2021).

Language learning at the university level must be achieved in a sustainable way (Maican & Cocoradă, 2021; Makarova, 2020). To date, the learning processes have been focused on efforts to improve students' ability to master four important language elements – namely, speaking, writing, reading and listening – through

topics that are less contextual and rarely touch upon local values to be raised in a global context (Jayantini et al., 2022a). In the foreign language classroom, the introduction of local culture can be a means of incorporating current socio-cultural contexts so that learning brings added value in supporting character-building, critical thinking, respect for local wisdom and attention to the environment (Aglasi & Casta, 2017; Wirahyuni et al., 2021). Authentic topics that are chosen for course materials may have a positive impact on students' motivation, depending on each student's individual motives for learning, as well as the teacher's classroom management practices. Although the degree of progress may vary, authentic materials may motivate EFL students to talk more readily (Hoang, 2022).

Planning for language learning, especially in the EFL classroom, can also consider the involvement of other fields of studies related to environmental contents, including the cultural values being respected by the local community, so that the learning becomes more relevant and supportive of ESD. This concept aligns with the potential for developing ESD in Indonesia, according to the Indonesian National Commission for UNESCO, Ministry of Education and Culture (KNIU, 2014). The commission members pointed out several opportunities for the application of ESD in Indonesia, such as the likelihood of Indonesian students feeling more immersed in a local culture-based learning model.

EFL learning involves productive skills, reflecting speaking and writing abilities. These two productive skills are easily recognized in terms of accuracy and fluency. For accuracy, linguistic competence must be improved, while fluency can be enhanced by undertaking more practical exercises that explore the students' knowledge and insights into many different issues. Previous studies have focused on the integration of local values in English learning and have recommended the inclusion of local values to increase the value of learning English as the "global" means of communication (Adawiah & Putri, 2021; Hasyim & Puspita, 2021; Laili, 2017; Purandina & Sari, 2022; Wirahyuni et al., 2021). However, no study to date has applied participatory mapping to investigate the potential of local values being utilized as teaching materials that explore the students' knowledge and critical thinking. Participatory mapping (PM) is a type of participatory action research whereby participants collaborate to collect data in a certain place by producing a map (Rubel et al., 2016); this gives students the opportunity to represent a socially and culturally distinct understanding. PM can be utilized as a medium for strengthening a community by spatially mapping themselves in terms of their landscape and the values they attach to it; such aspects are commonly excluded from mainstream maps (Lienert, 2019).

As the focus of this study, socio-legal topics explore the connection of legal aspects with other fields – including sociology, anthropology, history, psychology, and law – to report on the workings of law in people's everyday lives (Irianto & Shidarta, 2011; Irianto, 2012; Wiratraman, 2015). Meanwhile, eco-cultural studies observe various aspects of the interaction of human beings with nature and their environment. This study aims to show how socio-legal and eco-cultural sustainability investigation can be reflected in EFL students' writing. Writing has always been a problem from English students, even though this skill is considered

very important (Zhang et al., 2023). Triangulation methods were used to convincingly promote the integration of local values in EFL learning by selecting particular topics to discuss in the context of discourse, linguistically, situationally, or culturally (Song, 2010). The integration of sustainable values into the EFL classroom promotes a better learning atmosphere that is beneficial in terms of fluency skills as well as being character-building for the students (Sukarno, 2012).

2. Literature Review

This section presents an examination of ESD in EFL learning. To clarify, the terms socio-legal and eco-cultural aspects do not refer to a research design and approach applied in this study. Instead, the terms are used to connect to the aims of the study, i.e. mapping socio-legal and eco-cultural sustainability topics in English learning through participatory mapping, which is used as a method for determining interesting discussion topics to be reported in the EFL writing activity. Socio-legal and eco-cultural sustainability are selected as topics to explore the understanding of context interpretation in the Discourse Analysis course. The two values are considered worth exploring for applying ESD to EFL learning since they represent many aspects that could possibly enhance the students' awareness in maintaining social, legal, ecological and cultural values that are internally connected with the local community to which they belong.

The learning design here takes into account the importance of selecting materials for integrating ESD in EFL learning so that students can gain a greater benefit in terms of opening their minds. Linking ESD to foreign language learning, this study attempts to include several subtopics that can potentially be used to integrate language learning and ESD. Planning relevant, high quality materials in EFL learning must be done within a multidisciplinary framework (de la Fuente, 2021). In order to insert ESD values into EFL learning, participatory mapping has been widely used as a means of gathering data to encourage students to interpret their area's research findings. These results illustrate the participants' achievements in describing their perceptions, opinions and responses to various fields, providing added value to sustainable development and education (Rubel et al., 2016; Surata et al., 2014). The keyword for the inclusion of ESD in EFL learning is participation. The learning activities can be designed as an effort to realise a "collaborative" and "participatory" classroom. The application of these two characteristics is in line with the utilization of local wisdom to evoke students' awareness in EFL learning, namely: (1) conducting a field study; (2) joining a discussion with community members to gather meaningful data; (3) identifying values; (4) interpreting local terms through their values; (5) elaborating local values to assess productive skills; (6) reflecting on the impacts of collaborative work (Jayantini et al., 2022a).

At the global level, this research contributes to the realisation of sustainable development goals (SDGs) (Choi, 2019), especially in the fields of education and the environment, increasing participation in the field of environmental maintenance and the preservation of good social values. On its website, UNESCO emphasizes that sustainable development is becoming an important part of education. Quality education must focus on helping students learn and grow in all areas of their lives (Purnamasari & Hanifah, 2021). It concerns both teaching

methods and the ways in which students learn. Instruction for ESD gives learners the information, abilities, values and strategies to address the interconnected worldwide challenges including climate change, misfortune of biodiversity, unsustainable utilization of assets, and imbalance in resource management (KNIU, 2014). It also enables learners of all ages to make educated choices and partake in individual and collective activities to change society and care for the planet (UNESCO, n.d.). ESD should be a deep-rooted and necessary portion of quality instruction. Furthermore, ESD improves the cognitive, socio-emotional and behavioural outcomes of learning and includes learning materials and results, instructional method and the learning environment itself (KNIU, 2014).

The socio-legal concept in this study adopts the interdisciplinary perspective that combines social and legal studies, which is now a trend among legal studies. Socio-legal issues include legal sociology, legal anthropology, legal history, psychology and law, judicial political science studies, comparative science, and other disciplines (Irianto & Shidarta, 2011; Irianto, 2012; Wiratraman, 2015). Practically, the socio-legal term is needed to explain the workings of law in the daily lives of community members. Socio-legal studies focus on the connection between the legal and social aspects of human life. This approach considers that it is necessary to know the contents of legislation and case of regulation implementation. However, the approach does not provide an understanding of how the law works in everyday life, or how the law relates to the societal context.

The term eco-culture seems to have been developed in response to the notion of studying culture and the environment together. The study of eco-culture investigates relationships between people and the environment, as well as relationships among people. Additionally, it looks at the ways in which culture affects these relationships. The eco-cultural approach is important for both scholars and activists who are interested in understanding how culture and the environment are connected (Ivakhiv, 1997; Surata, 2014). Because people are starting to realize that the Earth's ecosystems are facing a significant problem, the study of the environment has become more important. However, the environmental problem is not merely a scientific issue. It is also a cultural issue because it is thought about, talked about, and dealt with by people around the world in terms of their own culture. Each particular group of people might imagine and understand the crisis in a different way. A person's knowledge will determine how he responds to such a crisis. Cultural studies provide new approaches to understanding the ways in which power and culture are connected (Ivakhiv, 1997).

Eco-cultural studies are concerned with the ways in which people have power over nature as well as the ways in which different cultures interact with the environment (Ivakhiv, 1997; Surata, et al., 2022). Their focus includes issues such as working with nature, enjoying nature, studying nature, and examining the ways in which these interactions are controlled or repressed by politics. Furthermore, eco-cultural students look at the ways in which ideas about nature and the environment, the ways in which people interact with the environment, and environmental politics and action are discussed and debated in different

cultures (Ivakhiv, 1997). The focus of eco-cultural studies can also be promoted in the EFL classroom to improve awareness of the ecological and cultural aspects of life. Taking an eco-cultural approach to learning is similar to taking local wisdom into English learning with a specific purpose, such as character-building (Jayantini et al., 2022b). Similarly, it is expected that incorporating eco-cultural values into EFL learning will be beneficial to the students; for example, by providing them with meaningful topics that are related to their environment, giving them an understanding of values and rules regarding cultural and environmental management, and fostering cultural and environmental awareness through exploring local values (Sukarno, 2012).

3. Method
3.1 Research Design
The concept of the research was primarily inspired by an exploration on ESD in Foreign Language Learning (de la Fuente, 2022), which showed that teaching and learning activities can contribute to authentic learning that fosters a different atmosphere for EFL students. This was also done with a view to improving the students' language skills by presenting the specific topics on their cultural backgrounds as well as mapping the cultural values that will help them to acquire a deeper understanding of their culture, and specifically the socio-legal and eco-cultural aspects. This study is a qualitative research through the triangulation of methods; namely, the observation of participatory mapping (PM) conducted by English students and representative community members prior to their writing activity. This method was combined with content analysis to investigate the local knowledge and insights that the students could use in their report writing to identify how context in discourse is comprehended (Song, 2010). In-depth interview accompanies the two methods for the students to reflect on their feelings about the PM and the utilization of socio-legal and eco-cultural aspects to support their understanding of legal and ecological values in their social and cultural backgrounds.

3.2 Subject and Research Site
The main participants of the research were 14 students from the English department of one private university, which is located at the centre of the province of Bali's capital city, Denpasar. However, the students had to undertake their PM in a traditional village far from the city. The English students were taking the Discourse Analysis course in the academic year of 2022-2023. Participants were selected based on the results of their writing assignment, with the common scoring rubric of English writing covering writing structure, grammar, terminology, and content. A further factor in participants' selection was the students' performance in the interview when the research project commenced.

The study was undertaken in a rural area, in a traditional village named Demulih. The village is located in Susut District, Bangli Regency, Bali Province, which is very rich in natural resources as a biocultural landscape. To conduct the participatory mapping, the students acted as "researchers" by implementing the concept of PM, involving representative community members to identify Balinese local wisdom values as potential themes to be integrated into their English classroom. In their participatory mapping, the English students interacted with community figures

and members of the young generation, called *sekeha teruna-teruni* in Balinese, in the village of Demulih, considering the richness of the village with its natural resources, its sacred hill, religious ceremonies, and agricultural activities.

3.3 Data Collection

This research aimed to create a contextual learning atmosphere by forming a synergy of lecturers, students and the community in a learning method designed through a PM approach. This approach can be realized through the participation of the stakeholders in conducting the research (Salamanca et al., 2015; Campbell et al., 2019). The research steps in the study design involved a triangulation of methods, including an observation of the way in which the students conducted their PM, followed by content analysis and in-depth interviews. All of these steps were organised in the following stages:

1. *Initial Stage*

   This stage involved making clear the research plan and objectives to the English department students. Having selected the students who would participate in the research, they were introduced to the research location for their PM. In preparation for their field study, the students were encouraged to learn about Demulih village as their research site by studying digital and printed documents and by identifying local wisdom related to socio-legal and eco-cultural activities.

2. *Implementation Phase*

   At this stage, PM was carried out by the English students. The students had to explore and make a map of the research site before joining the Focus Group Discussion (FGD) with the village leaders and youth groups. Several PM procedures were undertaken by the students, namely: (1) preparing for the field study at Demulih village by identifying socio-legal and eco-cultural sustainability efforts to preserve the temple networks and local wisdom values at the research site; (2) mapping the borders of the village and checking Google captures of the village to understand the geographical characteristics of the village; (3) facilitating discussions with guided questions on the topic to be explored; (4) taking photographs and video recordings (for documentation) and analysing the sequences of events found at the research site; and (5) undertaking interviews with the village leaders and youth group members.

3.3 Data Analysis and Interpretation

The research aimed to contribute to making foreign language learning – specifically EFL in Indonesia – more authentic and contextual in its processes and results. There is an urgent need for topics of discussion that encourage social, legal, cultural, and environmental awareness for sustainability in human life. Such discussion should be interrelated to aspects of law and sociology in emphasizing the values and topics of English language learning. This promotes fluency as the English students need to produce contextual talks and writings related to the two productive skills of speaking and writing. The specific skill under focus in this study is writing, which challenges the students to structure their ideas clearly and use rich vocabulary as well as accurate grammar. The students were also asked to provide a more critical and "content-driven" piece of

writing to show their feelings and perspectives on the local values related to aspects of everyday life; for this study, socio-legal and eco-cultural awareness were selected. Interpretation of the data was conducted using notes from the discussions and recorded interviews using ATLAS.ti software. An output from the software is presented in Figure 1.
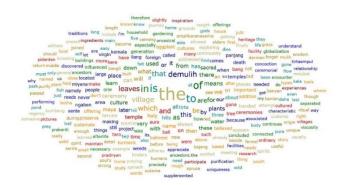

Figure 1.
Word Cloud used to Map the Topics Discussed by the EFL Students

Figure 1 shows the word cloud produced on ATLAS.ti software after the final reflection. This was compiled by formulating the concept of supplementary teaching materials for the Discourse Analysis course based on the PM of local wisdom values. The materials are useful not only to help students to improve their language skills but also to increase their knowledge. The analysis was performed through categorization using ATLAS.ti and was hoped to be relevant with the approach of PM. The mapping emphasizes the active involvement of local communities in utilizing knowledge about the space in which they live, with the local values forming part of their natural landscape.

In summary, the results were interpreted in several stages, as follows: (i) observing the students' report writing; (ii) highlighting the use of local terms containing socio-legal and eco-cultural aspects identified by the students; (iii) diving into the village's local values in assessing the students' statements in their writing to evoke their cultural and environmental awareness; and (iv) cross-checking the results of the report writing with the in-depth interview to analyse the students' reflections on the importance of obeying the local rules and raising eco-cultural awareness.

4. Results and Discussion
The study resulted in two major findings, which were the socio-legal and eco-cultural aspects. The participatory mapping that students performed as part of their contextual English learning resulted in the discovery of several important findings, which were the focus of socio-legal and eco-cultural approaches to world views.

4.1 Results
It is expected that the results of this research will contribute to the integration of ESD in EFL learning, which was practically applied through several activities from performing PM to reflecting on the identified values. By studying the local values,

including socio-legal and eco-cultural sustainability, the topics offered in English learning can both enhance the fluency of the students' writing skills and raise their awareness of social, legal, cultural and environmental issues at the same time. In order to increase students' competence and knowledge in foreign language learning, students must be equipped with theory and practice in the field of linguistics. Furthermore, they must also be frequently given material outside of language to enrich their insights into the outside world (Jayantini; 2020; Mahmud, 2019; Oktariyani & Juwita, 2019; Romrome & Ena, 2022).

There are four aspects that show socio-legal values: (1) *awig-awig*, which is a traditional law that is grown and respected by traditional communities; (2) *cuntaka*, which refers to the existence of an unclean concept in carrying out sacred activities that are believed in by the community and practiced in life; (3) *bukit* (hill), whose sacredness is maintained; and (4) forests, which are also held sacred. Meanwhile, the aspect of eco-cultural sustainability is contained in the written report, in which four main terms indicate the relationship between humans and the environment, which are further developed in the writing. The four terms representing nature and culture, whose sustainability must be maintained, are: (1) *pura*, which is a temple for people as devotees of Balinese Hinduism in Indonesia; (2) *setra*, which is a cemetery for traditional communities, the purity and preservation of which is maintained for holding cremation ceremonies or burials; (3) *ngusaba*, which is a ceremony for expressing gratitude, love for nature and God's work that has been given in human life; (4) *srati*, who is a person at the focus of ceremonial activities, who helps to protect nature by regulating the use of plants and ceremonial needs; and (5) *wastra*, which is sacred clothing related to the naming of dances in ceremonies or the need to carry out ceremonies in temples.

Table 1.
Socio-legal and eco-cultural aspects that show cultural values

Perspective of Sustainability	Local Values	Values to be Adopted for ESD
Socio-legal	*Awig-awig*	*Awig-awig* is a customary legal norm formulated to regulate the behaviour patterns of community members in interacting in order to create order and peace.
	Cuntaka	*Cuntaka* refers to impurity according to Hinduism.
	Sacred Demulih Hill	The hill has perfectly beautiful scenery that is managed for its sacred values and people obey the rules willingly.

	Traditional Forest	The forest has been protected by *awig-awig* for its purity and its natural resources.
Eco-cultural	*Pura*	*Pura* is the Indonesian term for a temple. It is a place of worship, a centre for Hindu activities such as community gatherings, socializing, developing culture, etc.
	Setra	A grave or a place to carry out a temporary process in terms of death ceremonies for Hindus.
	<u>*Ngusaba*</u>	*Ngusaba* ceremony is a ritual procession to remind humanity to constantly bring together in synergy various elements to build the potential to improve the sources of life created by God.
	Srati	People who act as guides in the making of *banten* (offerings).
	Wastra	*Wastra* for Hindus is also known as clothes, *busana/pengangge*. *Wastra* is a colourful cloth that has its own meaning and symbol.

Table 1 highlights the socio-legal and eco-cultural values discovered following the PM conducted by the English students. PM is a tool used by a community in the exploration of a spatial map concerning the landscape and the values with which people live. Thus, PM is very different from a normal map (Lienert J, 2019). When utilizing PM in the EFL classroom, it is performed through a field study, with a discussion involving the students in interviewing the community leaders before making a map containing areas in the village that have specific rules and customs. All of these activities are then outlined in their written reports. Content analysis was particularly applied in analysing the students' papers, which they had written following the field study and their interaction with the village elders, traditional community leaders, as well as the youth groups. To confirm the students' perceptions on their own awareness of the values existing in the community, in-depth interview was conducted to assess their comprehension. These activities combined to make the study a worthwhile research design. The students' identification of the socio-legal and eco-cultural values was performed based on

the results of the students' writing and word clouds (see Figure 1). These were obtained by entering words, phrases, clauses and sentences in the ATLAS.ti, which is a software used for qualitative research that is relevant to the two sustainability topics. The students were asked to express their ideas and write a report on the results of the field study, which was to be categorized in two major topics; namely, socio-legal sustainability and eco-cultural sustainability for topic development in EFL learning.

This combination embeds socio-legal and eco-cultural values in English language learning at the higher education level. In this research, these two values were applied in writing to assess aspects of language ability that include expressing ideas through writing structure, linguistic aspects through diction and grammar, and technical aspects. According to the values shown in Table 1, the students were able to use those terms and define them in sentences. This was the process of expressing ideas according to the context of discourse that the students had studied in Discourse Analysis. The students' identification of socio-legal and eco-cultural values through PM can be linked to the values of Discourse in Context (Song, 2010). In evaluating students' writing, lecturers can ask them to explain and interpret the linguistic aspects of what they have written by referring to the linguistic context (for example, grammatical rules, sentence forms, e.g. imperatives in rules, negative sentences to prohibit and local terms that must be translated). Moreover, the social context, which tests the students' ability to provide information that shows the field (subject matter), tenor (involved participants) and mode (text construction, which is either spoken or written), adds to the completeness of the assessment. Finally, students must relate the cultural context to the linguistic context so that it can be accepted logically.

4.1 Socio-legal Sustainability for Topic Development in EFL Learning

The first value categorized as socio-legal was *awig-awig*. The customary law *awig awig* has shared legal strength that binds indigenous people to respect the regulations that have been set (Ningsihet al., 2021; Yulianingsih et al., 2021)). As Balinese customary law used to regulate the lives of indigenous Balinese people in villages, *awig-awig* is considered as a means for Balinese people to achieve *Tri Hita Karana*. *Tri Hita Karana* is a local Balinese saying, which literally means "three sources of happiness." *Tri Hita Karana* consists of *parahyangan*, *pawongan*, and *palemahan*. The integration of these values into EFL teaching and lesson planning requires students to explain this concept when they produce their written report. In relation to EFL learning, *Tri Hita Karana* must be explained well in English. From the language learning standpoint, the students must be able to think of a way to explain the term and its meaning appropriately. In addition, students must also use translation methods to convey the concept of a balanced life within the context of relationships, each of which determines meaningful value, i.e. human relations with God (*parahyangan*), human relations with nature or the environment (*palemahan*), and human relations with humans (*pawongan*).

The other values identified in the students' report writing are *cuntaka*, sacred hill and sacred forest. *Cuntaka* is a state of impurity, according to Balinese Hindus. It is also known as *sebel*. People are said to be *cuntaka* for several reasons, such as the

death of a family member or close relative, menstruation, or childbirth. The research site of Demulih village has unique potential and is strongly respected by the local people for its ancient forest and sacred hill, Demulih Hill. Ancient forests are sacred to the local community. Participatory mapping and the protection of natural resources are socio-legal sustainability values that must be learned and passed on, so that many people from different areas and backgrounds can widen their perspectives and horizons. The community maintains the purity of the water at Demulih Hill through special regulations. For example, people are prohibited from entering Demulih Hill for 12 days after one of the traditional village residents dies, in order to preserve the village beliefs and customs. This rule is rigidly enforced, for the benefit of everything and everyone in the village. This is done to maintain the sanctity of the 11 temples that surround Demulih village. All of these values are included in Extract 1.

Extract 2 shows the socio-legal values that were identified by the students. In their report writing, despite the grammatical errors and mechanical mistakes, the students had to express their views regarding the existence of socio-legal values in a society that thrives on local wisdom. The socio-legal sustainability of the local community regarding regulations and *awig-awig* is the source of learning. Supporting the socio-legal sustainability of Demulih Hill can be integrated as a topic chosen for the EFL classroom as an effort to incorporate ESD.

Extract 1 (Student A)
There is a tradition in Demulih, a customary village with its protected and sacred hill. Women in their period are forbidden to visit the hill that last for 12 days and 12 nights

Extract 2 (Student B)
The village of Demulih also has regulations both for carrying out ceremonies or for the forest that the people there must obey. Among them are policies regarding ceremonial facilities for temples, some are made in their respective homes, besides that during feast day such as Purnama, Tilem, Tumpek and others, they are carried out at their respective homes.

4.2 Eco-cultural Sustainability for Topic Development in EFL Learning

Two physical pieces of evidence for ecosystem and cultural sustainability, combined in the term "eco-culture", can be seen in the buildings and sacred land, i.e. temple and graveyard. Temples, or *pura* (s), are constructed in accordance with the rules and style of Balinese architecture. Most temples are located on the island of Bali as the majority of devotees are Hindus. This is the island of a thousand temples. Here, most people practice Hinduism. Many temples can also be found in other parts of Indonesia, where many Balinese people live. *Setra,* or *sema,* is a grave or a place to carry out a temporary process in terms of death ceremonies for Hindus. The cremation ceremonies are usually conducted in *setra*. The temporary tradition of the *nyekar* (bringing flowers to the grave) has been eliminated because the gross body and the subtle body have returned to their original state.

Ngusaba is one of the Hindu religious ceremonies. *Ngusaba* comes from the word *sabha*. In Sanskrit the word *sabha* means to meet or gather. Thus, the *ngusaba* ceremony is a ritual procession to remind humanity to constantly bring together

various elements to improve the sources of life created by God. *Ngusaba desa* (meaning village) is one of the major Hindu ceremonies, which involves the sacrifice of one buffalo and one goat. Generally, this ceremony is divided into three parts. The first is *Ngusaba Gede*, which is performed every fourth full moon to save the earth and give people the spiritual strength to live according to philosophical values as well as to maintain the preservation and function of the elements of *Panca Maha Bhuta* (five great elements). The second is Ngusaba Alit, which is held every fifth full moon; the last ceremony is Ngusaba Dalam, which is held during the fifth month of *Anggara Kasih* (good Tuesday to conduct ceremony).

Srati is part of the eco-cultural sustainability values for the role of *srati* (male or female) in managing the use of natural resources needed for the ceremony. The students were able to identify their significant role. The term *srati banten* (offerings maker) usually refers to those acting as guides in the making of *banten* (offerings). *Srati* is also needed to assist the *pemangku* (priest) or *sulinggih* (high priest) in handling the *banten* during the ceremony. Finally, *wastra* is also known as *busana* or *pengangge* (clothes). *Wastra* is a colourful cloth with its own meaning and symbol. For example, the white colour represents purity, red symbolises the existence of God, and yellow symbolises prosperity. To demonstrate the identification of eco-cultural values, two extracts from the English students' writing activity are presented to strengthen the mapping of eco-cultural sustainability for topic development in EFL learning.

Extract 3 (Student C)
The rice fields in this village are shrinking every year as the land is used for housing, livestock, and other purposes. As a result, the harvest is solely used for the village, and owing to the enormous number of people who are not proportional to the harvest in the village, the harvest must be purchased again from outside the village. In Bali, many ceremonies are often conducted by the society. The ceremonies are also related to the maintenance of the subak in this village.

Extract 4 (Student D)
The preservation of the upakara plants found on Demulih Hill is maintained. The preservation of natural resources in Bukit Demulih can be well maintained until now, of course, cannot be separated from the role of the village community. Although the people of Demulih Village often pick leaves from this sacred plant, it does not make the natural resources of Demulih Hills diminish or disappear. This is because the Demulih village community takes leaves or plants that are used sparingly and not excessively. In addition, the people of Demulih Village also cultivate several traditional plants in their yard. The awareness that the people of Demulih Village have motivate them to continue their dedication to preserve their culture.

Extracts 3 and 4 underline the importance of preservation and how to deal with the challenges through the following statements: "*The rice fields in this village are shrinking every year as the land is used for housing, livestock, and other purposes*" and "*The preservation of the upakara plants found on Demulih Hill is maintained*". In terms of eco-cultural sustainability, the physical aspects of the hill and ways in which people try to preserve the tradition and manage the use of natural resources for

ceremonies are also good values to learn. The sacred forest, with its unique eco-culture, including the plants for ceremonies, also illustrates the core points of sustainability that can be potentially explored as teaching materials, with lessons to learn and values to respect. The teaching materials can be taken from the results of PM, which are subject matters that the English students could explore. In order to convey the local concepts in the local language, i.e. Balinese, the students must translate and interpret them well. The translation involves methods that need to be applied as well as understanding the semantic relationships between the English words, phrases, clauses and sentences, which are used as a means of conveying meaning. These aspects of integration result in two benefits. On the one hand, the incorporation of socio-legal and eco-cultural sustainability will be realized by including this as one of the topics to be explored in teaching the four major language skills, which was specifically writing, in the case of this study. On the other hand, it is expected that the students could succeed in conveying what they have learned. The identified values are included in the report text, which indicates their awareness of the local wisdom, particularly in terms of socio-legal and eco-cultural sustainability.

5. Discussion

In EFL learning, Education for Sustainable Development (ESD) encourages all stakeholders to be creative in order to provide a better experience and support the students to gain new knowledge, skills, values and attitudes that will foster a more sustainable and equitable society for all. In this study, students participated in participatory mapping in order to experience and explore potential topics related to the issues of sustainability in line with ESD's aims, i.e. to empower and equip current and future generations to meet their needs using a balanced and integrated approach to various issues, including the economic, social, legal and environmental dimensions of sustainable development. By incorporating key sustainable development issues into teaching and learning – for example, the connection of people with environmental rules for their cultural preservation – the English department students were able to share ideas, perspectives, and opinions to develop and demonstrate their communication skills. This study has illustrated how participatory teaching and learning methods can be applied to motivate and empower learners to change their behaviour and take action towards sustainable development. In this way, ESD consequently promotes competencies such as critical thinking, visualising potential future scenarios and making decisions collaboratively (University of Plymouth, 2014).

The findings of this study strengthen the argument for incorporating local values into the EFL classroom. Introducing the element of community to the contextual materials will provide students with additional values alongside their target of enhancing the four major language skills. By providing them with various topics related to many aspects of life that can enrich their knowledge, students are given the opportunity to learn about sustainable development. In Indonesia, everyone can work together to map their natural surroundings, including the phenomena that teach people values. People can work together to map the issues they want to investigate.

This should involve all of the stakeholders. In Indonesia, teachers, students, and experts can work with local communities to create a learning environment that helps students to understand how to live together in a way that is good for everyone as well as the environment. This could be done by choosing specific subjects that will help people learn about culture, social life, and the environment. When learning English, everything should be related to learning English that gives added value (Nur, 2013; Suwastini et al., 2020). In this research, the participants studied the ways in which socio-legal and eco-cultural sustainability issues are relevant in an effort to incorporate contextual learning in the EFL classroom in tertiary education as the main concept of ESD. This could be done through participatory mapping when students are working with the community to map their local values; the lecturer can then utilize the results of the mapping as the topics for the students' writing task. An assessment of the writing will then reflect the knowledge and experience the students have gained. This could help teachers to develop better ways of teaching that are more practical in real life. When EFL learners are able to talk about issues outside of the language they are learning – for instance, the environment and how to keep it safe and healthy – it is worthwhile including different topics and issues recommended for ESD. The learning design can help students to learn how to take care of the environment as part of their education (de la Fuente, 2021; Prabawani, 2021; Purnamasari & Hanifah, 2021).

Incorporating local values to support ESD in EFL at university level is in line with the immersion program at the primary level. Immersion can help improve academic and language development through the use of two languages as well as developing students' appreciation of their own and other cultures. One of the important keys to immersive education is knowledge of the language and culture that could be used as a learning resource (Fortune & Tedick, 2003) so that the relationship between language and national identity is strong and they are inseparable from each other (Fishman, 1985). Thus, the students will become proficient in the language, increasing their cultural awareness as well as achieving high academic attainment (Supriyono & Dewi, 2017). Education that prioritizes a local cultural approach, in addition to addressing global issues, must become a priority for all stakeholders. As a source of learning materials for students, the environment is perfectly rich, offering learning resources that may include physical, social and cultural aspects. The environment can act as a learning medium, but also as an object of study or learning resource. Moreover, children often enjoy using the environment as a learning resource. Utilizing the environment can help to develop a number of skills such as observing (with all the senses), taking notes, formulating questions, hypothesizing, classifying, writing, and making pictures/diagrams (KNIU, 2014).

6. Conclusion
Participatory mapping was utilized in this study to identify the local knowledge that can be classified as portraying social-legal and eco-cultural values to support ESD in various learning activities, including EFL learning in Indonesia. The results can be useful for designing EFL programs that offer greater benefits to students and allow them to enjoy contextual and enriching learning. In this

study, the English department students conducted participatory mapping that incorporated social, legal, and cultural topics. They identified two important elements. Societal and environmental values can be used in EFL classroom activities at the university level. After completing participatory mapping, the students demonstrated that they had a good attitude towards understanding local society, with its customs and regulations that are respected in the community and the relationship between culture and the environment.

This study is expected to contribute to the design of contextual learning that is aligned with Education for Sustainable Development (ESD) principles. The results of previous research have provided implications for the development of the topic of EFL learning in order to enrich students' insights and knowledge. Participatory mapping in this research resulted in the English students' ability to understand the concept of socio-legal and ecological sustainability, which not only helps to build character as an advantage in learning a foreign language for global interests but can also maintain local values. Further research should aim to offer further benefits in deepening the investigation and providing materials regarding local wisdom-based environmental values for designing contextual learning methods. Future studies should also highlight the added value that should be inserted into the course in order to improve EFL students' four major language skills while at the same time preserving the social, legal, ecological, cultural and other aspects of local wisdom.

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