Abstract
Sustainability is a key aim of the Association of Southeast Asian Nations (ASEAN), particularly in areas such as environmental management, employment options, and socio-economic development; however, many Southeast Asian students lack a clear understanding of the meaning of sustainability. Even students who do understand sustainability may be unable to discuss this topic in English, the working language of ASEAN. The imminent integration of the ASEAN Economic Community, scheduled for 2015, lends urgency to the task of resolving these issues. This paper will outline an upper-intermediate level language project designed to teach Southeast Asian English-language learners about sustainability. This project, created in an intensive English for academic purposes (EAP) program at a Thai university, is structured around Elkington’s Triple Bottom Line framework, which assesses sustainability in terms of people, planet, and profit. Over a semester, each student evaluates a particular multinational corporation by referring to the three aspects of the Triple Bottom Line. In addition to improving their language skills, the goals are to prepare students to become more responsible members of the global community and to provide students with the language that they need to engage in meaningful dialogue about sustainability. This paper will describe the project in comparison to three other approaches to education for sustainability, drawing insights from each to provide directions for further development of the project. The paper will be of interest to language educators who wish to introduce elements of sustainability and social responsibility into their courses.

Keywords: English for academic purposes (EAP), education for sustainability, Triple Bottom Line (TBL), EFL, project-based learning, content-based language instruction
Introduction

Sustainability is an issue of growing international concern; indeed, “never has the whole world been so concerned about global issues generally and environmental education and protection in particular” (Nkwetisama, 2011). While the issue of sustainability concerns people around the world, it resonates particularly strongly in regions that are undergoing rapid economic development. Southeast Asia is such a region, and the secretariat of the Association of Southeast Asian Nations (ASEAN) has declared that sustainable development is one of the primary goals of the soon-to-be integrated ASEAN Economic Community (AEC) (ASEAN Secretariat, 2009). Despite the local, regional, and international importance of sustainability, many students enter university with only a vague understanding of its meaning. This paper describes the approach to education for sustainability that has been integrated into the curriculum of the Preparation Center for Languages and Mathematics, an intensive English for academic purposes program at Mahidol University International College in Salaya, Thailand. The paper begins by introducing the approach to education for sustainability that has been implemented at the center. Next, it briefly describes three instances of education for sustainability from other contexts: Egypt, Cameroon, and Australia. It then contrasts the various approaches, paying particular attention to their theoretical underpinnings.

The Preparation Center for Languages and Mathematics provides intensive classes for students who wish to enroll in the English-medium liberal arts program at Mahidol University International College but who lack the requisite language skills. As indicated in its mission statement, the program aims “to provide educational experiences which cultivate students’ academic English communication skills; to foster their ability to be self-reflective and responsible learners; and to stimulate their curiosity about the world.” These goals are consistent with education for sustainability and with the aims of liberal arts education in general. Writing from the Center of Inquiry at Wabash College, Blaich, Bost, Chan, and Lynch (2004) provide a thorough and insightful operational definition of liberal arts education. They posit that liberal arts education has as its goal the following: “an attitude of intellectual openness, especially to inquiry, discovery, new ideas and perspectives. The eagerness to grapple with difficult questions .... [and] the ability and desire to adopt a critical perspective on one’s and other’s beliefs, behaviors, values, and positions” (p. 14). In the context of the Preparation Center for Languages and Mathematics, education for sustainability certainly introduces new concepts and difficult questions to students. It also requires significant critical thinking, a set of skills that must be developed in order for the students to make the most of their liberal arts education. The complementary aims of liberal arts education (and thus of Mahidol University International College), the Preparation Center for Languages and Mathematics, and education for sustainability provide ample justification for the implementation of this project.

The Triple Bottom Line Project

At the Preparation Center for Languages and Mathematics, sustainability is taught through a project that centers on a term-long investigation of the sustainability of a major international corporation. For the purposes of the project, sustainability is understood through the Triple Bottom Line (TBL) framework, which was coined by John Elkington (1997) in his book Cannibals with Forks. This framework is generally
used in assessing the sustainability of businesses. Accordingly, it explains sustainability in terms of three aspects: people, planet, and profit. In this model, the three aspects are interrelated, and sustainability is located at the intersection of the three. The first aspect, people, assesses the impact of a company on all of its stakeholders, including employees, customers, and all others affected by the company’s actions. The second aspect, planet, assesses the impact of a company on the environment. This includes the environmental effects of the company’s products and services. It also encompasses any other actions, such as investment in clean energy, that impact the environment. The third aspect, profit, assesses a company’s financial performance in both the short and the long term. This final aspect of the Triple Bottom Line is comparable to the idea of a company’s “bottom line” as it is generally understood, providing a useful link between business success and sustainability. Approximately 70% of the students enrolled at the Preparation Center for Languages and Mathematics plan to major in business, and the TBL is effective in linking environmentalism with business sustainability. The inclusion of the business aspect of the TBL increases students’ motivation, giving teachers an opportunity to introduce environmental education in an engaging way.

The primary product of the sustainability project is a term paper of approximately 1,400 words. For many students, writing this paper is the first major research project that they have undertaken. To make this project more accessible, it is heavily scaffolded. At the beginning of the 10-week term, a clear schedule that breaks the project down into manageable steps is distributed. In the first week, each student is assigned a different multinational company from a list compiled by the teachers. The companies have been chosen because of the availability of sufficient information about them in English. Once the companies have been assigned, the students develop their background knowledge. They do this by completing a series of readings about sustainability, the history of environmentalism, and the Triple Bottom Line over the first few weeks of the term. These readings have been adapted from various authentic sources. The students are also given guidelines, which are included in the appendix of this paper, to help them structure their papers.

Each student is assigned a faculty advisor. This teacher will work with them throughout the term to guide the student’s research and provide feedback. This will be done both face-to-face and through Turnitin.com, which is a web-based service for process writing. Turnitin.com has the additional benefit of submitted texts against websites and against a database of previously submitted work for instances of plagiarism. Each student meets with his or her advisor individually three times during the term: in week 3 to discuss source selection, review the term paper structure, and be advised on how to write an effective outline; in week 5 to discuss a draft of the outline and review the sources; and in week 7 to discuss the content of the first complete draft of the term paper and receive feedback about grammar. The final draft of the term paper is due in week 9, at which point the advisor will use a rubric to assess the paper.

Students also receive instruction on finding sources and evaluating their reliability. They are encouraged to begin their research by reading the homepage of their company’s website and any other materials provided by the company, such as annual reports; however, the students are cautioned that they should not rely heavily on information directly from the company in their final paper. Other commonly used
sources of information include news sites and online magazines. Google Books and the university’s library databases are also introduced, but their use is not mandated.

The main educational theories guiding the TBL project are project-based learning and content-based language teaching. Project-based learning has a long history, extending back to Dewey (1907) and other educators in the 19th and 20th Centuries. This approach to teaching seeks to involve students in challenging and intrinsically motivating activities that push them to explore new content and develop new skills. Such an approach contrasts sharply with rote learning, which has been prevalent in many educational contexts through much of recent history. A solid working definition of project-based learning is provided by the Buck Institute: “a systematic teaching method that engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks” (Markham, Larmer, & Ravitz, 2003, p. 4). The design of this project was informed by Thomas’ (2000) five criteria for effective project-based learning. The five criteria are as follows: centrality, meaning that the project is an essential part of the course; driving questions, meaning that students are pushed to engage with important content through focused questions; constructive investigation, meaning that completing the project requires students to develop new skills and knowledge; autonomy, meaning that students have some input in the way that the project is completed; and realism, meaning projects are authentic, not “school-like” (Thomas, 2000, p. 4). The TBL project meets some of these criteria to a greater extent than others, and the criteria provide useful directions for further development.

The other educational theory guiding this project is content-based language instruction. This approach to language teaching entails “a focus on real-world content and the understanding and communication of information through language is the key to second language learning” (Beglar & Hunt, 2011, p. 93). In content-based language teaching, language and content teaching are integrated to a greater or lesser extent (Brown, 2001). The “strong” form of content-based language teaching values the teaching of content over the teaching of language, whereas the “weak” form values both equally (Brown, 2011, p. 234). The Triple Bottom Line project is informed by the “weak” form of content-based language teaching. Several studies have revealed positive effects of content-based language teaching, including greater improvement of language skills as compared to skill-based language learning (Kasper, 1997) and improved likelihood of passing further language and content courses (Song, 2005). The Triple Bottom Line project seeks to integrate key elements of education for sustainability, project-based learning, and content-based language instruction.

Other Approaches to Teaching Sustainability

Although the use of sustainability-based lessons, projects, and courses in the teaching of English as a foreign language is still relatively uncommon, such materials have been applied in a variety of contexts and with various specific goals. This paper will describe approaches to education for sustainability that have been drawn from three different contexts: Egypt, Cameroon, and Australia. Examining these three approaches in contrast with each other and with the approach used at the Preparation Center for Languages and Mathematics will provide insights into the myriad forms that education for sustainability can take.
The first example is drawn from Egypt. Nashat (2011), an EFL instructor at Cairo American College, explains the use of a lesson based on sustainability in the middle school language classroom. The lesson arose through a “serendipitous event” (Nashat, 2011, p. 41): at the time that the teacher planned to introduce persuasive writing, a controversy arose at her school about the possibility of taxing bottled water. This provided an opportunity for Nashat to give her students a practice persuasive writing assignment about a topic drawn from their own experience. Furthermore, the completed essays could be submitted to the school administration. The author does not include any explicit formulation of the meaning of environmental education; however, the assignment that she gave her students seeks to address a specific environmental concern in their context. This implies that the teacher considers environmental education to include participation in resolving local issues.

The process that the teacher followed was relatively straightforward. Nashat (2011) watched a short film about bottled water with her students, who took notes for later reference. Together, she and her students brainstormed pros and cons of introducing a tax on bottled water. Once they had done so, the teacher introduced persuasive writing, including both the organization and types of support typical to this genre. The students were then asked to outline essays on the topic of whether or not the school should tax bottled water. Next, the teacher had them focus on two specific writing conventions, fluency and word choice. The students gave each other feedback and suggestions, which helped them to edit their essays. Finally, the completed essays were submitted to the school administration. This last step adds authenticity, and it is a major strength of the assignment.

The second example is drawn from Cameroon. In this article, Nkwetisama (2011) explores the ways in which environmental education could be integrated into language teaching in the Cameroonian context. The author emphasizes the connection between critical thinking and environmental education. Additional theoretical considerations include content and language integrated learning (CLIL) and task-based language learning. The author mentions that environmental education has been piloted in some schools in the southern region of Cameroon and lists typical activities, which include discussions, debates, writing tasks, and authentic input texts; however, not much detail about these activities is provided.

Cultivating students’ critical thinking skills is one of the primary objectives of education for sustainability in Cameroon. The author explains that thinking critically will help learners decide what to believe and how to behave. This type of thinking is cultivated through repeated practice discussing important and complex global issues. In the author’s view, critical thinking “sharpens learners’ focus on environmental matters and urges them to react accordingly” (Nkwetisama, 2011, p. 114). The author also draws a connection between critical thinking and critical language awareness, i.e., “the ways in which language relates to social issues, such as power, inequality and discrimination” (Nkwetisama, 2011, p. 113). Exploration of the complex relationship between ideology and language is useful in developing students’ critical thinking skills as well as helping them to understand the world around them.

The author includes two additional theoretical bases: CLIL and task-based learning. CLIL is comparable to content-based language teaching as both teach academic content in the target language. While there are some minor theoretical differences
between the two, CLIL and content-based language teaching programs “share the same essential properties” (Cenoz, 2015). Task-based learning is an approach to language teaching in which learners are given an objective, or task, which requires the use of language. Typically, completing the task requires learners to acquire new language. This type of learning values the achievement of a communicative or real-world goal over the teaching of specific language: “priority is given to getting something done through language rather than to practicing predetermined language items” (Nkwetisama, 2011, p. 115). Task-based learning follows a specific procedure: pre-task activities scaffold learning, and post-task feedback reinforces new language and corrects common mistakes.

In the case of the article on Cameroon, environmental education is defined clearly. The author indicates that the goal of such education is to raise awareness of the function, management, and protection of natural environments, stressing that a broad range of topics such as habitat destruction, global warming, energy use, and water crises must be included (Nkwetisama, 2011). The goals and topics that the author includes are explicitly based on the goals listed in the UNESCO-UNEP, which include the following: being aware that environmental problems exist, possessing a rudimentary understanding of the environment and of humans’ role in it, being concerned about environmental problems, having the necessary skills to ameliorate environmental problems, being able to assess the effectiveness of potential solutions to environmental problems, and contributing actively in addressing environmental problems (Nkwetisama, 2011).

The third example is drawn from Australia. This article Podger, Mustakova-Possardt, and Reid (2010) describes the whole-person approach to education for sustainability. This approach is centered on critical moral consciousness, which is related to concepts such as identity, motivation, and “higher-order dispositions” (Podger et al., 2010, p. 339). Significantly, this approach was applied in content courses, not in the language classroom. In the case of this article, sustainability is understood to mean “a disposition towards human rights, peace, active citizenship, participatory democracy, conservation, and ecological, social, and economic justice” (Podger et al., 2010, p. 339). This definition, which is based on the writing of Sterling (2007), includes much more than the typical definition of environmental or business sustainability, also encompassing various topics related to human rights and social responsibility.

Critical moral consciousness is the major theory underlying this approach to education for sustainability. This theory draws heavily from critical pedagogy as formulated by Freire (1973); however, it is also shaped by more recent cross-cultural studies by Mustakova-Possardt (2003). The authors describe the development of critical moral consciousness as follows:

evolution of critical moral consciousness in the lifespan is characterized by an intuitive and progressively more conscious critical moral dialogue with the world, spurred by a quest for truth and justice, and characterized by an increasingly responsible, interconnected, and action-and-service-oriented disposition to collective social life; while the understanding of truth, justice, and agency is continually developmentally reconstructed. (Podger et al., 2010, p. 342)
According to the authors, the development of critical moral consciousness depends on the development of systematic thinking and on primary moral motivation, which is seen as a “disposition toward truth, beauty, and goodness” (Podger et al., 2010, p. 342). In the authors’ understanding, moral acts take these factors into account; immoral acts ignore them for the sake of convenience or other self-serving reasons. Primary moral motivation is developed through four interrelated areas of awareness: sense of self-identity, sense of the sources of moral authority, sense of being related to others and to the world, and sense of life’s meaning (Podger et al., 2010). For a whole-person approach to environmental education to be effective, it would need to develop learners’ critical moral consciousness by instilling rigorous systematic thinking and healthy primary moral motivation.

Discussion

Each of the approaches to education for sustainability introduced above is based on a different understanding of the meaning of sustainability as well as different educational theories. Comparing and contrasting the various approaches provides insight into their relative strengths and weaknesses. It also provides direction for further development of the Triple Bottom Line project at the Preparation Center for Languages and Mathematics.

Authenticity is a strength of several of the approaches. This is particularly the case in the Egyptian example. The students wrote persuasive essays for a real audience: members of the school administration. Having such an audience motivates students to perform well. Additionally, it emphasizes the importance of clear communication as a means of effecting change in the world. In this case, the involvement of the students in school policy elevates the lesson from an academic exercise to more authentic learning. None of the other approaches include an authentic audience; however, both the Preparation Center for Languages and Mathematics and the author in Cameroon use content-based language teaching or CLIL, thus providing the students with authentic content in the language classroom. The use of authentic inputs is present to a lesser extent in the Egyptian example, as the teacher shows the students a video about plastic water bottles. While she does not explicitly call her approach content-based language instruction or CLIL, Nashat (2011), explicitly draws the connection between sustainability education and effective language teaching. In her view, such materials provide “the perfect medium for teaching both content and language concepts” (p. 40). In all of these examples, education for sustainability provides appropriate content for language learning.

Task- or project-based learning is also common to several of the approaches. The Cameroonian example supports task-based learning, and the Preparation Center for Languages and Mathematics used project-based learning. The Egyptian example also uses task-based learning, although this is not explicitly stated in the article. Both task-based learning and project-based learning motivate the students and allow them to learn language in realistic, goal-oriented situations. The complexity of the content and the existence of many real-world problems creates opportunities for meaningful tasks and projects.

Critical thinking is also a commonality. In describing education for sustainability in Cameroon, Nkwetisama (2011) explains the connection between critical thinking and
responsible decision-making. Systematic thinking, which is similar to critical thinking, is also mentioned in the Australian example as one of the two foundations of critical moral awareness (Podger, 2010). The Egyptian example and the Triple Bottom Line project both require students to engage with challenging content; however, neither explicitly teaches critical thinking or systematic thinking skills.

Perhaps most interesting are the different understandings of environmental education and sustainability. These range from specific and concrete — a highly specific definition provided by the U.N. (Nkwetisama, 2011) — to the broad and abstract — a definition encompassing human rights, democracy, and justice as well as environmental conservation in its definition (Podger et al., 2010). In another case, only a vague definition of education for sustainability is provided. The teacher from Egypt states that it “encompasses current economic, social, and environmental issues that have a direct effect on the lives of future generations” (Nashat, 2011, p. 40). She does not provide a meaning of sustainability. In contrast with all three of the other definitions, sustainability at the Preparation Center for Languages and Mathematics is explicitly understood in terms of the Triple Bottom Line framework, which includes a strong business component. While this is helpful in motivating business-oriented students, it may downplay the importance of environmental sustainability.

The examples explored above provide insights into avenues for further development of the TBL project at the Preparation Center for Languages and Mathematics. Inspired by the Egyptian example, more authentic audiences could be found for the students’ work. One way to do this would be for the students to produce short videos making a persuasive point about the company that they have analyzed. If the company’s performance in terms of the Triple Bottom Line is exemplary, they could call for people to support the company; on the other hand, if the company’s performance is poor, they could call for changes in the company’s policy. Inspired by the Cameroonian example, the project could be brought into line with the objectives of environmental education that were outlined by the U.N. This would mean placing more of an emphasis on finding solutions to environmental problems, evaluating proposed solutions, and ultimately participating in overcoming problems. Bringing the Triple Bottom Line project into line with these goals would require extending the project to include problem solving, which is also consistent with the development of critical thinking as described in the Cameroonian and Australian examples. Overall, these three instances of education for sustainability have provided excellent material for the development of the project at the Preparation Center for Languages and Mathematics.

**Conclusion**

Educators in a wide range of contexts have addressed the need for education for sustainability in various ways, basing their approaches on diverse understandings of sustainability and diverse theories of education. The Triple Bottom Line project described in this paper represents one approach to teaching about sustainability, an approach that is tailored to an English for academic purposes program at a Thai university. The project is still a work in progress, and it will continue to develop by drawing inspiration from both the local context and other instances of effective teaching. The need for education for sustainability is increasing, and this need can be
met in part by language teachers, who are in an excellent position to incorporate this meaningful content into their programs.
References


Appendix: Triple Bottom Line Term Paper Guide

This quarter you will need to write a term paper about the economic, environmental, social impacts of a particular corporation and evaluate their overall sustainability.

The framework for organizing your paper and analyzing will be provided in your academic reading class. This framework will be based on a book by John Elkington called *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. In this book, Elkington provided a framework for analyzing a company’s sustainability. Sustainability is the principle of making sure actions taken today do not negatively affect those around us, now and for future generations.

Your teacher will allocate you a corporation in the first week. You will need to do the following:

- Give a brief background of your company, particularly aspects related to the TBL.
- Describe the company’s profitability and how this impacts the planet and people.
- Explain how the three Ps (People, Planet & Profit) are interrelated.
- Predict how the sustainable the company will be in near future.

*The word length of the paper is a minimum of 1,400 words* (does not include title page and references).

This is a suggested outline for the term paper with details on the content you should include in each section. This is only a guide — if you wish to organize it differently then you can do this and your teacher will discuss it with you when you do your outline. You need to discuss all three frameworks in your paper. If the company you choose does not currently focus on all of them, you can still explain why it may not focus on one of the requirements and how this may affect society / the environment / profit.

**Introduction**

- What is this paper about?
- Sustainability and the TBL
- Company
- Thesis: Based on the TBL, how sustainable is the company?

**Background**

- Background of the company (e.g. products, size, company TBL)
- Information relevant to the following three sections

**First Bottom Line (People)**

- *Is the company positively impacting stakeholders?*
- How is this company affecting society/employees in its own country and abroad?
- What are the negative impacts it has on the society/employees?
- What are the positives things it is trying to do for society/employees?
- Are there any notable events which have happened?
Second Bottom Line (*Planet*)
- **Is the company significantly reducing its negative impacts on the environment?**
  - How is this company impacting the environment?
  - What are the negative impacts it has on the environment?
  - What are the positives things it is trying to do?
  - Are there any events which have happened that have significantly impacted the environment?

Third Bottom Line (*Profits*)
- **Is the company profitable?**
  - How have profits been over the last few years?
  - How strong is this company’s business?
  - What are the most profitable parts of the company?
  - Is the business getting stronger or weaker?
  - Is the industry getting stronger or weaker?
  - What are the business strategies for profit?
  - Are there any threats to their business?

**Recommendations**
- Speculate on the future of the company; how will the company’s TBL change going forward?
- How can the company improve its treatment of stakeholders?
- Indirect and direct stakeholders
- How can the company improve how it affects the environment?
- resource consumption and waste/pollution
- How can the company improve long term profits?
- Will its business get stronger or weaker?

**Conclusion**
- Restate thesis: how sustainable is the business overall according to the TBL?
  - How do the three parts of the TBL affect each other?