EFL/ESL and Environmental Education:
Towards an Eco-Applied Linguistic Awareness in Cameroon

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Abstract
This article seeks to examine the perception of the EFL/ESL teachers on environmental education and the integration of environmental education in language teaching. The hope of the article is that it will enable Cameroon EFL/ESL teachers to discover or rediscover the aims and extended reach of their profession. That is, that EFL/ESL teaching should not only be limited to the improvement of learners’ language proficiency but also to enable them develop critical thinking strategies that can be useful in environmental sustainability; that the English language teaching profession can be used in promoting environmentally friendly behaviours among citizens, thereby activating an eco-applied linguistic awareness among Cameroonian EFL/ESL teachers.

Keywords: Critical pedagogy, Critical language awareness, Task-based approach, Content-based approach, Materials development, Environmental education

1. Introduction

Never has the whole world been so concerned about global issues generally and environmental education and protection in particular. “Thinking green” and “acting green” preoccupies many individuals, governmental and non-governmental institutions worldwide today. But, this environmental education does not seem to be the preoccupation of the Cameroonian EFL/ESL teachers. Is it ignorance or negligence or both and more? Meanwhile, according to Tang (2009), the Earth Summit of 1992 had provided agenda 21 to render environmental education necessary for every citizen in the world and the former head of the United Nations Environment Programme, Ghafoor-Ghaznawi had stated that environmental education was considered cross-curricular because the environment includes all areas of studies. This implies that EFL/ESL teachers worldwide could use their profession in building up a sustainable environment for mankind’s future generations. By the way, according to, UNESCO (2005), institutions of teacher education have the special role in reorienting teacher education to address sustainability, and since institutions of teacher education fulfill vital roles in the global education community; they have the potential to bring changes within educational systems that will shape the knowledge and skills of future generations.

As a matter of fact, the writing of this article was prompted by a heated discussion that this writer had with an English language teaching colleague from another institution. In deed, the writer’s department had instituted that student-teachers carry out projects dealing with contemporary global issues like environmental protection, global warming, human rights, gender discrimination, peace education, waste management and English language teaching.

This writer’s response was simple: Rivers (1976: 96) had pointed out that "As language teachers we are the most fortunate of teachers...all subjects are ours. Whatever [our learners] want to communicate about, whatever they want to read about, is our subject matter". Besides, the colleague’s attention was drawn to the fact that “…we, the English language teachers and teacher trainers are citizens of the world and like any conscientious citizens, we have the duty to be committed to the world’s crises. It is worth noting that most of the world’s hazards have been caused by humanity and it is the responsibility of humanity to resolve them before passing them to the forthcoming generations. So, like other professionals like geographers, science teachers, lawyers or teachers of social workers we, the English teaching professionals have also in one way or the other contributed in the degradation of the environment, and so since we can, we should embark on the use of the English language teaching and teacher training profession not only to develop the communicative skills of our learners but also to empower them with knowledge, know-how and attitudes that would
The apprehensions of the colleague heightened as she questioned the type and source of material as well as the methodology that could be used in such a venture. The worries of this colleague translate the limited impact or degree of the teaching of environmental issues with English in the EFL/ESL classroom in Cameroon. Indeed materials for environmental education abound. These materials start from the colleague, herself the teacher, her classroom, her classroom surroundings, her learners, the learners’ homes, all the new information and communication technology gadgets, books of other disciplines, newspaper, journals and magazines, townships and villages. In short, the material was to be her and everything and everybody around her. For the methodology, teachers could make extensive use of the more recent approaches such as the task-based and content-based approaches which incorporate thinking skills (even critical thinking skills) with language development.

Besides, environmental education falls within the realms of the recent trends in psycho pedagogy like Critical Pedagogy which is a way of teaching that strives not only to transmit linguistic knowledge and cultural information, but also to critically examine both the conditions under which the language is used, and the social, cultural and ideological purposes of its use, Weaver (2006).

One course book was randomly chosen and its examination revealed that there were many issues or themes about the environmental crises such as endangered species, waste minimization, and deforestation. For example in Fualefich Anu et al’s (2006) *Graded English for Colleges 1 (2nd edition)*, there were images, passages and poems about the environment. The next questions were: how do teachers handle these issues? Do they really teach them to conscientiously raise the learners’ awareness on environmental sustainability? Do they only use them to fulfill their language pedagogic roles of developing learners’ listening, speaking, reading and writing skills? To what extent were they aware that they could use their profession to enhance environmental awareness?

To answer these questions, the lesson notes of some teachers were examined. The conclusion after the analysis of the lesson notes was that the Cameroonian EFL/ESL teachers did not use their language teaching profession to empower learners with the ability to deal responsibly with global crises in general and environmental protection or education in particular; that although the course books contained environmental themes, the UN’s sixth environmental education objective of participation, was often lacking from ELT course books’ treatment of environmental concerns. This seems particularly sad, as being aware of environmental problems, understanding why they occur, caring about and having the skills to overcome the problems, and being able to evaluate different proposals for addressing them are all for naught if no action occurs. Jacobs & Cates (1999)

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2. What is Environmental Education?

Put simply, environmental education can be considered as concerted efforts conscientiously organized to teach or draw the attention of human beings about how natural environments function and how these human beings can manage and protect them. Environmental protection is therefore the aspect of environmental education that refers to practices that are aimed at protecting the environment by individuals, governments, nongovernmental or professional entities like EFL/ESL teachers.

Environmental education covers a wide range issues whose endangerment is due to human activities. These issues include global warming, greenhouse gas, ozone depletion, species extinction, poaching, endangered species, inefficient energy use, habitat destruction, air quality, light, noise and visual pollution, pollution of water like ocean dumping, oil spills and urban runoffs; electromagnetic radiation and health, nuclear proliferation and fallout, genetically modified foods, overgrazing, excessive use of pesticides and herbicides, intensive farming, land pollution and desertification, soil erosion and contamination, water crises, overfishing, illegal logging and deforestation.

Environmental education is therefore an important component of every environmental programme and the principal aim of such education is to prepare not only the individual but also the society for the task and duty of protecting the environment by raising their level of environmental knowledge, understanding, responsibility and ethics. One of the greatest challenges of environmental education is to bridge the gap between knowledge and ethics, to internalize environmental knowledge so that it could be visible in new behavioural patterns and practices. In a bid to sustain the...
interest and participation of citizens in environmental issues in which eco-friendly behaviours are reflected, environmental education has to be based on the following three facts that: it is a study of the environment, that is, water, air pastures plants animals and forests; about the environment and the ecosystems and for the environment, that is their preservation and conservation.

The question of environmental education emerged in 1972 when the United Nations Conference of that year encouraged member states to start thinking about global environmental problems. The conference laid lots of emphases on environmental education. According to UNESCI-UNEP 1976, the following are the objectives of environmental education:

1) Awareness of environmental problems.
2) Basic understanding of the environment and its problems, and humans’ role in the environment
3) An attitude of concern for environmental problems.
4) Skills in overcoming environmental problems.
5) Ability to evaluate proposed solutions to environmental problems.
6) Participation in solving environmental problems.

3. Why teach Environmental Education with English language

Environmental education is necessary for the EFL/ESL instructor because according to Babcook (1993), successful language learning equally involves a successful combination of the micro and macro skills acquired into appropriate expressions of communication; and, environmental issues are rich subject matters of communication.

Rethinking and extending the aims of the English teaching profession is another reason why it is necessary to involve environmental education in the profession. This has been necessitated by the advent of more practical teaching approaches like the task-based and the content-based models which focus on the tasks and contents assigned to learners rather than focusing overtly on the linguistic structures of the assignments.

Still talking about the need to include environmental matters in English language instruction, Cates (1997:4) points out that

We can’t call our English teaching successful if our students, however fluent, are ignorant of world problems, have no social conscience by using their communication skills for international crime, exploitation, oppression or environmental destruction.

This, according to Cates (2005), explains the growing interest over the last decade to incorporate environmental education into English language teaching.

Studies like those of Brown, (1990); Friel, (1991); Gambee & Klausman, (1992); Jacobs, (1993); Jacobs and Cates, (1999); Trisler (1993) and Tang (2009) showed that global issues such as environmental problems and energy crisis affect each person on earth. Tang (2009) argues that these issues can be pertinent content to be incorporated in language learning. Besides as a content-based teacher, Silver (1991) argues that students learn best in the context of relevant, meaningful, motivating and authentic materials which inspire students to think and learn through the practice of the target language. Brown (1990) on his part holds that English teachers have a mission of helping everyone in the world communicate with each other to solve the global problem. This is certainly because of the global status of the English language. Maley (1992:73) posits that: “Global issues are real issues: the spoliation of the rain-forests, the thinning of the ozone layer, acid rain, nuclear waste disposal [and that]….by making global issues a central core of EFL, these problems would be to some extent resolved.”

3.1 Teaching English to raise awareness about environmental sustainability

According to Tang (2009), the aim of incorporating environmental education into the EFL/ESL classroom is, to raise students’ awareness of global environmental crises. Knowledge of environmental protection is at the core of environmental education and should be done with any age group (be it at the nursery, primary, secondary, post secondary or higher education levels), with any linguistic rules and language specifics like vocabulary, grammatical rules, syntax, semantics and discourse of the target language. Thus, teaching English as a second or foreign language can emphasize the language skills and environmental issues in the school context in order to raise awareness about global issues like environmental degradation.

Environmental awareness activities could include the following tasks that are adapted from Jacobs and Cates (1999): writing letters to governments, organizations, and companies; growing trees and other plants; reducing use of paper,
energy, and plastic containers; reusing materials such as glass jars and bottles; recycling materials and buying recycled materials such as recycled paper; educating others and taking part in campaigns to persuade others to participate in environmentally friendly actions; raising funds for environmental causes; and boycotting environmentally unfriendly products, such as those made from endangered species, avoiding the consumption of endangered animal species like the apes and other primates and instead buying environmentally friendly products, like refrigerators that do not use ozone-depleting chemicals.

To these activities the following could be added; campaigns to discourage wanton cutting down of trees for wood, burning of the soil for agricultural purposes (popularly referred to in the North West Region of Cameroon as ankara), the deforestation of water catchment area and the destruction of swampy and marshy areas for farming or building construction.

3.2 Materials Development for EFL/ESL and Environmental Protection

Materials for the simultaneous teaching of English and development of environmental awareness among learners can be created both by the teachers and the learners. Students for example can create and develop materials in the following ways:

1) They can come to the classroom with articles or audio/videotapes from newspapers, magazines, radio, TV channels or from the internet. The Cameroon Radio and Television (CRTV) has many programmes that it broadcasts in collaboration the country’s ministerial departments in charge of nature and environmental issues; that is the Ministry of Forests and Wildlife and that of the Environment and Nature Protection.

2) Recording and playing-back songs in English that are related to environmental education. They could be songs of popular local or international environmentally committed artists. The contents of such songs could be used as discussion or debate topics.

3) Suggesting and debating on environmental education topics related to events taking place where they live. For example, the illegal sawing down of trees in the mbhine mikare (white man forests) in the North West Region; that is state-owned forests; the unlawful felling of the nimier (a large evergreen tree with an extremely bitter leaves) trees in the northern regions of Cameroon for diverse reasons like fuel or building; the drying up of rivers and lakes in the Congo Basin, the fast advancing Sahara Desert; burning of grass with the hope of increasing soil fertility in villages, waste disposal, making an inventory of animal and plant species that are protected by the Cameroon government or pollution in a nearby river;

4) Performing a discussion and writing skill task of developing questionnaires on environmental issues for class mates and after that students do a questionnaire related to how environmentally friendly the questionnaire items are. For example, do they buy or eat the flesh of endangered and protected animal species like gorillas, chimpanzees or elephants? Do they carry a cloth bag so that they do not collect plastic bags while shopping? After that they could make resolutions to adopt more eco-friendly behaviours.

3.3 Teaching to Rouse Learners’ Critical Thinking Skills Required for Environmental Awareness

The inclusion of critical thinking skills into the EFL classroom can help further develop students’ communicative abilities and analytical thinking, and allows students to practice communicating in a variety of situations on global issues (Ishikawa, Sasaki & Yamamoto (2007). Critical Language awareness on its part is an approach to language awareness that emphasizes the ideological aspects of language use, and the ways in which language relates to social issues, such as power, inequality and discrimination.

Critical thinking has variously been defined and its role in human learning (behavior change) emphasized. Dowden (2002), for example, holds that thinking critically, is among other things, being fair and open-minded as one thinks carefully about what to do or what to believe. For Scriven and Paul (2004) thinking critically entails:

- that mode of thinking—an about any subject, content or problem—in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them . . . in short, [critical thinking is] self-directed, self-disciplined, self-monitored, and self-corrective thinking.

Similarly, Hopper (2003:37) considers a critical thinker as one who “… is constantly asking questions, trying to distinguish between fact and opinion. Not about memorizing, but analyzing all sides of an issue to find more in the situation than the obvious and makes assertions built on sound logic and solid evidence.” Stroupe, (2006:3) cites Ennis (1978) as introducing critical thinking as “a process incorporating the skills necessary to decide what to do and believe.”

The above cited definitions view critical thinking in terms of the way information is processed and applied, and equally
emphasize the consciousness or awareness of this process taking place. This emphasis or awareness is necessary for the facilitation of critical thinking in the classroom. It is this kind of thinking that sharpens learners’ focus on environmental matters and urges them to react accordingly. More specifically, Halvorsen (2005) says that when we think critically about a given topic, we are forced to consider our own relationship to it and how we personally fit into the context of the issue.

Tsui (2008) defines critical thinking as “a way of reasoning that examines the inherent structure and logic of one’s intellectual functioning,” and Tang (2009) says that critical thinking is one of the crucial aims of education as a whole, and is shaped by language. Therefore students learning a second/foreign language will need to learn and apply critical thinking skills within the context of the second language in order to think, evaluate and express their ideas in that language.

The inclusion of environmental education into English language study will certainly enable students to improve on their critical thinking skills or abilities and at the same time contribute to their language development since environmental issues such as global warming and energy crises are interesting, relevant and debatable content issues.

4. Teaching Environmental Protection in our English Language Classroom

As mentioned earlier, one of the greatest preoccupations of this writer’s colleague was how to go about the teaching of environmental education and the source of material for the teaching. Jacobs and Cates (1999) here present a good number of questions that teachers (just like my colleague) often ask when they are faced with the inclusion of environmental education in their EFL/ESL classrooms.

1) Should every lesson be a global issues lesson?
2) Can we teach language at the same time we teach global issues?
3) How can we get enough knowledge about global issues to include them in our teaching?
4) How can we get materials for global education?

Jacobs and Cates (1999) go ahead to attempting answers to these probing questions. As to the first question which interrogates the inclusion of global issues into all English language lessons, they hold that the infusion of global education into second language teaching does not necessarily imply that every lesson, every reading passage, every group discussion should be about some global concern. The recommendation here is that environmental education be a regular and consistent part of the curriculum, not just something that is thrown or casually done in once or twice a year.

4.1 Blending the Teaching of Environmental Matters and English as a Second or Foreign Language

The second preoccupation was that of the ability to teach language and environmental issues at the same time. Here the teachers could make use of the communicative approaches. The communicative approach can be interpreted in many different ways and used to describe a wide variety of classroom procedures because it refers to a diverse set of rather general and uncontroversial principles. Writing about the principles, Richards (n.d:5) sums them up as follows:

1) The general goal of language learning is communicative competence.
2) Learners learn a language through using it to communicate.
3) Authentic and meaningful communication should be the goal of classroom activities.
4) Fluency and accuracy are both important dimensions of communication.
5) Communication involves the integration of different language skills.
6) Learning is a gradual process that involves trial and error.

Crandall (1987) believes that the communicative approach, is the dominant one in second language instruction and it emphasizes that languages are best learned by using them to communicate meaning, rather than by focusing on explicit learning of grammar and vocabulary. One way of attaining this focus on meaning is through content- or theme-based instruction, and contemporary teaching approaches such as the content-based and task-based ones which are all applications of the communicative approach which continues to be the approach in vogue today.

4.2 Content Centered Language Learning

Content and Language Integrated Learning (CLIL), according to Seregely (2009) is an educational context in which a foreign language, in the majority of the cases English, is used completely or partially as the medium of instruction in the teaching of subjects such as History, Biology and in our context, Environmental Education. The main aim of the method is to enhance students’ linguistic competence due to a higher amount of target language exposure. Among the aspects...
most favourably influenced by CLIL is undoubtedly the learners’ lexicon. Through receiving foreign language input in different content subjects, CLIL students acquire a greater and more profound knowledge of technical and semi-technical terms than their traditional EFL peers do (Dalton-Puffer 2007: 5-6).

This method is based on J. Cummins’ research on interpersonal and cognitive academic language proficiency. According to Cummins, these types of language develop differently because one is analytically based and the other is socially based. Cummins’ rationalization is that people develop two types of language proficiency: cognitive academic and interpersonal and that these two types of proficiency vary depending on the context available to the learner and the degree of cognitive challenge of the task. This approach utilizes cooperative learning techniques where students work in groups of multi-level English speakers (peer tutoring) which seems to effectively eradicate barriers to communication.

Just as with the contents-based approach, texts and tasks for the tasks-based approach are authentic. Authentic tasks are tasks that require the learners to use the target language in a way that simulates its use in the real world or real life outside the language classroom. When learners are asked to fill in the blanks, change verbs from the simple past to the simple present, give the correct forms of adjectives or adverbs and completing substitution tables, they are not therefore performing authentic tasks. This is because such exercises are not what we use language to do in our everyday life. Examples of authentic tasks would be writing a complaint about any abnormality around one (e.g. the wanton cutting down of trees in the city or village, poor management of waste matter in the school, city or village, air, water or acoustic pollution around one, marks wrongly calculated, food not well prepared etc), answering a letter addressed to the learner by an authority parent or friend, arguing a given point of view like the advantages of polygamy or early marriages and comparing various holiday brochures in order to choose the best place to spend the holiday.

Similarly, an authentic text is a text which is not written or spoken for language teaching purposes. Examples of authentic texts include newspaper articles, popular songs, novels, radio interviews and a traditional fairy tales, myths and legends are examples of authentic texts. A story that is written to exemplify the use of reported speech, a dialogue scripted to exemplify ways of inviting and a linguistically simplified version of a novel are not authentic texts.

5. Task-based Language Learning

Van de Brenden (2007:4) sees a task as “…an activity in which a person engages in order to attain an objective and which necessitates the use of language” This definition views language as a means to an end. That is, by understanding language input and by producing language output; better still, by interacting with other people in real-life situations through the use of language, the goal that the learner had in mind could be better achieved. The goal here is that of attaining environmental awareness through the English language.

Task-based language teaching considers tasks as giving learners direct and immediate experience of language use in communication. Focused tasks, pre-tasks and feedback on tasks enable learners to notice language forms, to use them under real operating conditions and to receive feedback on their language use. Priority is given to getting something done through language rather than to practising predetermined language items. The language of the tasks therefore is not predictable. Attention is paid on the task outcome or product and not on whether learners used a particular language form to complete the task. A task can be based on any of the environmental themes or preoccupations motioned in the contents model section of this paper. In other words the learners are declared successful if they got the task done, regardless of what language they chose to do the task. Nevertheless, the teacher keeps encouraging the learners to use the target language.

5.1 Applying the Task-based Approach EFL/ESL Classroom

For the task-based approach to work successfully, Beaven (2005:4) suggests the following measures:

1) Foster a class atmosphere that encourages trust and sharing, so that learners are willing to share real information about each other.

2) During the Pre-tasks and Tasks activities, check that the learners understand what they have to do, assist them with any problems, and input language items if help is requested. Note down how the learners are coping with the task and note good or problematic use of language, but do not correct them and do not join in.

3) After learners have done a Task:
   • give feedback as to whether the learners successfully achieved the Task,
   • input language that they needed but did not use, point out significant errors and tell them what they did well.

6. Source of Knowledge for Environmental Education by EFL/ESL Teachers

As to how to get the necessary knowledge required to teach environmental matters in the English language classroom,
recourse is made to the United Nation’s environmental education objective which stipulates that knowledge is important and that in a learner-centered education paradigm, the teacher is no longer seen as the key source of knowledge for students. Instead of being 'Sages on stages', teachers are now 'Guides on the side', facilitating learning, helping students discover how they can be independent learners. Today, teachers are no longer afraid to say to students, "I don't know. Why don't you find out and teach me and the rest of the class? Or "I don't know. How can we find out together?" In addition to gaining knowledge from and with the students, another place to turn is to teachers in other subjects. Cross-curricular projects have gained a lot of popularity nowadays and they offer excellent opportunities for teachers of different subjects to learn from each other as they guide students’ learning. Moreover, Richards (n.d.) says that teachers are now encouraged to examine and confront the underlying ideologies of texts and textbooks. Course books are no longer indispensable tools and are considered as controlling instruments that hinder the creativity of teachers.

6.1 The Sources of Materials for Environmental Education

Some English as a second or foreign language course books already contain lessons or parts of lessons related to global education. For example, in Fualefeh Anu et al’s (2006) Graded English for Colleges 1 (2nd edition), an ESL text book used in the Cameroon educational system, one comes across environmental themes as “Animals, their habitats, their young and feeding,” “Explaining a Natural Phenomenon,” and “Children's Rights.” Other ready-made materials can be bought but those that will readily suit the interest and be meaningful to learners will be materials that are closely connected to students' lives. These materials should be developed at a local or national level. For example, materials related to tree planting in the northern regions of Cameroon or activities that require each student in the country to plant and take care of a tree in his/her region right up to a certain number of years. While doing that, the teacher keeps reminding them of the popular adage that "One generation plants tree, the next generation gets the shade". Other sources of information may include non-governmental organizations, governmental ministerial departments and the media. Still in Cameroon our investigations revealed that very reliable material was prepared by Nduge et al (2009) for the English-speaking and French-speaking subsystems of education. Although the main focus of Nduge et al (2009) is climate change, it is a rich and worthwhile material for EFL/ESL teachers. Furthermore, (Lie, 1992) proposes that teachers can collaborate with others to create and share materials by taking for example, some global issues material from a newspaper article on solar ovens, and combine it with the jigsaw technique for teaching reading in which a reading passage is divided into parts and groups of four or less students become experts in one part of the passage and then teach their part to others, after which students take a quiz or do a task based on the entire passage.

Environmental education materials can be developed by students (Deller, 1990; Jacobs, 1993). This is as a result of the shift from the traditional teacher-centred to the learner-centred approach. Following the shift, it has been found out that allowing students to look for and bring English language learning materials suitable for themselves to the classroom is a way to promote learner-centredness (Pramoolsook (2009) and critical thinking. Tasks from the students’ materials have to be designed to be similar to real-world tasks and activities that the students will face in their real life. To accomplish these tasks, the teachers should act as facilitators rather than the conductors and controllers of all learning activities (Tudor, 1997). Moreover, the assessments should be based on both the products and the process of learning. The learner-centred approach requires the students to cooperate and collaborate in all aspects of learning, including selecting and creating materials suitable for their own learning.

7. Conclusion

This article set out to examine how environmental education could be integrated into the EFL/ESL classroom in Cameroon. It started with the examination of the attitude of an English language teacher towards environmental education. The ignorance of the use of EFL/ESL in generating and sustaining environmental awareness in Cameroonian learners was a general issue as the examination of teachers’ lesson notes books revealed that they do not conscientiously incorporate environmental education in their English language teaching. Teachers in their not integrate the proactive communication that triggers critical thinking about language tasks that deal with environmental issues. Though the inclusion of environmental education in the English language classroom may seem difficult, it is worth trying if we actually look forward to the welfare of our environment which is becoming an eminent threat to humanity. By the way some systematic inclusion of aspects of environmental education were witnessed in some pilot schools in the South West and South Regions, two of the ten regions of the country.
References


