Rationale and techniques for incorporating global environmental education into second language instruction are discussed. The approach suggested combines infusion of environmental issues into the curriculum and presentation of a global perspective on environmental problems and their solutions. Six concepts of global education are outlined: perspective consciousness; state of planet awareness; global interdependence; awareness of choice; self-esteem; and process mindedness. The language teacher's role and responsibility in teaching environmental issues is also examined. Finally, a language class project focusing on the environment is described. In the five-week project, high-intermediate to advanced second language students read two generic articles from an annual environment publication, extracted information, discussed pertinent issues, took quizzes and tests to test their comprehension, and wrote essays. Students conducted primary research on a variety of related topics, including eco-tourism, the greenhouse effect, the urban homeless, and a green business. A classroom environmental summit was also conducted. Project results, in terms of student learning, performance, and motivation, were encouraging. (Contains three references.) (MSE)
Environmental Education  JALT roundtable presentation

Brenda Bushell

In the time I have today I would like to offer some reflections on the approach to teaching environment education, the role and responsibilities of educators, and perhaps offer some suggestions for activities focused on the environment.

First of all I’d like to suggest that the “environment” can no longer be taught in the cause-effect framework it was in the past. By that I mean teachers should not be content with reading materials that isolate specific environmental problems, or with textbooks where the purpose is solely to study facts in order to answer comprehension questions, and to keep lists of vocabulary.

I think that teachers must also be cognizant of the fact that “environmental issues” cannot be fully understood through discourse - for example - “how do we get rid of noise pollution” air pollution, water pollution - This macroisation makes students lose interest, and it doesn’t even begin to address the problems, my feeling is that it merely drives the environment topic into a negative “repair the world” philosophy which not only overwhelms our students, but blankets the reality of environmental problems today. I am not suggesting that teachers should not make our students aware of these problems, nor discourage them from discussing them - certainly such discussions can and do provide a catalyst for change, but it is my feeling that teachers need to create a learning environment in which:

- students look beyond isolated issues and focus on how humanity and the environment exist in tandem

- students feel that they can affect change, where they can contribute to the wellness of the environment

So what approach should teachers take? According to global educators Graham Pike and David Selby, teachers need to infuse a global perspective into their teaching curriculum. So when we think about environment education in the language classroom, teachers not only need to help students become literate - to acquire language skills which will enable them to study, work and live in a second or foreign language, but they need to give them opportunities to study environmental issues as reality - as interrelated and interlocking, on both a personal and global level.

Kip Cates offers a similar approach within the context of the language classroom. He states that, “… language teaching aims at enabling students to effectively acquire and use a foreign language while at the same time empowering them with the knowledge, skills, and commitment required by world citizens for the solution of global problems.”

And finally, writing as an environment educator of ESL/EFL, Susan Stempleski confirms that an approach to teaching involves four goals: “… knowledge and awareness, the values of concern, the skills of critical thinking and action.”
As we can see, the traditional approach to the teaching of environment education is no longer relevant or meaningful for our students who will be working and living in an ever changing global environment. It is imperative then to incorporate the concepts of a global perspective -those non-language aspects that should be adopted so as to empower students, and to enable students to deal effectively in their ever changing world.

I’d now like to give you an overview of what teaching for a global perspective involves. In doing so I’d like to use the six concepts of global education which constitute a global perspective as defined by Pike and Selby.

1. **Perspective Consciousness**: Awareness of cultural differences, recognition of human commonality. The realization that our own world view is shaped by factors such as culture, gender, class, age, etc., and therefore, we need to find ways to view perspectives from other vantage points and to be receptive to those views. We need to be asking ourselves, “What are other viewpoints of this particular issue?”

2. **State of Planet Awareness** - (including biocentrism and sustainability)
Understanding of global conditions, developments and trends. Informed knowledge of current conditions, knowledge of population trends, types of development. We need to ask ourselves, “how is the global environment changing and why?”

3. **Interdependence** - Realization of planetary interconnectedness, need for a “systems” approach. Concrete knowledge of how the world “works”. Realization that issues are complex and multifaceted - economics, political, social within an ecological framework and that we need to consider all dimensions before responding, acting. We need to be asking ourselves, “How does this particular issue relate to or affect the environment, the economy and us?”

4. **Awareness of Choice** - Recognition of choice, understanding of responsibility for that choice. The need to be aware of the choices confronting the human species as consciousness and knowledge of the global system expands. We need to ask ourselves, “How will the choices I make now affect the future?”

5. **Self-Esteem** - Sense of worth and empowerment, affirmation of others. An emphasis on cooperative learning within an affirmative environment in which students’ self-concept, and their appreciation of each can be enhanced. We should ask ourselves, “What is essential for engendering self-confidence and a respect for others?”

6. **Process Mindedness** - Realization of continual change, an impermanence of the world system, which motivates the desire to explore or realize that learning is an ongoing aspect of life. Global systems change such as governments,
countries, economies. Education should prepare an individual of entry into a fluid regenerating society rather than the perpetuation of existing conventions, roles and structures. We should ask ourselves, "How do we adapt/adjust to these changes?"

This brings me to my second point - that is the teacher's role and responsibility in teaching the environment.

As I stated earlier their role is to first help students become literate - to learn vocabulary and phrases in order to allow them to express themselves logically and coherently in both written and spoken form. Another role of the teacher I believe is to encourage critical and social consciousness in their students. This means choosing materials that enhance language learning while encouraging global perspective taking. Stated simply, engaging students to think about the environment in a responsible way - to facilitate their language learning so that they feel confident in expressing their views and opinions - in processing information and analyzing environment issues.

I think educators need to be aware of their personal political agenda in the readings and activities they assign students. They need to make sure that the presentation of the issues is balanced, if not in the readings, then in the activities and projects that are required of students.

In addition, I feel teachers need to reveal reality for students - in other words, to remove whatever keeps them from seeing clearly and critically, whether it be in the language of the text, or the social, political arena.

I also believe that it is the responsibility of the teacher to set up a learning environment where both the teacher and students learn together. Global environmental conditions change dramatically for example; conditions of forests, forest people, the economy, etc., so teachers need to keep current, this means that teachers and students are learning together. Students enter into the same discourse with their teacher and in this way, authority never becomes authoritarianism in the classroom.

As well as creating a community for learning in the classroom, the teacher should be curious, critical and creative. By this I mean that the teacher must not only know the content of what he or she is teaching but be curious enough to learn it critically, examine and reexamine it, perhaps even see it first hand, and then invent ways in which to teach it so his or her students will be challenged to learn and develop an inner understanding of the issues. Students should be encouraged to explore and examine, and have the confidence to ask, reflect, react and or act in certain cases. So in my view, teaching and learning are one in the same - ingredients for success include curiosity, creativity, and critical and reflective thought.

Finally, I would like to quickly explain one project which I think illustrates what I have been talking about - shows 1) how a global perspective can be infused into environment education in the language classroom, 2) how a cooperative environment can stimulate learning and challenge students and 3)
how teachers can facilitate students’ learning, and how teacher-student cooperative learning can take place.

Project
Frequently, the assignments we give our students based on the environment make them disengaged - they feel they play no part in the health of the environment, and perhaps most distressing of all, feel that they are helpless in taking action. This seemed to be the sentiment of my students in the environment topic which I taught in a language program at one university in Tokyo.

Explanation
5 weeks in length - high intermediate to advanced students students read 2 generic articles taken from the State of the Environment, an annual publication concerning the environment, extracted information, discussed issues presented in the articles and took several quizzes to test their comprehension. They were also required to write a documented essay of between 500 and 700 words. At the end to the topic all the students in the program took a program wide multiple choice test.

In making the topic both personal and global in nature my colleague and I introduced our students to primary research - that is to conduct some kind of fieldwork related with their area of library research. We made suggestions for topics but basically said anything goes as long as there was a connection with the environment.

We were delighted in the papers students turned in and fascinated with the topics! The following are just a sample of the diverse issues students chose to examine.

- Eco-tourism - where students went out and interviewed travel agents, former biology teachers etc.,
- Greenhouse Effect - in which a student investigated the number of vending machines in an area of Tokyo in order to determine the amount of greenhouse gases given off.
- Homeless in Tokyo - where a student talked directly to people who were living rough in train stations.
- The Body Shop - where a student interviewed employees and reviewed materials in order to analyze the Body Shop’s claim as a green business.

Our students had an opportunity to explore the topic of their choice and examine the issue on both a local and global level through primary research and library research.

At this point my colleague and I wanted to challenge our students to examine issues from a global perspective - to go beyond the cause/effect relationships of environmental problems so we designed a Summit, fashioned after the 1992 Rio Summit.
In short students were asked to choose one of the following topics:
Eco-tourism
Biodiversity
Green Business
Transnational Development

They were given 2 readings on their topic, and worked in groups over the course of 2 weeks to come up with a set of guidelines/principles that would ensure sustainable development and or protect the environment and the people. To facilitate discussions and develop language skills, we had our students view a CBS news video “Disappearing Medicines of the Rain Forest”. This video which included discussion and the establishment of guidelines was used as a model for the students' Summit.

The outcome of the Summit was most exciting! Not only were the majority of their principles right on target, but they reflected critical analysis, systems thinking, the principles included a plan of action on a local, national and global scale. Through this student-centered activity, our students acquired a global perspective in dealing with environment issues.

This project was geared for motivated, intermediate to advanced learners, but there are similar projects that one can assign for less advanced students. Example: garbage disposable in the student’s local are - ex. Rules are different in Yokohama as opposed to Tokyo - students can get the information in Japanese - make notes or summarize in English, and then share their information in groups in class. They could then research in the library about another country and share that information - they could compare, think about the consequences these may have on the environment - locally and globally and pose solutions to the situation. In these kinds of learning environments everyone learns, both students and teacher.

In summary, I think environment education and the study of other global issues provides valuable content for language learning, and for developing a social consciousness. Students today should be learning to take responsibilities for their own learning and the quality of their own environment. Our goal as educators should be to facilitate and support young people so that they will have the wisdom, energy, vision and creative powers to be leaders in the 21st century.

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Signature: Brenda Bushell
Organization/Address: Bunkyo-ku, Tokyo University, Hongbu-1-26-3
Date: 02/17/98

Printed Name/Position/Title: Brenda Bushell Visiting Professor
E-mail Address: bbushell@galax.com
Phone Number: 03-32-42-823, 045-912-42-53
Home address: 3-7-3 Ushiku-Tsuzuki, Yokohama, Japan
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