
ENVIRONMENTAL SCIENCE THROUGH ESL TEXT BOOK

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Abstract: Material production is a vital area in English Language Teaching. Teaching materials form an essential part of most English teaching programmes. Environmental Science has come as a part of any UG curriculum because of the Supreme Court order. This paper tries to find out the advantages of having an ESL text book for the students who study Environmental Science as a compulsory paper in Indian universities and colleges.

Keywords: English Language Teaching, Material production, text book.

Introduction: There can be little doubt that, in the recent years, ecology has become one of the central discourses in the western world. Ecological issues are especially important in the social and natural sciences, who assume social and political responsibility by addressing urgent ecological problems and developing practicable and visionary solutions for them.

In 1991, Shri M C Mehta filed an application in the public interest (Writ Petition (Civil) No. 860 of 1991), asking the Supreme Court to: Issue a direction that the study of the environment becomes a compulsory subject in schools and colleges.

The Supreme Court dated 22 Nov 1991 ordered "We accept on principle that through the medium of education awareness of the environment and its problems related to pollution should be taught as a compulsory subject. The University Grants Commission will take appropriate steps immediately to give effect to what we have said, i.e. requiring the Universities to prescribe a course on environment". Thus the universities have prescribed a course on environmental study.

In literary studies also, nature which was at the periphery has come to the centre. There is surely a real ecoconsciousness has dawned on the researchers. The urgency of matter is well received by all. Thus this is the time for the teachers to inculcate ecoconsciousness in the minds of the students.

The term ecocriticism was first introduced by William Rueckert in his much-cited article "Literature and Ecology: An Experiment in Ecocriticism". Since then Ecocriticism has become a much sought after critical theory. Interest in nature and the relationship between mankind and nature or mankind and environment can be regarded as the common ground of this approach.

Even though William Rueckert coined this term "ecocriticism" in 70s, it was Cheryl Glotfelty who popularized this term. In an international conference Glotfelty reinvented this term. Now there are many branches like Ecojustice, Ecotheology, POCOecocriticism, many landscape studies etc. In

India Oikopoetics or Tinai poetics is the equivalent. Dr.Nirmal Selvamony has pioneered in this. He talks about integrative oikos, hierarchic oikos and anarchic oikos.

Now the English teachers are equipped with this tool. Why not the teachers of English use this ecocritical approach, to help students study, the language as well as the environment?

In the Comprehension Hypothesis, Stephen Krashen says that the ESL student acquires the English language, when he/she receives a comprehensible input in a low anxiety situation. In other words, acquisition happens when learners receive aural and written comprehensible inputs. The Comprehension Hypothesis claims that if the current level of understanding of a learner is (i), then he or she can move to (i+1) input, to foster acquisition. Here, the learners' previously acquired linguistic competence will help them move from the current level (i) to the next level (i+1). The theory further explains that language acquisition is involuntary. As the process of acquisition is subconscious, the acquirer does not know if he/she acquires language while obtaining the input.

Reading is a necessary part of the learning process. It can be done alone or in a guided situation. The reading exercise becomes enjoyable if the text chosen is interesting and is comprehensible to the reader. If the students are given the poem in a nut-shell, they will be in a better position to understand the poem or story, and thereby they acquire the language.

Narrow Reading is an inexpensive and pleasant way to obtain a comprehensible input. In his "The Case for Narrow Reading" Stephen Krashen says, "It may be that narrow input is much more efficient for second language acquisition. It may be much better if second language acquirers specialize early rather than late" (Krashen, 1996; Rodrigo and Krashen, 1996; Dupuy, 1999). In the same way, if the students are exposed to ecological consciousness through poems and stories, they will acquire ecological consciousness and environment awareness in low anxiety situation. For example, the poem entitled, "Barren Dam" by

Palamalai (trans.: Nirmal Selvamony) can be chosen.
 With the dry lands becoming wet
 there is no shade anymore.
 Is it just that there is no shade?
 No millet, no maize;
 no gourd that climbs and blooms in the evening;
 no partridges that stir out suddenly
 from under the groundnut plants
 at the slightest sound;
 no pigeons in the shade of the neem
 among the cactus hedge;
 no coucals, no koels;
 no cassia, the croton of the dry lands
 to inspire the koel to sing.
 The bare dam built on the small stream
 laid waste our village.
 The dams on kaviri had destroyed
 forests far and wide.
 We lost our forests for rice,
 and then, no rain;
 now, no forest, and no rice.
 In this world, the human beings are trained to esteem
 the wet lands and despise the dry lands. This poem
 will surely help the student to understand the value
 of the dry lands. This will also help the students to
 understand that no one should try to destroy the
 existing ecosystem.
 Another poem can be "Sparrows" by Nissim Ezekiel
 You may not doubt their single aim,
 Which is to fly and then to mate,
 Aroused to build with twig and leaf
 A nest sufficient for the need –
 Open, warm and planned to give
 A truly bird's-eye view of things
 Perhaps there is a better creed
 Among sparrow-communities;
 Artists with plastic sense
 Who learn to love their loneliness.
 Or statesmen of a sort who say,
 'Our safety lies in unity
 And larger nests, prosperity',
 Philosophers in solitude
 Unearthing thoughts instead of
 worms,
 And contemplating silently
 The destiny of sparrows
 I fancy this, and then I face
 The facts – the mating and the nest–
 Primeval root of all rest.
 Surely the students will come to know of this
 beautiful bird and its behaviour. Through this poem,
 the teacher can teach about birds in general and the
 birds which are living in the vicinity.
 Another poem can be "The Snake Trying" by W.W.E.
 Ross.
 The snake trying

To escape the pursuing stick
 With sudden curvings of thin
 long body. How beautiful
 And graceful are his shapes!
 He glides through the water away
 From the stroke. O let him go
 Over the water
 Into the reeds to hide
 Without hurt. Small and green
 He is harmless even to children.
 Along the sand
 He lay until observed
 And chased away, and now
 He vanishes in the ripples
 Among the green slim reeds.
 The most misunderstood animal on the face of this
 earth is the snake. Many people fear snakes because
 they feel that all the snakes on the face of this earth
 are venomous. But the majority of the snakes are
 non-venomous. This poem also will give ecological
 wisdom to the students.
 Another example is "On Killing A Tree" by Gieve
 Patel.
 It takes much time to kill a tree,
 Not a simple jab of the knife
 Will do it.
 It has grown
 Slowly consuming the earth,
 Rising out if it, feeding
 Upon its crust, absorbing
 Years of sunlight, air, water,
 And out of its leprous hide
 Sprouting leaves.
 So hack and chop
 But this alone won't do it.
 Not so much pain will do it.
 The bleeding bark will heal
 And from close to the ground
 Will rise curled green twigs,
 Miniature boughs
 Which if unchecked will expand again
 To former size.
 No,
 The root is to be pulled out
 Out of the anchoring earth;
 It is to be roped, tied,
 And pulled out-snapped out
 Or pulled out entirely,
 Out from the earth-cave,
 And the strength of the tree exposed,
 The source, white and wet,
 The most sensitive, hidden
 For years inside the earth.
 Then the matter
 Of scorching and choking
 In sun and air,

Browning, hardening,
Twisting, withering,
And then it is done.

This poem will help the students to understanding how the trees are uprooted. The students should be taught that these trees are animate and full of life. As per the first law of ecology, "Everyone is connected to everyone else". This ecological wisdom will help the students preserve nature.

Like this, there are many other poems like Oodgeroo Noonuccal's "We Are Going", Tagore's "Tame Bird" and so on will form an excellent text book for the students.

Conclusion: As an outcome of the Honourable Supreme Court's ruling on making environmental studies a compulsory subject at all levels of education. It is imperative on the part of the UG student to pass a course on environmental studies. There are many science books on environmental studies. If an ESL book with ecological consciousness is introduced then that will serve double purpose on one level it introduces environmental studies, and on another level it helps students acquire the English language. Such a course will be a double delight for the students.

References:

1. Dupuy, B. 1999. "Narrow listening: An alternative way to develop listening comprehension in the foreign language classroom". *System* 24(1):97-100. Print.
2. Glotfelty, Cheryll and Harold Fromm. ed. 1996. *The Ecocriticism Reader: Landmarks in Literary Ecology*. Georgia: The University of Georgia Press. Print.
3. Krashen, S. 1996. "The case for narrow listening". *System* 24(1): 97-100. Print.
4. Odum, Eugene P. 1996. *Fundamentals of Ecology*. Dehra Dun : Natraj Publishers. Print.

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