LANGUAGE AND ART ACTIVITIES AT PRIMARY LEVEL: THE EE DIMENSION

Bill Holderness, Nancy Wame Mothala and Rob McCallum

The inter-relationship of language and art with environmental education (EE) within the Primary Education Upgrading Programme (PEUP) in Bophuthatswana is described and discussed.

INTRODUCTION

During the past six years, there has been a largescale Primary Education Upgrading Programme (PEUP) in the schools of Bophuthatswana. After small beginnings in 1980 with seven primary schools, the programme has grown so rapidly that by 1986, over 800 of the 850 primary schools have become involved.

The main aim of the programme has been to improve the quality of primary education throughout the country. Amongst other things, this ambitious project has challenged schools to limit the teacher:pupil ratio in each class to 1:50 (and to reduce that further still); to upgrade teaching materials and methods and to change the attitudes of principals, teachers and inspectors towards children and education. (See Box 1).

Principals and teachers have attended in-service courses on a regular basis each year at all levels of the primary school. At these courses, the participants have shared ideas on how to involve their local communities in the process of education upgrading (including fund-raising initiatives). Thereafter, principals and teachers have been encouraged to become more child-centred in their attitudes and teaching methods.

ENVIRONMENTAL STUDIES

Bophuthatswana differs from most other parts of Southern Africa in that Environmental Studies appears on the junior primary curriculum and, like language, is seen to play a key role. From as early as Grade 1, three periods are given to Environmental Studies each week. These lessons often include short walks outside the classroom, which are intended to arouse the pupils' interest in the environment and to give them practice in observing and investigating the world about them.

Teachers who attend PEUP in-service courses are shown ways of encouraging children to:

- go through the world with open eyes;
- bring objects to the classroom for display, and to label these objects and put them on the Nature or Interest tables;
- engage in experimentation, appreciation and conservation of the environment.

Bophuthatswana stretches for some 700 km from east to west, sncompassing remote and semi-desert rural areas such as Ganyesa and Kudumane (north of Kuruman) in the west and densely populated urban areas such as Ga-Rankuwa and Mabopane in the east (north of Pretoria). For this reason the PEUP helps teachers to adapt lessons to the childrens' various local environments. Children (and their teachers) soon begin to learn that there is science everywhere! They discover that:

- under or beside rocks and logs can be found ... slugs, mushrooms, ghekkos, snails, worms, moss, beetles, toads, lizards, snakes, centipedes, frogs, ants, damp soil and scorpions;
- on a pavement ... footprints, grass or weeds, puddles of water, ants, crevices, beetles and litter;
- in, or near a dam ... algae, tadpoles, snakes, insects, fish, twigs, leaves, grass, reeds, plants, drinking water, seeds, moss, rocks, frogs, trees, birds, mud and reflections;
- in a pile of soil ... insects, worms, seeds, rocks, pebbles, different coloured soil, leaves and rocks;
- in, or under a tree or bush ... fruit, berries, holes, protection (from rain/ sun), birds, knots, insects, branches, flowers, twigs, toadstools, nests, bark, shadows and leaves (shapes).

Back in the PEUP classroom, real objects (and suitable pictures) are used for display purposes and as a stimulus for discussion and creative writing. As part of the upgrading, schools try to equip their classes with magnifying glasses, measuring cups and a terrarium. (The latter is a container with glass and screen sides; it has a glass or screen top which may be lifted off, and a bottom layer of sand or soil containing plants).

BOX 1

AIMS OF THE PRIMARY EDUCATION UPGRADING PROGRAMME

- To change the classroom into a stimulating, rich environment for children.
- To divide children into ability groups in order that each child should be able to learn at his own pace, to become an active learner and to participate in the learning process.
- To give each child an opportunity of *learning* from his own experience and of expressing himself, becoming creative and of realising his full potential as a problem-solver.
- To help the child master new concepts and to explore these concepts fully.
- To make learning a joyful and positive experience and to reduce harassment and con-
- fusion at this early stage of life and learning.
 To help children build a good self-image, to be independent, self-reliant and to learn to share and be considerate towards others.
- To plan the timetable in such a way that learning be more child-centred.

In the higher classes of the primary school a greater variety of activities is practised. The various Bophuthatswana Teacher's Guides produced by the PEUP supply additional facts about the environment for the teachers' information. They also suggest related extension experiences for the classes, such as in Grade 2 visiting a furniture shop, paint store or fabric shop to help children notice different woods, metals, colour and fabrics.

LANGUAGE AND ART

The organisers of the PEUP believe, along with most informed opinion, that language plays a central role in the learning and development of children. The PEUP timetable reflects this emphasis in that 50-minute periods are given to each of the languages in junior primary classes each day. They also believe that every teacher, irrespective of the subject she teaches, is in fact a teacher of language, and has an important role to play in the language development of the pupils.

Teachers draw on the rich supply of pupils' observations and experiences gained in Environmental Studies and in the Setswana and English Creative Writing lessons. This is one of the ways in which the relationship between language and the environment is made manifest and mutually reinforcing. Children also draw on the environment for their creative activities. From as early as Grade 1 they are encouraged to experiment with various media. This includes not only crayons, chalk and paint, but also cutting and sticking, and three dimensional constructions using boxes, cylinders etc. This further encourages the development of language, for example in the critical and comparative chatter which accompanies the creative activities and exploration of the media.

DEMONSTRATING THE INTER-RELATIONSHIP

At an EEASA Workshop held in Bophuthatswana in 1985, the authors were asked to demonstrate the inter-relationship of language, art and environmental studies at the junior primary level.

The session began with the telling of a traditional Tswana story to a group of Bophuthatswana pupils. (The story has been translated into English for teachers who might wish to try it out. See Box 2 and also Box 3). The children were involved in listening attentively to the story for they knew that they would be dramatising it in due course. Time was then spent discussing and studying the various insects mentioned in the story: their appearance, movements, eating habits etc. In some cases it was necessary for children to go outside first in order to find, identify, observe and draw insects before they made their masks. Note for example, how this Std. 1 child was able to draw a much more accurate and detailed picture of her insect after she had observed it through a simple, inexpensive magnifying glass. (See Figure

Because the pupils enjoyed the story so much, the teacher decided that they should have an opportunity to make masks of the various insects in their art period. The way in which this was done is described in Box 4. The children also had great fun making costumes, props (properties) and scenery from virtually nothing. While this was going on, pupils were developing not only their artistic creativity and observational powers, but also their vocabulary (mother tongue and/or second language), their language and communication skills as well as their reference skills. It was observed how *heuristic* the talk became when groups of children were discussing, for example, what mandibles looked like and how they moved. Furthermore pupils had to refer to available books on insects in order to find answers to the questions which arose in the course of their mask-making activity.

Once the masks had been completed, the pupils worked together in groups of five to seven for ten minutes planning and rehearsing how they would dramatise sections of the story which had been allocated to them. Ouring this time observers were able to move from group to group listening to their discussions and rehearsals. The children then gathered together to present their dramatisations. After each performance the teacher commented constructively on the interpretation and communication. Pupils were encouraged progressively to evaluate the dramatisations and to give reasons for their assessments.



FIGURE 1 An example of drawings before and after observation

THE VALUE OF HEURISTIC USE OF LANGUAGE

The language and vocabulary learning that goes on in the informal exploratory discussions of the pupils is immensely valuable particularly as pupils search and make discoveries in pairs or larger groups. This is a crucial part of the lesson which should not be skipped over. The temptation is for teachers to under-rate the

BOX 2

A TRADITIONAL TSWANA STORY

THE RICH FARMER AND HIS INSECTS

Long long ago there lived a very rich man. He had four wives and many children - so many that he did not even know their real names. He would only say, "You" - "You do this", and "You, you do that".

This rich old man had very many cattle, donkeys, sheep and fowls. Each wife had a number of small huts and many kraals. The old man also had his own hut right in the centre of his 'village'. He also had a good number of servants. But the time came when there was so much to be done every day, that the work couldn't be finished.

Then he thought of a very wise plan. He woke up early one morning and said, "Aaah! there are too many insects in my yard, but I'm going to tie them up with work and make them my servants too" and he laughed. He said to one of his children, "You, call me the dung beetle." But the child refused. The farmer went out angrily and shouted: "Dung Beetle, Dung Beetle, beautiful fat Dung Beetle, come here."

The Dung Beetle came running. "Dung Beetle, I want you to smear my floors with dung and when that is done I will give you a reward." The Dung Beetle danced off gleefully and thought: "Ah Ha! now we are going to call our friends. We are going to roll the dung away and eat it. We are not going to smear the floors."

The rich farmer shouted again, "Harvest Ants, Harvest Ants, come and help me sweep the floor." He gave the harvest ants a broom. The ants looked at it and said, "What a soft broom. It must be tasty too. Our friends are also very hungry. We shall call them to feast with us," and they crawled away, carrying the broom behind them.

The farmer called for the Woodborer. "Woodborer!" ... "Woodborer, I want you to look after my fruit trees." The borer answered, "Oh yes, with pleasure." She counted the trees and said to herself, "Just enough to feed my other friends." She smiled and shuffled off.

Next the farmer called out: "Fishmoth!" ... "Fishmoth, I know you are a tidy insect and that you'll do my work very well." The fishmoth felt proud and happy and asked, "What is it that I can do for you master?" "Shake off all the dust from my clothes." The fishmoth nodded obediently then ran off in excitement thinking, "That's Manna from heaven."

Then the farmer thought how he could use locusts. "Locusts" he shouted. "Locusts, I want you to look after my crops. I have planted mealies, beans and corn but the birds are destroying them. I want you to look after them." The locusts answered obediently that they would, but even before they had sprung off to do their duty, the one said to his friend, "The leaves look green, shiny and very tasty. We shall all feast today."

Finally, he thought what a useful servant the Bee could be. "Bee, Bee, busy Bee," he called. "Mr. Busy Bee. Your clothes are very beautiful. My wives always talk about the way you look after our flowers. My Busy Bee, my children are very stubborn and I don't know what to do. I want to chase them away but I'm too old to run after them." The Bee said to himself, "I have many friends with sharp and long stings. We shall do the job. We shall not even spare his animals." The bees stung all the farmer's children and beasts who ran away with faces swollen. value of this type of pupil enquiry, investigation discovery and discussion. Educational linguists
and researchers refer to this as the *heuristic* use of language i.e. everyday exploratory language through which pupils make discoveries, come to terms with new information and *make it their own*.

Research has shown that pupils who do not have these opportunities to use exploratory, everyday language are often educationally deprived because the new knowledge has not been born afresh in their minds. Instead they have had to rely on rote-learning of information which has been passed down. The teacher-derived knowledge often remains second-hand, vague and abstract instead of personal, concrete and internalised. So, by using exploratory language to look at environmental issues, vaguely understood *book* information can be converted into clearly understood *personal* knowledge.

BOX 3

A BRIEF SELECTION OF BOOKS ON AN ENVIRONMENTAL THEME FOR CHILDREN.

 Particularly suited to pre-school and early primary children.

CARLE Eric CARLE Eric FOREMAN Michael LEFF Suzannah	The Bad-tempered Ladybird The Very Hungry Caterpillar Dinosaurs and all that Rubbish Ginger the Giraffe and other Burbyold Eaptacies
PAGE Ian	Learning Tree and the Rubbish Bin
PEET Bill SCHAFFER Ulrich SELSAM Millicente	Farewell to Shady Glade Zilya's Secret Plan Benny's Animals
b. Enjoyed by child for reading alou	iren of all ages and suitable ud.
ADAMS Richard CARTWRIGHT A.P.	Watership Down Animal Chatter: Tales from the Living Veld
DANN Colin ELLIDT Geraldine HART Sue HART Sue	The Fox Cub Bold Where the Leopard Passes Tales of the Full Moon The Forever Tree
MACDONALD David MELLANBY Kenneth PIETERSE Pieter POLAND Marguerite	Vulpina: The story of a Fox Talpa: The story of a Mole The Misty Mountain The Mantis and the Moon: Stories for the Children of
SHERFIELD Paul STRANGER Joyce	Africa Laika and the Animals The Running Foxes.

(With acknowledgements to Anne Irwin)

As teachers, we should remember that pupils benefit by talking about their environmental discoveries in everyday, heuristic language. Pupils won't become excited telling the class (in speech or writing) about their environmental observations and discoveries if it has to be in perfect Setswana, English or Afrikaans. However, they may be so proud of their discoveries that they can be encouraged to polish up their spontaneous responses and first attempts at writing into a poem or well-constructed report, essay or letter. The possibilities are endless and pupils will be writing with a specific purpose in mind.

CONCLUSION

Just as language and environmental discoveries can be mutually reinforcing, so too artistic observation and environmental knowledge are



FIGURE 2 The completed insect masks

BOX 4

MAKING AN INSECT MASK

MATERIALS

Shoebox, scissors, glue, stapler, string, eggboxes, styrofoam meat trays, tempera powder paint, paintbushes.

PREPARATION

Before starting the work, photographs, pictures or real insects need to be examined. These can be shown to the pupils for ideas of what they are going to create. Encourage the pupils to find scrap materials such as string, eggboxes or any other waste material which might be suitable.

HOW TO MAKE THE MASK (Refer to Figure 3)
 Get the pupils to make holes in the shoebox for

- their own eyes (a).
- then cut out the bottom of the shoebox as shown on (b) to accommodate the pupil's neck.
- Cut the styrofoam meat tray to the shape of an insect's mouth and glue it onto the shoebox (c).
- For eyes (d), feelers (e) and mandibles (f) cut-out eggboxes can be used. Where possible these parts can be stapled onto the shoebox as well as being glued for extra strength.
- Decorate the mask with paint or crayons, encouraging the pupils to use appropriate colour and designs that the insects have.
- Lastly, make a small hole at eye-level in each side of the mask and thread the string through, securing it with a knot at each end.

closely related. By giving pupils the opportunity to look closely at the environment we are likely to increase not only their ability to depict it in art, but also their knowledge about environmental form and behaviour.

Do not restrict the pupils; rather allow them to embellish their insect's nose, eyes, mouth, feelers with additional pieces of waste material that might be available. Having dried for 15 minutes or so, the mask is ready to be used by pupils to illustrate a song, dance, or play to the rest of the class.

