

The Necessary Role of Outdoor Education In Education Process

Ni Ketut Sekar Santi and Maria Mump uni Purboningrum

Abstract

Outdoor education is not yet an integral part of learning process at schools in Indonesia, although it carries two important factors. Firstly, it provides opportunity for pupils to make connection between theory and textbook material they learn in classroom and real-life situation. Centralised curriculum tends to treat Indonesia as a homogenous entity. Often textbooks are not applicable to the reality in various areas of Indonesia. Outdoor education, therefore, would encourage pupils to review textbook critically based on their own experience in the field. Secondly, pupils would gain first hand experience through outdoor education, which would contribute to raising pupils' awareness about the local environment. This paper would show some essential roles of outdoor education in learning process to the betterment of Indonesia people.

Introduction

“The Delhi Declaration”, a result of 9 countries meeting on “ education for all” (UNESCO, 1994) had produced statements that are important for education organiser, among others are:

- *Education is the pre-eminent means for promoting universal human values, the quality of human resources, and respect for cultural diversity;*
- *The content and methods of education must be developed to serve the basic needs of individuals and societies, to empower them to address the most pressing problems – combating poverty, raising productivity, improving living conditions, and protecting the environment – and to enable them to play their rightful role in building democratic societies and enriching cultural heritage.*

According to a research conducted by UNESCO's Program for International Student Assessment (PISA), Indonesian students of 15 years old are ranked among the lowest in basic skills compared to their peers in other countries.

In reading literacy, well over 50 per cent of students surveyed in Indonesia performed at level 1 - the lowest out of five - or below. Level 1 represents those students who have serious difficulties in using reading as a tool to manage information that is presented in unfamiliar texts, show detailed understanding of complex texts and infer which information is relevant to the task, and critically evaluate and build hypotheses with the capacity to draw on specialised knowledge and concepts that may be contrary to expectations.

In mathematics, Indonesian students are weak at mathematics in terms of its relation to its use in people's lives, in using mathematical knowledge and procedures to solve problems, in formulating and communicating the outcomes, and in other aspects of mathematics.

Are Indonesian students really weak in all those basic skills? It must be wrong to draw that conclusion if we really look into the factors associated with student's literacy proficiency,

including student engagement in the learning process in Indonesia as compared to other countries participating in this program.

Problem analysis

Politics of homogenization and centralistic curriculum

During 32 years under the dictatorship of Suharto, economic growth had been the main focus of Suharto's New Order government. Education, consequently, had been used as means to achieve the goals of economic development, for example, the link-and-match program promoted by Habibie, an influential minister of president Suharto. Its main aim is to link education closer to the industry.

Furthermore, the education system had also been instrumental to maintaining *status quo*. The delivery of education, which is supposed to promote the actualisation of a whole human being, was then reduced to become merely indoctrination tool to implant New Order's ideology¹.

One way to retain control through education is to homogenise and centralise the curriculum. Despite the vastness of the archipelago and its rich cultural and environmental diversity, there was only one curriculum applicable to every school in Indonesia with intention to assert one identity of Indonesia. Unique characteristic of each region as important element of education was dwarfed by this over-arching goal. Unfortunately, such identity far too often was translated into Javanese urban- or Jakarta-oriented attributes.

Such centralistic approach has detached the experience of schooling outside Java and Jakarta from its surrounding reality. It is an irony for pupils in Papua, for example, to learn at school that rice is staple food of the Indonesian. Despite being part of Indonesia, the Papuan consumes sago, which is ubiquitous locally. The ironic has become bitterer when rice gradually replaces sago as local staple, like a bad dream comes true. The reason among others is sago forest has been marginalised by more lucrative business such as shrimp farming².

Education as a system to create mass product

The delivery of mass education is a logical consequence of creating one face of Indonesia (homogenisation). After the place of living losing its unique characteristic to Jakarta or Java, the very subject of education, i.e. pupils, are no longer seen as human being with unique attributes but merely numbers. Similarly, teachers are no more sources of wisdom and information, who would pass their wealth of knowledge onto the next generation. They were downgraded to become merely parts of big machinery to support economic success.

Teachers' performance is measured by students' passing percentage. The higher percentage of students passing the exams the better performance has been achieved. The higher the ranks of students in exams, the more prestige the teachers earned. On the other hand, pupil's

¹ Darmaningtyas (1999)

² see for example <http://www.wrm.org.uy/bulletin/51/Indonesia.html>, and <http://www.wrm.org.uy/deforestation/shrimp/women.rtf>

achievement is measured only upon cognitive advancement leaving out affective and psychomotor aspects of education.

After the detachment from the local environment, the target-oriented drive only adds the isolation of teachers from the genuine teaching-learning process. Teachers may feel lack of encouragement to link the theory of a lesson with the reality of their own lives. It is easier and quicker to feed pupils with information. In turn, the pupils would only need to memorise and recall the information to pass the exams. In-depth discussion is almost a luxury. After all, it is the number of students passing the exams which matters.

Specialisation is another feature of contemporary education in Indonesia, which leads to segmentation in teaching. Each teacher tends to care only on one's own lesson ignoring the bigger picture, far from the concept of holistic education. Not surprising if education moves away from its purpose to promote a whole human being in harmony with nature and social environment.

Theoretical background

Ki Hadjar Dewantara, the Father of Education of Indonesia, describes the fundamental nature of education as an attempt to promote the whole being of children, mentally, morally and, physically, towards the perfection of life that is, life in harmony with nature and the community. Hence, education supports the actualisation of community's potential to reach the ultimate well-being and happiness.³ His thoughts in education are summarised in 3 principles: '*ing ngarso sing tulodho*' (in the front giving examples), '*ing madya mangun karso*' (in the middle giving encouragements), and '*tut wuri handayani*' (in the back ready to give assistance).

Although the principles were not clarified in details, it is clear that respecting human dignity is an integral part of education. In this light, individual autonomy is paramount in education as a continuous process. Education should provide *the* 'space' for human to 'being' and 'becoming' responsible being.

UNESCO proposes 4 pillars as the foundations of education:

- a. learning to live together
- b. learning to know
- c. learning to do
- d. learning to be

Learning is individual responsibility, yet teacher is responsible to create a motivational situation. Schools could use the aforementioned skills to organise learning activity.

In Indonesia, however, the prevailing approach in education treats students as 'depositor', terminology used by Freire in his critics to 'banking concept of education'. Students act only as receiver of teachers' statements and teaching. There is almost no student response. Achievement is measured in how much students could memorise and recall the information given by teachers. Unfortunately, the learning environment does not encourage students to

³ Majelis Luhur Taman Siswa (1976)

nurture their curiosity and formulate it in intelligible expression. Indonesian students are lacking such exercise.⁴

Children are learning by doing. Through active involvement with their environment, children attempt to make sense of the world around them. They learn by observing what happens when they interact with material and other people. Children learn simple concepts and then use these concepts to grasp more complex idea.

What we believe is that the education through the method that the method of “learning by doing” (Dewey) has the most effective result. It is said that (Getting 1988) = that people keep

- 10% of what they hear
- 30% of what they read
- 50% of what they watch
- 90% of what they do

Learning process

Pedagogue ought to organise activities and the environment to challenge children to learn. Pedagogue should give the children opportunities to discover activities that please them and are interesting to them. Learning can be achieved by the means of object that are mainly used by the children. Pedagogue helps; they learn with previous relative concept or object and start the internal procedure of thinking, logic and problem solving. It is important that the activities appropriate with children’s interest, skill and experiences.

Children would have different experience in two different environments, also because outdoors has so many special features. These would add to what children have learned in their early explorations.

The richer the environment, the more concrete opportunities there are for children to learn by interacting with materials and people. Environment invites children to observe, to be active, to make choice and to experiment.

The role of environment in child development

Environment provides opportunities for sight, sound, smell, flavour, gravity, and some touch sensations. Our body must provide movement sensations and, through movement, the rest of our touch sensations as we move about in the world. Through movement there are muscle and joint sensations coming from inside the body. It is all of these sensations and responses to them that cause the brain to develop.

Sensations from the body and interaction with physical environment influence growth and development.

Jean Piaget was one of the first to recognise that the child’s interaction with his environment was a critical factor in his development. Piaget saw that children do follow a predetermined sequence of developmental steps in which learning occurs in response to the things that happen. Learning does not merely happen to us. We create our own learning process by responding to what happens.

Piaget described the child “accommodates” himself to his environment and “assimilates” the environment to himself. This combination of “give and take” produces an adaptive response that is effective, smooth, and satisfying.

Interaction with the environment actually improves the structure, chemistry, and function of the brain.

⁴ Sindhunata. (2000).

Stimulus and response were circular. In an environment where there are many stimuli, the individual responds more often and in more different ways, and create a greater amount and variety of stimulation for himself.

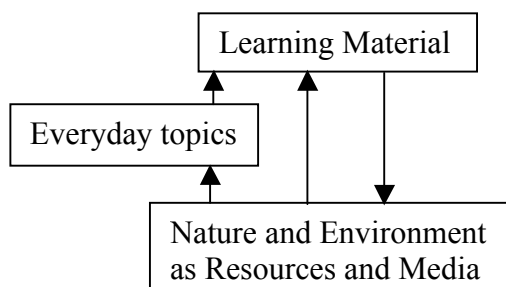
Discussion

In attempt to address the chronic problem of education in Indonesia, BIMA is focusing on introducing outdoor education as part of learning process in formal education in schools. Gross lacking of affective and psychomotor aspects in the delivery of education in Indonesia as pointed by Arief Rachman (2003) has been moving the purpose of education away from its ideal that is to promote the whole being of individual towards life in harmony with nature and the community.

Outdoor education works as catalyst to internalise social and environmental issue, an important process to sensitize people who have been out of touch with their surrounding reality.

This discussion is based on our experience implementing outdoor education as part of the learning process in formal education at 2 schools in Surabaya, East Java over the last 3 years.

The diagram below shows the interlink between nature as media and learning resources and topics of learning drawn from everyday themes:



The outdoor activities are set out as follows:

- (i) If participant are amount to large group of mixture levels, the teachers are grouped according to their level of schools, e.g. junior and senior high schools. Each group should then consist of mixture of teachers of different subjects, e.g. biology, geography, economic, sociology, etc.
- (ii) A topic about everyday life is chosen. The topic should encompass different subjects. For example:
 - a. Life style, activities at school (food at school's canteen, water, river, waste management, transportation, factory, etc).
 - b. Agriculture and farming at the outskirts of city (peri-urban area)
 - c. Agriculture and life style in the country side
 - d. Forest area and its problems
- (iii) Teachers would then prepare the 'joint' material, which would be used together, and material of each lessons plus other relevant information sheets
- (iv) A detailed field activity is set out complete with its worksheet
- (v) Each group would decide the outdoor activity or field trip site
- (vi) A briefing session takes place before groups go out to the field

Various possible activities during field trip, among others are:

- Observation and simple research in the surrounding area where pupils would compare and test the theory in real life situation
- Interview people in the street or at works
- Outdoor games
- Camping at the deforested area
- Live-in at a village in agricultural area

Each activity should be wrapped up with sessions where pupils analyse and draw conclusion of their trip. They would be encouraged to provide ideas for problem solving.

Our years of working with different groups of schools saw that the outdoor activities/field trip give the opportunity for pupils to:

- Find out differences and discrepancies between real life situation and information/theory given at school
- Learn about life which is not taught at school
- See the interconnection and overlapping between one subject to another
- Find out the benefit and how to make use of the theory taught at school in real life
- Learn critical thinking by addressing problems in real life, analysing and look for solutions
- Learn working as team or group
- Learn that there are more than one possible answers and/or responses to any situation

On the other hand, teachers also encounter:

- ❑ By preparing a 'joint' material encompassing different lessons, teachers could avoid repetition
- ❑ Discrepancies between information on the book and real life situation
- ❑ Outdoor activities/field trip help pupils to absorb the subject more effectively
- ❑ Working as a team with other teachers
- ❑ Teachers are encouraged to find answers or to respond on the discrepancies between theory/text book information and real life → Teachers may need to alter and/or correct the information on the book
- ❑ A new situation where teachers are expected to learn together with the pupils to access and address new information, deal with differences of opinion. It requires teachers to learn new skills to accommodate active learning

However, our endeavour to introduce outdoor education is not without problems. We were confronted by:

- Lacking of information to support the teachers during preparation process;
- Teachers' limited information and perspective outside their lessons;
- Teachers' lack of capacity and creativity to organise outdoor activity and/or active learning;
- Teachers' lacking of capacity to accommodate diverse interests of the pupils, in contrast to classroom situation where teacher usually dominates the class;
- Some teachers are hesitant to change to more active learning and see it as only adding extra burden;
- Some teachers are not well equipped to address new situation/information which is not in the text book
- Lack of skill and capacity to organise joint programme. It may also due to self-isolation by teachers in their own subjects

- Interesting way to present and evaluate the activity
- Lack of time to organise outdoor activity/field trip
- Lack of funding
- Some parents are hesitant to let their children participate in the outdoor activity/field trip for various reasons

Outdoor education in village schools: an example

We have had the opportunities to introduce outdoor education in 2 villages in Central Java and South Sulawesi.

Centralistic curriculum and one-way learning rendered children's alienation from their environment. Furthermore, village schools are often lacking access to information as well as learning materials/facilities provided by the government seldom reach remote areas. Upgrading/training for teachers are not always accessible either.

During training, we share our knowledge and skills to run outdoor activities and providing examples of outdoor games for the teachers. The teachers would give us feedback on methods and activities appropriate to local context.

Teachers are receptive to the concept of outdoor education, especially when lessons are linked to everyday themes of living in the village. It gives new perspective and familiar context to the lessons, which in turn enable the children to understand better. Outdoor activities are also more enjoyable for children to learn.

The advantages of outdoor activities in the two locations are:

- The surrounding environment provides wealth of information and material for learning
- Almost no-cost activities
- Low-risk and safe as the participant are familiar with the surrounding
- Children are involved in daily activities of the parents

For example, at Candirejo village (Central Java) a big river stretches along the village, hills and vast areas of open space are precious compliments to learning process, which have not been used as learning sources.

In Puntondo (South Sulawesi), the sea and its livelihood are not yet part of learning sources.

Disadvantages among others are:

- Lack of reference and source of information
- Lack of visualisation tools/material

It is a great challenge to encourage teachers to using their creativity to explore local potentials to be used as local sources.

Conclusion

- Outdoor activity provides extra space for pupils to comprehend theories and information taught at school and put them into context in real life situation.
- Furthermore, pupils could explore the benefit and make use of the theory and information as their contribution as community members.
- During outdoor activity/field trip, pupils would encounter problems, differences in opinion as well as various possibilities of solutions. This would encourage pupils to draw on their own capacity and skills in addressing the problems and finding solutions.
- Outdoor activity should become a regular and integral part of learning process in schooling, especially to support holistic approach in education.
- One of the major challenges is to improve teachers' capacity and broaden their perspective about outdoor education, that it should become an integral part of learning process.
- Outdoor education should become an option to improve the quality of schooling in marginalized small towns and villages.
- Convincing the educators that the delivery of education is not limited indoors is a big challenge on its own.

References and Reading Materials

- Darmaningtyas. 1999. *Pendidikan Pada dan Setelah Krisis*. Pustaka Pelajar. Yogyakarta
- Freire, P. 1970. *Pedagogy of the Oppressed*. The Seabury Press. New York.
- Hendrik Berybe. 2001. *Dilema Pelembagaan Pendidikan*. In *Pendidikan: Kegelisahan Sepanjang Zaman*. Sindhunata, BASIS. Kanisius, Bandung.
- Irna H.N. 1985. *Soewardi Soerjaningrat dalam Pengasingan*, PN. Balai Pustaka. Jakarta
- Drost S.J, J. 2002. The Jakarta Post.
- Majelis Luhur Taman Siswa. 1976. *Ki Hadjar Dewantara*. Taman Siswa Yogyakarta
- Meier, D. 2002. *The Accelerated Learning Handbook*. Kaifa. Bandung.
- Rachman, A. 2003. *Mengkaji Ulang Keberhasilan Pendidikan di Indonesia*. In *Mengurai Benang Kusut Pendidikan*. Ed. Ronisef, S, et al. Transformasi UNJ & Pustaka Pelajar. Jakarta, Yogyakarta.
- Sindhunata. 2000. *Menggagas Paradigma Baru Pendidikan: Praksis Pendidikan Berwawasan Ekologi*. Kanisius. Bandung.
- Y.B Mangunwijaya, 2001. *Mencari Visi Dasar Pendidikan*. In *Pendidikan: Kegelisahan Sepanjang Zaman*. Sindhunata, BASIS. Kanisius, Bandung.

About the authors

1. Ni Ketut Sekar Santi IP
 2. Maria Mumpuni Purboningrum
- Benih Matahari Organization
Jl. Rungkut Mapan Barat IV / BC 20
Email : bimaesw@indo.net.id
Telp./fax : +62 (031) 871 3481
Surabaya, East Java, Indonesia