

BIOCENTRIC EDUCATION AND DEVELOPMENT

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Human development, as a concept, has to be understood within the context of the material, emotional and spiritual advancement of the individual as a member of the human species. Development, to the extent that it is related to the moulding of character, presupposes a matrix within which the modalities and strategies, leading to the goal have to be formulated.

What has to be moulded into shape and guided is the human species, which today has perfected technology capable of changing the course of evolution. What is lacking is a value-based vision and a clear sense of direction. Human endeavour, at every turn, has to be guided by a unifying value system, based on a humanising philosophy of life.

Working toward the formulation of such a value system is, itself, the fundamental objective of this project. Development, as envisaged in the project, is bio-centred - a shift of emphasis from the prevailing human-centred to life-centred initiatives. From such a point of view, reality is visualised as the interdependent existence of humanity, other life forms and non-living matter. The time-frame for the implementation of the project objectives, is obviously a short one, measurable in a few years. But short-term objectives, to be meaningful and effective, have to be understood in the context of medium and long-term goals. Medium-term cover four generations or a hundred years, and long-term, the next millennium.

The long-term objectives, themselves, must be comprehended in the context of the universe, beyond time and space. We have reached a stage in the evolution of the species, when development initiatives, based purely on short-term goals are not only counter-productive, but positively dangerous for the survival of life on the planet.

Long-term Objectives - Elementary Level

- familiarising students with the bio-environment, so that they can develop awareness of themselves, as well as, the living things around them
- helping students to develop an understanding of growth processes in order to foster attitudes of love, care and protection of bios (life)
- enabling students to understand the relationships between the various components of bios within a given eco-system
- helping students to develop moral responsibilities with regard to bios and the capacity for making moral decision

Long-term Objectives - Secondary Level

- assist students in identifying and analysing causes pertaining to bios and natural phenomena in order to develop unified ways of viewing and thinking about bios
- help students to understand that harmony exists, despite the diversity and variety of bios
- teach students that all natural phenomena have a history governed largely by their habitat, thereby heightening students' interest in the preservation of biotic forms
- help students to understand that human life is maintained by a dynamic balance within the bio-environment
- deepen students' knowledge with regard to the actions of humankind and their impact on the bio-environment, stressing the role of culture and values
- help students to realise the importance of the following principles:
 1. the need to develop an appropriate and value-oriented technology that advances sustainable development
 2. utilise resources equitably, fairly and efficiently
 3. maximise bio-diversity by judicious strategies
 4. monitor population growth to ensure the effective implementation of economic and bio-environmental programmes

Specific Objectives

- to produce curriculum material for bio-centred developments in education

- work in collaboration with the National Institute of Education to implement all stages of the project
- create awareness among potential resource personnel about the underlying principles of bio-centred development education
- reach out to teachers, in general, and teachers of Social Studies in particular through the Master Teachers attached to the NIE
- conduct intensive educational programmes pertaining to the project in all Study Circles
- utilise the Study Circles as focal points for the implementation of project objectives in peripheral schools
- conduct seminars and workshops for the effective implementation of the project objectives
- involve environmental agencies and programmes within and outside the UN system to play a supportive role in the project

Project Implementation

- The project will be implemented in collaboration with, and primarily through, the NIE.
- Other ministries and departments will be drawn in at appropriate stages.
- Ministries of Education at provincial level will play a supportive role.
- The involvement of the UN Association will be directly, with respect to student members of Study Circles, formed in secondary schools throughout the island.

Resource personnel will be drawn, by and large, from the NIE which is the Curriculum Development arm of the Ministry of Education. The principle target groups for awareness creation and active involvement are:

- staff and volunteers of the UN Association
- personnel of the NIE
- staff and trainees of the Colleges of Education
- teachers of Social Studies, Sciences and the Humanities

With respect to the non-formal education sector, relevant project objectives will be implemented in collaboration with the NIE divisions of the Ministry of Education and Provincial Ministries of Education. Target groups are:

- adults, in general
- NGO's concerned
- personnel of Ministries engaged in project related activities

Curriculum Content

Apart from the content explicitly and implicitly enumerated under general and specific objectives, the following subject areas will be included in the curriculum content:

- the meaning and implications of evolution and natural selection
- genes, genetic research and bio-technology (the possibilities and inherent dangers of unethical use)
- factors controlling the size of population of human and other biotic life forms
- an appreciation of ecological relationships including the structure and diversity of ecological communities
- the meaning of conservation - a process requiring the control of pollution
- bio-diversity and the conservation of rain forests

Content Pertaining to the UN System

- origin and development
- critical study of structure - principle organs, agencies and programmes
- restructuring of the system, in line with the objectives of bio-education
- conflict areas and conflict resolution
- the redefinition and reformation of the Human Rights Declaration
- the First World, the Second World and the Third World
- the North-South divide
- critical study of the global economy
- the world food crisis
- indigenous peoples and their problems
- the welfare role of the UN and the 1995 Social Development Summit conference

Space and Space Research

- the solar system and the expanding universe
- modern voyages of discovery and the Hubble telescope
- the spin-off from space research and space probes (There is a distinct possibility that the material produced, depending on quality and standard, could be approved, as supplementary readers, for use in all school and national libraries.)

Religion and Philosophy

- preserving cultural identity in order to counter racism
- racism and ethnic and religious conflict
- the core values of the main religions
- selected Western philosophers
- selected Eastern philosophers
- religion and culture of indigenous peoples
- conservationist ideas and practices among the Native Americans

Selection of Advisers and Writers

- The panel, comprised of five advisers and five writers, will be drawn from the Association and the NIE.
- Since the NIE has the expertise and resources and has direct contact with most of the target groups, it will play a significant role in implementation at all levels.
- At the commencement of the project the panel will draw up a programme of work with deadlines for the planning, writing, printing, publication and distribution of material, in forms to be determined by the panel.
- The panel will prepare a second programme for the creation of awareness among the aforementioned target groups, i.e. staff and volunteers of the UN Association, concerned NGO's, etc.

Monitoring and Evaluation

- Since the greater part of the target population is identifiable as coming within the formal education system, monitoring will be the responsibility of the Association, supported extensively and intensively by the National Institute of Education.
- Subject to the guidelines prepared by the panel, quarterly reports in a prescribed form will be submitted by Master Teachers involved in the project.
- Half-yearly questionnaires will be sent out to random samples of the target groups to evaluate the effectiveness of the methods and strategies devised to achieve project objectives.
- In respect of the non-formal education sector, evaluation will be through NGO's associated with the project and will take the form of response to periodical questionnaires.
- Evaluation of attitudinal and behavioural changes resulting from the project will be carried out by the NIE in collaboration with the Association at the end of the project period.

Accountability to Funding Agency

- During the pre-acceptance stage the objectives and details regarding implementation will be clarified jointly by the Association and the NIE in discussions with the Funding Agency.
- The grant money will be utilised under two heads - capital and current.
- The entirety of the grant will be deposited in the Bank of Ceylon.
- The Association will, as far as possible, operate on the monthly interest of the deposit.
- A quarterly statement of accounts will be submitted to the Funding Agency with a copy to the National Institute of Education.

Kumaran Fernando is Founder and Secretary General of the United Nations Association of Sri Lanka and has represented the UNA at conferences all over the world. Founder and Chairman of the Flag Research Centre of Sri Lanka, the only one of its kind in Asia and Africa,

he has been a member of many professional organisations including the Audubon Society of America, and is an honorary member of the UN Associations of the UK and the USA, as well as the Sagala Trust and the VASLA Flag Society.