

Enabling continued adult-learning through open and distance learning

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Abstract

The paper, based on an ODL experience, presents a case of how ODL can be effective in realizing the goals of quality education and sustainable learning. Exploring the new paradigm of Education, the paper begins by establishing key characteristics of quality education. It argues that good teaching-learning:

- Focuses on learning rather than teaching;
- Builds learners' ability of critical thinking;
- Banks upon multidisciplinary approach to learning;
- Should be multi-sourced and accessed rather orchestrated;
- Is continuous and life-long;
- Enables new knowledge creation; and
- Leads to empowerment rather than indoctrination.

Further, the paper explores features of ODL—openness; accessibility; inclusivity; resource-effectiveness; affordability; enabling flexibility in education making it suitable for multi-end use in a variety of situations—which make education 'learner-centred' and 'learner-controlled'. With examples, the paper illustrates how ODL acknowledges the experience and knowledge of learners and allows learners to not only play the role of recipients of knowledge but also that of creator of knowledge and skills.

The paper concludes by stating that ODL not only makes teaching-learning process relevant, but it instills a positive attitude in the learners making them open to learning in its broadest sense, thus allowing the process of learning become sustainable.

CONTEXT

The Declaration of the period 2005-2014 as the United Nation's Decade of Education for Sustainable Development (DESD), has given the much required global recognition to Education as an important part of environment and development strategies. Education has been recognized as a critical tool for achieving sustainable development and the Millennium Development Goals (MDGs).

EDUCATION FOR SUSTAINABLE DEVELOPMENT

Sustainable development is about empowering; it is about enabling critical thinking, developing analytical and problem solving skills, Education for sustainable development (ESD) is a life-long learning process that leads to an informed and involved citizenry which has creative problem-solving skills, scientific and social literacy, and commitment to engage in responsible and cooperative actions. This is what quality education is all about as well.

Education for Sustainable Development thus:

- Focuses on learning rather than teaching and enables knowledge creation;
 - Sustainable development requires ability of being able to contextualize, thus ESD needs to support learning rather than teaching, in its strictest sense of 'one-way instruction'.
Knowledge is constructed and hence every individual carries a unique set of knowledge and learnings. It is therefore important that a good learning process is open enough to allow multiple role-playing at different points of time—all learners can be the teacher as well, thereby creating new knowledge in that field.
- Builds learners' ability of critical thinking;
 - Since development situations may not have a 'right or wrong' answer, it is required that individuals are able to think critically in a given context to arrive at the most plausible action.

- Banks upon multidisciplinary approach to learning;
 - Environment is all encompassing. Learning for environment and development thus requires an approach which does not compartmentalize various disciplines, rather which encourages exploring linkages between ecological, social, economic, political, cultural, scientific and technological aspects of development.
- Is multi-sourced and accessed rather orchestrated;
 - It is imperative that any learning process derives knowledge and information from a variety of sources, instead of the conventional 'linear' process of having only one source of information and knowledge
- Is continuous and life-long;
 - Since the context (environment and development) are in a continuous state of flux and change, it is required that every experience is taken as a learning experience irrespective of how old or young we are. Professionals also need to continuously update their understanding in the field, continued education is thus critical to sustainable development
- Leads to empowerment rather than indoctrination
 - Since ESD requires ingenuity and innovativeness, it is therefore very important that learners are empowered to take appropriate actions in a give situation. Such ability can be developed in the learners only when the learning process is not only learner-centred but also learner controlled.

OPEN AND DISTANCE LEARNING

The features of quality education and ESD imply that the focus of education needs to be 'learning'. Learning is for everyone at every stage of life. There is also need to utilize all spaces of learning (beyond the formal education system alone). Open and Distance Learning (ODL) has the capability of engaging all spaces of learning.

Key features of ODL include:

- Openness and Inclusivity
 - Unlike the conventional education system, ODL provides adequate flexibility in terms of 'entry' and 'exit' points to a learner. Thus irrespective of age and occupation, one could pursue a learning course of ones own choice and requirement. This feature of ODL supports the 'life-long and continuous' learning need of ESD so well.
- Accessibility and Affordability
 - This is especially valid for in-service, continued and life-long learning. Professionals can learn at their own pace and at their own convenient time and not necessarily be class-room bound at a given time. Further the open system of learning has made the basic educational system also accessible and inclusive. High quality education does not necessarily mean 'expensive' education. Though highly inclusive, ODL is affordable.
- Adaptability and flexibility
 - ODL has enabled flexibility in education by making it suitable for multi-end use in a variety of situations. ESD also demands that learning be multi-sourced. ESD requires that learning be 'contextual'; flexibility in ODL allows contextualizing of learning. These features of ODL have enabled learners to create knowledge.
- Resource-effectiveness
 - Since ODL is open, flexible and accessible, it makes the process of learning so much more resource-effective, in terms of knowledge creation (not just the teacher, but learner also contributes making the process much richer and better); in terms of time (learners can learn at their desired time and pace); and in terms of use of conventional and new media.

GREEN TEACHER: MEETING NEW CHALLENGES

Centre for Environment Education (CEE), a national centre of excellence in environmental education (EE) has been closely involved in teacher education and training of professionals in ESD since 1984. Through its six regional offices in different parts of India, and a strong networking with education departments and NGOs across

the country CEE has, over the last two decades, offered face to face training and orientation.

Given that India is large in terms not only of size and population, but also tremendously diverse in terms of language, culture and educational systems, CEE has always looked for strategies and partnerships to address the diversity as well as maximize its reach.

In the year 2003, the concern for mainstreaming EE in India was spelled out by the Honourable Supreme Court of India in its directive making EE compulsory at all levels of schooling. Yet another set of reality is the reality of concerns with regard to teacher training in the country. These include inadequate resources or facilities for EE, limited access to teaching aids, tremendous workload on teachers and the fact that teachers cannot take off long periods of time for enhancing skills or professional development.

Within the changing concept of both the accelerated demand for in-service training, and the concept of 'time', the challenge for CEE was how to bring in principles of good quality education into in-service training without necessarily having professionals take off from work for long to come to the 'training room'. ODL provided an obvious alternative.

CEE, with support from, and in partnership with, the Commonwealth of Learning, Vancouver Canada, undertook an experiment in the form of an ODL teacher training programme in EE, called The Green Teacher. The period of 2002-2004 was the development phase of the Green Teacher programme, with the pilot programme offered during July 05-June 06.

Green Teacher is designed as an in-service training programme with the objective to enable teacher-learners to effectively take up environmental concerns and issues in the classroom, and engage their students in practical, action-oriented EE activities and projects.

This ODL programme is structured such that it provides the freedom of learning at one's own convenience and style. Some key features:

- The Course is designed in a blended mode of face to face and distance learning, the course makes learning requirements—time to be spent, essential entry level qualifications as well as utilizing expertise of the learners to shape their new learning—much more conducive to in-service professionals and their professional development needs.
- It commences with a compulsory four-five day contact session which helps introduce learners to the course structure and content. Contact sessions will enable personalized interaction with resource persons. The contact sessions are held at six Centres—Ahmedabad, Bangalore, Delhi, Guwahati, Lucknow and Pune, or as a special case in a particular institution or location.
- The course content comprises four modules and a 4-5 month school system-based EE project. All to be completed/accomplished in one year.
- Over the first six months, learners go through the four modules and carry out assignments given therein. Assignments act as the link between the theory provided in the course modules and the practice of transacting EE effectively in the school system.
- The second contact session is organized sometime mid-way through the Course. During this session, learners discuss their Course project ideas with resource persons and decide on projects to be carried out over the next 4 months.
- During the year, learners are encouraged to visit the contact centres in the above cities on designated days to access library and audio-visual material or any other kind of support.
- Regular E-mail support is also made available to the learners.

WEAVING THE STRENGTHS OF ODL WITH THE REQUIREMENTS OF ESD

Green Teacher has proved to be a classical example of bringing in principles of good education and ESD through ODL.

The key features include:

- **'Openness' allowed learner-controlled learning:** Designed in a blended mode, the course made learning requirements—time to be spent, essential entry level qualifications, as well as utilizing expertise of the learners to shape their new learning—much more conducive to in-service professional development needs. It provides the freedom of learning at one's own pace and style. Further, in the Green Teacher Material there is immense scope of feedback/input from the individual learners into the larger learning process as s/he uses the course material, allowing the learner to contextualize the learnings.
 - **Example:** The Course cycle had different beginnings and completion time in different parts of the country. This was based on the school calendar in the particular region of the country, thus ensuring that it was convenient for the teachers to come for the contact sessions.
 - Although the set of 4 modules has a sequence and progression, yet learners were encouraged to decide the sequence of pursuing the modules based on their subjects of specialization. A quote from the Green Teacher Learners' Handbook: "...However, we do understand that learners of this Course come from different backgrounds and have different experiences. For example, a graduate of M.Sc. in Environmental Science may require very less time to do the assignments of Module 1 and 2. A school teacher may find it interesting to read Module 3 before Module 2 and is able to finish the assignment of Module 3 before that of Module 2"
- **The Course Content: Designed to suit heterogeneity among learners:** Given that Green Teacher is open for all teachers/educators, irrespective of their subject of specialization, the flexibility built in the module content through use of examples, case studies, acknowledges and appreciates the richness and heterogeneity of the learner group.
 - **Example:** The registered Green Teachers had background in diverse subject areas—educational psychology, administration, science, geography, fine arts, etc.
- **Multidisciplinary Approach**

The 4 Course modules are also varied in terms of content as well as presentation. The first two Modules (Basics of Ecology and Life Support Systems; and Understanding Sustainable Development), provide better understanding of Ecology and recent and relevant debates in the field of Sustainable Development. Being 'knowledge-based' these two modules follow the prescriptive style of self-learning. Module 3, titled 'Environmental Education in Schools' is largely skill-based and thus has been written in the 'situated learning' style. Module 4, titled 'Resources and Opportunities for EE' furthers learners' ability of transacting EE in schools by giving them tips on using locally available resources and opportunities for EE.
- **Adaptability and Flexibility:** The four course modules were developed through a series of workshops with involvement of multi-disciplinary teams, including experts in instructional design and appropriate subject knowledge, in one of the cases, a practicing teacher herself was invited as a subject expert. This process helped in building adequate flexibility in the material in order that all teachers, irrespective of their subjects and their location, find the programme meaningful. Further, all green teachers take up a 4-5 month Course Project which they need to do in their schools with their pupils. This gives Green Teacher the flexibility, where each learner, based on his/her realities and requirements, can apply the same sets of learnings to his/her unique teaching-learning situation.
 - **Example:** The range of project work taken by Green Teachers in the pilot run included analysis of a text book lesson; research on impacts of interactive approaches on learnings made; action projects involving children on themes such as waste management, energy conservation; conducting audits of various resource uses in the school.
- **Cost and resource-effectiveness:** The mode of open and distance learning has enabled optimization of the reach of the training programme without putting too

much demand on the systems. Already existing relevant networks, within CEE and outside CEE as well, are being used to reach out. This has ensured effectiveness of the programme, making the programme relevant for a developing country like India. This has resulted in programme being offered at a fee which is affordable and accessible by not just private elite schools, but also government schools.

- **Example:** In the pilot run, about 50 per cent of the registered learners were from government schools.

SUPPORTING LEARNING

The innovative course design of Green Teacher, based on the principles of ESD and quality education, was developed keeping in view the ODL approach. Once the programme was launched, the challenge was to support meaningful learning in the distance mode. A major challenge of supporting learning processes which are open, flexible and customized is to be able to draw-up a unique framework of reference (towards facilitating learning) for each of the participating individuals. Thus the Green Teacher's challenge was to be able to work with at least 100 such frames and being able to provide specific, context-based support to each of the 100 green teachers. A number of mechanisms built within the Green Teacher programme enabled this.

- The contact sessions, counselling sessions, continuous e-mail based support, small assignments built within the course modules, helped provide this support.
- In terms of contact support, different Study Centres of Green Teacher used different kinds of approaches towards this—for example in Ahmedabad, where CEE's main office is located, provided access to facilities such good library. In Delhi, half-a-day guidance and counselling sessions were conducted at least once every two months.
- All green teachers were also provided additional relevant material, besides the course modules. These included teachers' manuals in environmental education, a text book (graduate) on sustainable development, and an interactive CD on the subject of environmental education.

EVALUATION AND ASSESSMENT

The pilot run of Green Teacher in 2005, provided tremendous scope for meaningful evaluation of the process and application of the findings. Evaluation was at two levels—evaluating the relevance and effectiveness of the programme itself (course structure, course material, logistics of running the programme, and learner support systems). The other level was assessing the learnings that the programme brought in for the Green Teacher Pupils.

The first evaluation was done in both the formative as well as the summative manner. Each phase of the programme—contact sessions, modules, module assignments, final examination—were evaluated at appropriate junctures and feedback from one element of the programme influenced the other. For example, a 2 day workshop was conducted with about 30 teachers (who had not enrolled for the programme) seeking their feedback on the four Course Modules. Major feedback received is that while the instructional design of the modules suit 'teachers' as a professional group, very well, but there is a need to bring down the complexity level of the text/content, especially of module 2 which is an introduction to Sustainable Development.

Further, a team of two external evaluators were also observing the entire process from the perspective of future improvement.

While documenting each step and reflecting on it to draw out learnings was not an easy task, a bigger challenge was to be able to assess learnings of the course participants. Since this was an in-service training programme, a greater focus in terms of expected learnings was on 'skill -building'. This meant that every step that the learner made towards progress on the course was important enough to be on the learning-sheet. This was the basis of the overall evaluation scheme. Several smaller components added weightage to the overall learning score. For example, each module contained a module-end assignment, which carried a certain weightage into the final evaluation. Attendance and contributions made by the green teachers in the two contact sessions

was also assessed. The Course-end project, with a weightage of over 50 per cent in the final evaluation, is an integral component of the assessment. The Course project is a mechanism aimed to facilitate transfer of learning to the teachers' respective work contexts.

Finally, the written examination (towards the granting of the Diploma) was not based only on definitions, facts and opinions provided in the text-books or the course modules. It was designed in a way so as to provide the learners the necessary scope of being able to share and write about learnings they made from their own experiences of being a Green Teacher. Framing and designing of the Green Teacher question paper was based on the facts that:

1. Green Teacher is an in-service training programme (and not pre-service).
2. ESD and responses to ESD are very contextual, contested and open. There are seldom straight 'yes' or 'no' situations in the EE context.
3. Focus of 'good assessment' should be on 'what has the learner learnt' and not on finding out what the learner does not know.

The Green Teacher written examination paper is an example of assessment which promotes learning and the attitude for learning, rather than ranking learners into good or bad, pass or fail.

EXPANDING FRONTIERS

The Green Teacher, as a case, illustrates the immense potential that ODL has in meeting the challenges of learnings for sustainable development. The Green Teacher experience of running a print-based ODL programme with about 100 teachers is getting ready to expand in several ways: Adapting and offering Green Teacher in some regional languages of the country (the pilot run was conducted in English); converting the Green Teacher programme into a web-based on-line training opportunity, which will also allow Green Teacher to move beyond India to other countries of South Asia, where the contexts—environment and development priorities, the formal education systems and teacher training systems—are similar. In comparison, a face to face training programme may not have been able to expand as far and as quick as the Green Teacher is aspiring to, thanks to ODL.

LOOKING AHEAD

It is hoped that the Green Teacher experiment and this paper that attempts to capture the essence and learnings of this experiment, will enable several programmes and institutions in leap-frogging learning for sustainable development by utilizing open and distance learning mechanisms.

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