

Lessons Learned – developing an environmental education programme

The challenge

Broadly speaking the goal of environmental education is to instil in learners: knowledge about the environment, positive attitudes toward the environment, competency in citizen action skills, and a sense of empowerment.

The challenges in developing environmental literacy in Prespa through environmental education programmes in order to engage its citizens more fully in environmental issues can be broken down into three overlapping areas of concern:

How to develop the necessary problem-solving skills amongst learners?

Addressing environmental problems requires both knowledge and a problem-solving skill set, therefore problem-solving needs to be taught, rather than simple knowledge transfer. In other words, learners shouldn't just learn *about* knowledge but also how to *use* knowledge. Simple awareness is not sufficient to foster action and engagement – we need critical thinkers in order to develop informed decision-makers.

How to develop activities which allow learners to discover how they interact with and impact the environment?

It is essential that learners fully understand that they have responsibilities and obligations as citizens – environmental problems are complex and involve social, economic, political aspects not just natural ones, therefore requiring a complex understanding of human interaction with the environment.

How to communicate environmental issues effectively to learners?

The style of teaching is crucial in addressing the concerns above. Approaches should be interactive, participatory, creative and stimulating for learners. Programme development should take account of the variables of resources, time, space, curriculum, and student characteristics.

The solution

Environmental literacy depends on a personal commitment and motivation to help ensure environmental quality through individual behavioural change. This commitment and motivation often begins with an ecological awareness of the environment and nature experiences. Environmental education can help foster learners' innate curiosity and enthusiasm, providing them with continuing opportunities to explore their environment and engaging them in direct discovery of the world around them. As learners develop and apply analysis and action skills through action-oriented learning, as they have the opportunity to make their own decisions and think more critically about their choices, as they are given space for ethical reflection and as they hear stories of success, they are learning that what they do individually and in groups can make a difference. This *locus of control*, or sense that they have the ability to influence the outcome of a situation, is transformative and is very important in helping learners develop a sense of empowerment and a sense of personal responsibility – further key aspects of environmental education.

A key skill in environmental education, therefore, reflecting the aforementioned, is problem solving. Problem-solving skills are: process-oriented as opposed to content-oriented; conceptual rather than factual; student-centred; and, activity-based. Through this approach, students learn to form an opinion, and make choices and decisions that will directly affect their lives and those of their families, as well as society as a whole. Problem-solving develops critical thinking and evaluation skills through mediated experiences of actual, concrete and locally-relevant situations.

In order to reach the goal of environmental literacy, environmental education programmes must be effective: programmes should be relevant to the mission of the agency or organisation, to the educational objectives of the audience, and to the everyday lives of the individual learners. They should involve stakeholders and empower learners with the skills to help prevent and address environmental issues, and foster a sense of personal and civic responsibility. Furthermore, programmes should be accurate and balanced, incorporating multiple perspectives and interdisciplinary aspects, as well as instructionally sound, using best practices in education.

Lessons learned

- Base programmes on the ‘mantra’ of *awareness-ownership-empowerment* for the best results – don’t simply focus on imparting information.
- Effective programmes should be relevant to the work of the organisation, so choose subjects that relate to ongoing efforts, or current campaigns or projects. This means that the organisation can integrate its efforts on a particular issue, saving resources and time, and also improves effectiveness by using multiple means of conveying a message (through communications, education, lobbying, conservation work etc.)
- Ensure that programmes are relevant to both the abilities of learners, i.e. age/skill appropriate and the objectives of educational institutions, i.e. appropriate for, and related to, the wider curriculum.
- Lay good groundwork – have a multi-disciplinary team work through the aims and objectives, identifying topics and problems. Check back with the team regularly to get feedback, as wider perspectives will improve the programme. Set a clear scientific and educational framework for the programme to provide a sound structure and reference points.
- Active, participatory and experiential learning are important in increasing ownership and empowerment. The typical steps involved in teaching skills include: (1) demonstration, (2) practice, (3) feedback and (4) corrective action. Practice, which is the key to learning skills, occurs when the learner performs the skill and task as the educator observes and provides feedback, allowing the learner to correct and perfect the skill.
- Active learning should be firmly connected to local problem solving. Hands-on educational activities with a local focus create more successful learning outcomes and ultimately aim to impact the everyday lives of the individual learners.
- Including stakeholder perspectives in the development of programmes is beneficial. For example, use local people rather than consultants to design and implement activities, they know their ‘audience’ and better understand the local issues. Input from stakeholder groups can be helpful in creating a balanced view of issues. For example, a programme on fish conservation necessarily needs to understand the perspective of local fisheries in order to address and resolve conflicts through a problem-solving approach.
- Don’t be over-ambitious - consider the time and resources you have at your disposal – it is better to teach one simple thing effectively than risk a complex, time-consuming subject being misunderstood, potentially alienating learners.
- Carefully consider the transboundary aspects of environmental education programmes. In Prespa the vast majority of environmental issues have a transboundary dimension and require a corresponding cross-border approach. Ensure this aspect is clear and consider the adjustments needed to adapt programmes in the three different countries according to varying cultures, values and legislative environments.