

Introduction

by Tim Grant and Gail Littlejohn

Since 1991, we have had the pleasure of working with a great many inspired educators who have shared their innovative environmental education programs, strategies, and activities in the pages of *Green Teacher* magazine. This book is a selection of some of the best of those “green” teaching ideas for educators who are working with students in the middle school grades. Some are strategies for helping young people learn about local ecosystems and what is needed to protect them. Others explore what lifestyle changes may be required if we are to lessen our environmental impact and live more sustainably on the planet. Still others help students recognize global disparities in resource use and their own connections with other people and other species. Perhaps most important, many of the activities provide opportunities for young people to develop and reflect on their values and to consider how they might take an active role in solving environmental problems, both locally and globally. Virtually all of the more than 60 contributors have revised and updated their articles based on the comments and suggestions of reviewers. The result is a wide variety of up-to-date activities and teaching strategies designed to engage adolescents in learning the fundamentals of environmental citizenship in the 21st century.

But what exactly does it mean to “teach green”? While definitions and frameworks abound among environmental, global, and outdoor educators, most agree on a few fundamental principles:

Students should have opportunities to develop a personal connection with nature.

We protect what we care about, and we care about what we know well. If students are encouraged to explore the natural world — to learn about local plants and animals, to observe and anticipate seasonal patterns, to get their

feet wet in local rivers — they are more likely to develop a lifelong love of nature that will translate into a lifelong commitment to environmental stewardship.

Education should emphasize our connections with other people and other species, and between human activities and planetary systems.

If young people understand our global interdependence and common reliance on having a healthy environment, they are more likely to take steps to reduce global inequalities, preserve biodiversity, and work together to find ways of lessening our impact on the Earth’s life support systems.

Education should help students move from awareness to knowledge to action.

Awareness of environmental issues does not necessarily lead to action. When students have opportunities to act on environmental problems, they begin to understand the complexity of those problems, to learn the critical thinking and negotiating skills needed to solve them, and to develop the practical competence that democratic societies require of their citizens.

Learning should extend into the community.

Community partnerships and service learning projects provide authentic “real-world” reference points for classroom studies and help students develop a sense of place and identity while learning the values and skills of responsible citizenship.

Learning should be “hands-on.”

The benefits of hands-on learning are widely acknowledged among educators, and, during the past 20 years,

brain research has underscored its importance. Learning is a function of experience and the best education is one that is sensory-rich, emotionally engaging, and linked to the real world.

Education should integrate subject disciplines.

Environmental issues are complex and cannot be separated from social and economic issues. Addressing them requires knowledge and skills from all disciplines. Integrated learning programs, in which several subjects are taught simultaneously, often through field studies and community projects, help students develop a “big picture” understanding and provide opportunities for authentic learning.

Education should be future-oriented.

History helps us to understand the present, but to solve environmental problems we also need to think about the future. As British educator David Hicks has said, “The future is that part of history that we can change.” Students should have opportunities to explore alternatives to our current paths of development, to envision the kind of world they would like to live in, and to think realistically about what is needed to achieve it.

Education should include media literacy.

Through constant exposure to mass media, our mental environments can become just as polluted as the natural environment. Media studies help students understand how advertising and other mass media foster dissatisfaction by creating false “needs” and contribute to the depletion of resources by promoting consumption as a goal in itself.

Education should include traditional knowledge.

It is important for young people to realize that the scientific, social, and economic models of Western culture reflect a worldview that is not held by everyone. Across North America, many educators invite native Elders to share aboriginal perspectives on nature and ecology, exposing students to a worldview that recognizes the intrinsic value and interdependence of all living things.

Teachers should be facilitators and co-learners.

The teacher’s role is to facilitate inquiry and provide opportunities for learning, not to provide the “answers.” Teachers do not need to be experts to teach about the environment. The natural world is an open book for endless discovery by all. As co-learners alongside their students, teachers both model and share in the joy of learning.

While “green” teaching is appropriate for education at any level, environmental education is particularly well

suited to meeting the developmental needs of students in the middle school years. Young people between 10 and 14 years of age are experiencing major intellectual, physical, and emotional changes. During this time, the neural circuitry of the brain is strengthened and refined, and students become capable of more abstract and complex thinking. They are reshaping relationships and developing their identities. They are beginning to think beyond the personal sphere to the wider world. The National Middle School Association, in their 2003 report “This We Believe: Successful Schools for Young Adolescents,” identified several characteristics of education that successfully meets the special learning needs of this age group. They include opportunities for active leadership; partnerships between schools and communities; curriculum that is relevant, integrative, exploratory, and developmentally appropriate; and the use of multiple learning strategies and interdisciplinary team teaching. The hands-on, multi-sensory, multi-disciplinary nature of environmental education fits this bill exactly.

Whether you are just beginning or are an old hand at environmental education, we hope you will find many ideas in this book to help you to enrich your teaching. On the first page of each article, you will find a handy summary that indicates the subject connections, key concepts, skills to be developed, and, if appropriate, the time and materials needed to carry out activities. At the back of the book, a glossary defines terms that may be new to some readers, and a curriculum index serves as a quick guide to subject links. Matching national curriculum standards — both American and Canadian — for each article and activity can be found at the Green Teacher website <www.greenteacher.com>.

With more than 60 individual contributors, the book includes a diverse mix of approaches and styles and a wide spectrum of environmental topics. It does not, however, directly address two topics that are central in many environmental education programs: climate change and the greening of school grounds. In response to the anticipated impact of climate change in the coming decades, and to the current interest in creating outdoor classrooms, we have published two separate books, *Teaching About Climate Change* (2001) and *Greening School Grounds* (2001), each one a collection of the best articles and activities on those topics from *Green Teacher* magazine.

The environmental and social problems bedeviling humankind will not be solved by the same kind of education that helped create these problems. It is our hope that this book — and the companion books for the elementary and secondary school levels that we will produce in 2005 and 2006 — will inspire educators to take a leading role in helping the next generation to develop knowledge, skills, and values that will enable them to enjoy and share the Earth’s bounty while living within its means.