Introduction

by Tim Grant and Gail Littlejohn

ince 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 the best of those "green" teaching ideas for educators who work with young people of high school age. Virtually all of the 55 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. Some are strategies for teaching about local ecosystems and what is needed to protect them. Others explore lifestyle changes that 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 our connections with other peoples 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.

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 teenagers are encouraged to explore the natural world — to learn about local plants and animals, 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 peoples and other species, and between human activities and planetary systems.
We are connected to other peoples, other species and other lands though the food we eat, the clothes we wear, the items and materials we use every day, and our common reliance on a healthy environment. If young people understand these global interdependencies, they are more likely to take steps to reduce 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 supported by findings in brain research. 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 be future-oriented.
In order to solve environmental problems we need to think about the future, or what British educator David Hicks has called "that part of history that we can change." Teenagers should have opportunities to explore alternatives to our current paths of development, to consider the kind of world they would like to live in, and to think realistically about incremental steps that might be taken to achieve it.

Education should include media literacy.
With constant exposure to mass media, our mental environments can become just as polluted as the natural environment. Media studies can help students learn to

distinguish between fact and fiction in advertising, to recognize racial and gender stereotypes and to consider the difference between needs and wants.

Education should include traditional knowledge. It is important that young people become aware that our dominant scientific, social and economic models represent a worldview that is not held by everyone. Native elders can share aboriginal perspectives on nature and ecology, exposing students to a worldview that recognizes the intrinsic value and interdependence of all living things. Further, the stories of grandparents and other elders in our communities can help young people realize that the consumer society is a very recent development and that many people in the past enjoyed satisfying lives with fewer material possessions and less strain on the Earth's resources.

Teachers should be facilitators and co-learners. An educator'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 that invites endless discovery for all. As co-learners alongside their students, teachers both model and share in the joy of learning.

Education should integrate subject disciplines. The division of high school education into separate subjects reflects the Western philosophical tradition of dissecting knowledge into discrete branches and is maintained in large part to meet the entrance requirements of colleges and universities. The emergence of global environmental problems exposes the weaknesses of this subject-based learning. Environmental issues are complex, and addressing them requires holistic perspectives and knowledge and skills from all disciplines. Students need to be able to grasp the "big picture" of environmental problems if they are to find ways to effect change. Integrated learning programs in which students apply expertise from all of their subjects, often through field studies and community projects on issues of importance, offer one way to help students develop that big-picture understanding and provide opportunities for authentic learning.

Whether you are just beginning or are an old hand at environmental education, we hope you will find many ideas in this book to enrich your teaching. The Table of Contents indicates the subject areas with which each article is most closely aligned; and on the first page of each article is 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. With more than 50 individual contributors, the book presents a diverse mix of approaches and styles and a wide spectrum of environmental topics. It only tangentially addresses climate change, a topic now central to many environmental education programs. In response to the anticipated impact of climate change in the coming decades, we have published a separate book, *Teaching About Climate Change* (2001), which is a collection of some of the best articles and activities on the topic 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 middle school levels — will inspire educators to take a leading role in helping the next generation to develop the knowledge, skills and values that will enable them to enjoy and share the Earth's bounty while living within its means.