The bottom line for research of this kind, its "cash value," lies in its implications for practice, how it purports to help us achieve our goals. Here again, the book falls short. Foucault is cited to suggest that such analyses create "new forms of subjectivity," (p. 309); the authors claim that their strategy "makes visible the principles that intern and enclose consciousness, thus opening up different possibilities and alternatives" (p. 32). But the book offers no specific proposals for educational reform, nor are there examples of new "possibilities and alternatives" that have supposedly been opened up.

Every culture has a language, ways of thinking, forms of knowledge, and educational and other practices. It can always be said that these are limiting since they represent but a few of an infinite set of possibilities. Knowledge orders or disciplines our behavior as an intrinsic part of helping us achieve our goals; unguided by knowledge, action is free but ineffective. Language shapes our thinking, but does so in ways that a linguistic community has, over hundreds of years, found useful in achieving its goals. It goes without saying that the educational practices characteristic of Western culture could be different. Scholarly work which argued persuasively that practices from other cultures are better suited to our needs, or that developed hitherto unimagined alternatives having demonstrable value, would contribute to human betterment. It is unlikely, however, that such a contribution will ever be made by this program of "cultural history."

Gerald F. Smith
College of Business Administration
University of Northern Iowa
Cedar Falls, IA
U.S.A.

Grant, T. & Littlejohn, G. (Eds.). (2001). *Greening School Grounds: Creating Habitats for Learning*. Toronto: Green Teacher Magazine, (softcover),136 pages.

Greening School Grounds: Creating Habitats for Learning, edited by two experienced school teachers, Tim Grant and Gail Littlejohn, is a resource book on transforming a school ground into an environment that supports meaningful learning in all subjects. It includes chapters by more than 40 authors; many of them are North American pioneers in schoolyard greening. The book also involved 75 reviewers from

Australia, Brazil, Canada, Great Britain, and the United States. Over 200 individuals were involved in various stages of the book from proposing the book content to applying for funding, writing book chapters, reviewing, and critiquing. By many standards, this book is extraordinary; it is an exemplar for action research and collaboration – the essence for school change in the 21st century.

The book is organized in six sections. The "Perspectives" section reviews research on the intellectual, emotional, and social benefits of undertaking a school ground greening project; the section entitled "Getting Started" gives advice on organizing a project team, fund raising, inviting wide participation, step-by-step planning, and getting support. The "Greening the Grounds" section gives ideas on designing and implementing a variety of projects including tree planting, natural wetlands and retention ponds, a prairie, desert and dryland gardens, tree nursery, and even a rooftop garden. "Attracting Wildlife" gives ideas for designing and implementing projects related to creating habitats for wildlife like amphibians, birds, and butterflies. The "Site Enhancements and Safety" section provides advice on maintaining a green school ground such as beautification, sun shelters, safety and liability, and discouraging vandalism. The final section, "Learning in the Outdoor Classroom," gives practical suggestions and examples of making maximum use of the green school ground in all subjects including art, health and physical education, home economics, language arts, mathematics, music, science, and social studies.

> This book is not a dig-it-and-seed-it planning guide for schoolyard sodbusters, although it does offer much practical how-to advice. Rather, its aim is to guide teachers through all phases of a school grounds project, from developing a rationale that will win the support of principals and administrators, through redesigning the grounds, to tapping the rich potential of the schoolyard as a place for hands-on, multidisciplinary learning. (p. vi)

Many environmental education books are either solely activity-based without much attention to rationales, or solely pedagogy-oriented without many practical ideas for implementation. This book is unique in that it provides both; it not only reviews sound rationales for a schoolyard project, but also provides tried-out how-to guides for various projects for greening school grounds. The readers are reminded that a school ground is not a neutral place for student recess. As noted in the book reviewed, traditional playgrounds tend to discriminate along lines of gender, race, and personality. Violence, bullying, vandalism, and littering happen daily in schools. A greening playground can reduce up to 80% of "knock and bump" accidents and decrease juvenile delinquency considerably. The items above are only one example of the benefits for greening schoolyards. An art class

may have students drawing living things in a schoolyard garden, a language arts class may engage students in developing a tour guide for public access to their schoolyard, a science class may involve students in studying the biodiversity in their schoolyard, a computer class could involve students in creating a database for the species in their school garden, and a social studies class may engage students in studying the native species that were used extensively by early settlers and explore the role of the plants in pioneer life. Although plenty of examples of curriculum integration are given in various chapters of the book, which is indexed by subjects and grade levels on page 136, the ways of connecting curriculums to the greening schoolyard are endless.

Greening school grounds is not just a project to be completed in one or two years, the book promotes a systematic and process-oriented approach to greening school grounds for on-going and authentic learning. During the very early stage of planning, teachers of various grades in a school may get involved in deciding what habitats they would like to create so that every subject in every grade may potentially benefit. During various stages of designing and creating the habitat in the schoolyard, all grades may get involved in conducting activities relevant to the specific subjects. Once the project is completed, various curriculum-related projects can be conducted again. Also, on-going maintenance is required and should be integrated into subject learning. Thus, greening school grounds is an effective means for a whole school to act together for meaningful student learning. It is a process in which change is planned, implemented, and sustained. One key to sustaining this on-going process is collaboration. The book does a very good job in promoting the value of collaboration among teachers, students, school administration, parents, community, and so on. In fact, the book itself is a result of superb collaboration involving educators in four continents. Process and collaboration are two of the most valued characteristics of environmental education.

This book, rich in pedagogy and practical tips, is ideal for teachers and school administrators at any level who want to make a change in their school learning environment through greening their schoolyards. Although this book is specific about greening school grounds, the rationale and process of greening school grounds may be applied to any other types of environmental projects such as recycling, school noise control, school waste management, and so on. This book can also be a valuable resource for university science methods courses in any preservice teacher education programs.

Xiufeng Liu
Faculty of Education
University of Prince Edward Island
Charlottetown, Prince Edward Island
CANADA

Rose, E. (2000). *Hyper Texts: The Language and Culture of Educational Computing.* London, ON: The Althouse Press, (softcover), 210 pages.

Ellen Rose brings a background of instructional design, educational software development, technology-based instruction, and experiences as an instructor at the University of New Brunswick to bare on the language used to construct understandings of educational computing. Specifically, her intention in *Hyper Texts: The Language and Culture of Educational Computing* is to create a critical mindset that "prompts educators, parents, and others concerned with the use of computers ... to consider some of the assumptions and biases underlying all they read and hear on the subject" (p. xiii). Within this context she wishes us to see technological developments as a broad-based "cultural phenomena" (p. 190). To these ends Rose succeeds in a well-referenced and articulated book that avoids much of the techno-jargon and hyperbole often found in discussions of technology's place in education.

Rose discusses the binary oppositional arguments that control the current debate about the role technology is to play in education. In this debate, the opponents of computer technology use in schools and dire forecasts are placed along side the utopian predictions of advocates. Claims by techno-enthusiasts like Papert, Tascott, Gates, and others, that computer use in education will expand communication capacities, increase the ability to mold texts, improve