“Cultivating Minds: A Logo Casebook”
Sylvia Weir, Harper & Rowe

A Review by Barbara Johnson, Lecturer in Science Education, Monash University.

Cultivating Minds by Sylvia Weir is not just another expose’ on ‘How to Use Logo’ for the logo “buff”. It is much more, because of the author’s concern with some of the psychological aspects of the educational use of microcomputers across the school curriculum. I eagerly awaited this publication and have not been disappointed.

There is a message for all teachers, including special educators, to be found amongst the pages of this book, in spite of the fact that the author’s topic is an in-depth, critical analysis of how children are learning with Logo. A few relevant quotations reflect this applicability for all educators and children.

“It does not make sense to ask whether the computer is good or bad. What matters is the nature of the interaction between computer and child; what matters is the potential of the computer, used in a particular way, for cultivating children’s thinking.” (p.9)

“Mobilizing the visual imagination for academic purposes forms an important part of my use of the computer in the classroom.” (p.50)

“One important difference between ‘rote’ learning and ‘real’ learning is that, in the latter, the student learns how to select the appropriate problem-solving method for a particular kind of problem.” (p.75)

“The view an individual has of her own competence can play an enormously important role in the kinds of achievement goals she sets for herself, the way she responds to the challenge of learning new things, and the degree of persistence she shows in the face of obstacles.” (p.93)


This book explores the difficulties involved in creating effective learning environments, especially for children with special needs — the autistic, the physically handicapped, the cerebral palsied, and those with specific learning attributes such as spatial learning modes.

The author acknowledges that Logo and computers do not change the processes of learning by themselves. However, she argues that the computer provides the vehicle to release “trapped intelligence”, to provide previously denied success, empowerment, recognition, and fulfilment.

The research quoted in this book indicates how Logo, specifically, can be used to nurture a variety of learning styles. As a consequence the inadequacies of current teaching and testing strategies are highlighted by the author.

Sylvia Weir’s main aim in writing this book is to give teachers a “framework for thinking about their students’ thinking”, an aim she achieves most forthrightly through the theoretical analysis of the wide range of problem-solving styles displayed by the children in the case studies quoted.

The emphasis in the case studies on the learning styles of children with special needs is most illuminating as these children “provide a magnified slowed-down view of familiar processes”. This research will no doubt be of value to all educators.

In conclusion, this book is about research into the learning styles of children using Logo. However, the insights this research has revealed, the relevance of the author’s findings for a wider educational context, and her very readable writing style, especially the use of the female pronouns, make this book one of the most significant yet published on the educational impact of microcomputers. It should be compulsory reading for all teachers. What a shame it costs so much!!

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