

Whyte, J., Deem, R., Kant, L., & Cruickshank, M. (Eds.). *Girl Friendly Schooling*. London: Methuen, 1985, 252 pp., \$14.95 (paperback).

This collection of articles represents approximately one quarter of the original papers presented at a conference held in Manchester, England in 1984. The conference was called *Girl Friendly Schooling* and, like the edited proceedings, was divided into three sections:

- a. What makes schooling unfriendly to girls?
- b. What interventions make schooling more girl friendly?
- c. Where do we go from here?

In many ways the educational system in Britain is different from schooling in Canada. When it comes to gender issues, however, the observations are depressingly familiar. For a start, female students and teachers are seriously underrepresented in the areas of mathematics, science and technology there, as they are here. Even the introduction of science, technology and computer appreciation in the primary grades has made little impact. An important reason for this, as Patrick Orr points out, is that "unless there is informed and sensitive intervention by the teacher, boys are likely to take the dominant role in all these activities, both inside and outside the classroom" ("Sex Bias in Schools: National Perspectives," p. 14). To compound the problem, math and physical science teachers (who are predominantly male) are the least likely to favor equal opportunities. Also much of school science, including textbooks and resources, continues to be packaged in such a way as to appeal to boys rather than girls and further reinforces the notion that science is a masculine enterprise. A result of all this is that large numbers of young women become ineligible for a wide range of courses in further and higher education and for many jobs requiring a technical or scientific background (Whyte, Judith. "Girl Friendly Science and the Girl Friendly School"). And so the cycle continues.

Gender discrimination in the sciences is not all we have in common with the British educational system. As in Canada, there are still few women in senior positions in the schools. In a study sponsored jointly by a Local Education Authority (LEA), and the Equal Opportunities Commission (EOC), Hilda Davidson ("Unfriendly Myths about Women Teachers") found that women continue to be discriminated against for professional advancement based on the myth that they are not interested in promotion. Indeed, things are getting worse. Ten years ago, one quarter of secondary "headships" in England were held by women; today there are fewer than one in six (Patrick Orr, "Sex Bias in Schools: National Perspectives"). An analysis of legal cases also indicates that sex discrimination legislation has done very little to enhance the status of women teachers (Kant, Leslie. "A question of judgment"). These studies show just how deeply entrenched traditional gender role stereotyping remains. It is no wonder that "girls and boys are *more likely now than in the past* to acquire the idea from school that men are in charge, and women are natural subordinates" (Davidson, p. 191, my emphasis).

Resistance to change continues on the part of teachers as well as administrators. John Pratt, in a study examining teachers' attitudes toward gender discrimination, ("The Attitudes of Teachers"), found that almost half of his sample population of over 1850 secondary school teachers generally appeared unsympathetic toward equality of opportunity in schools. Many did so on the grounds that they and the educational system had greater responsibility to remain "neutral," (as if "neutrality" were somehow possible, let alone desirable, in this situation). Those teachers who *did* support equality of opportunity, while committed in principle, were often confused or uncertain as to how they could translate their principles into practice. What clearly doesn't work is excessive criticism of the teachers themselves who already face an inordinate number of demands. Nor does it work to foist anti-sexist initiatives on them "without preparation or time to reach an understanding of the issues . . ." (Taylor, Hazel. "INSET for Equal Opportunities in the London Borough of Brent", p. 106). Teachers who do want to make changes need constructive help.

Some of the articles address these concerns by outlining projects or strategies for those educators who are interested in change. In the area of science, for example, it helps to organize science clubs *for girls only* that can meet over lunch hours or after school and which cater to their specific interests and needs. Opportunities for students to interact with female role models (such as women scientists and mathematicians) are also important. In addition, teachers need to be encouraged to experiment with positive ways in which to dispel the notion of science as a masculine endeavor. One promising method in the classroom (which could be extended to science materials) is to place less emphasis on the physical sciences and more on topics of interest to girls, such as nature, the environment and medical science (Whyte, Judith. "Girl Friendly Science and the Girl Friendly School").

It is also important for teachers to be given the opportunity to plan and implement their own interventions as much as possible. One potentially effective way is through carefully planned inservice training and follow-up (Taylor, Hazel. "INSET for Equal Opportunities in the London Borough of Brent"). Another is for academics and researchers to involve teachers in a collaborative way in projects while minimizing the power relationships which usually characterize more traditional types of educational research (Witcher, Helene. "Personal and Professional: A Feminist Approach").

Little of the material covered in this collection of articles will come as a surprise to most readers. The data largely confirm what we already knew or strongly suspected. But in an indirect way the book raises an important issue with respect to gender inequality and education in Canada. It points to the fact that we tend to know more about the educational research carried out in Britain than we know about similar research in Canada. In part, this is the result of larger numbers of conferences held in Britain and their easy accessibility from most parts of the country. In addition, proceedings are often published, making the information widely available to interested parties. There are far fewer conferences in Canada, however, and attendance is more difficult, not only because of the size of the country, but also because of dwindling financial resources. Furthermore, collected papers are seldom published or widely distributed. Thus, it is with particular enthusiasm that many of us await the promised publication of *The Women and Education Conference* proceedings held June 12 to 14, 1986 at U.B.C. If we are to have continued access to findings in a Canadian context, this is a step in the right direction.

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Sloan, Douglas. (Ed.), *The Computer in Education: A Critical Perspective*. New York: Teachers College Press, 1984, pp. 129, \$11.95, (paperback).

The ten articles Douglas Sloan has collected in this book raise critical questions about the use of computers in education from the points of view of a journalist, a physicist, a teacher educator, an early childhood educator, a cognitive psychologist, an educational policy analyst, a philosopher of education, a sociologist of education, and from other perspectives that are harder to label. In his introduction, the editor states his view that while "the computer offers potential for human betterment," (p. 1) it is also "fraught with great dangers to the human being," (p. 1) and his contributors adopt the same stance, occasionally acknowledging the possibility of benefits (largely unspecified and unanalyzed), while raising all sorts of misgivings, apprehensions, and objections.

In his introductory chapter, Sloan not only shows that there is a need to raise critical questions about computers in education, he also offers "emotional rationality" (p. 4) as one perspective from which to ask critical questions and gives "What is the nature and quality of the sensory life encouraged by the computer?" (p. 5) as an example of a critical question suggested by that point of view. Although Sloan never directly answers this question, he does contend that present theories and practices in education with computers are dominated by mechanistic images, and he argues that "the development of a rich, healthy, living image-making capacity is the chief task" of education (p. 7).

John Davy's article "Mindstorms in the Lamplight" evaluates Seymour Papert's book *Mindstorms: Children, Computers and Powerful Ideas*, (New York: Harper & Row, 1980), and criticizes it on three grounds: "its tendency to experiential impoverishment, its uncritical 'head-start' philosophy, and its idolatry of powerful ideas and computer thinking" (p. 12). Davy explains "experiential impoverishment" by recounting Papert's description of a Logo investigation in which children made drawings of flowers, seagulls, etc. and by comparing its "autistic" (p. 12ff) quality with the rich smells, tastes, and sounds that children experience, for example, on a playground. Although he concedes that the Logo activity might be mentally rich, Davy is concerned about the "sheer impoverishment of life [and] the effects of simply sitting still for hours, absorbed in an artificial image world" (p. 15) which, he believes, are shared in watching television and programming in Logo. Unfortunately, Davy does not seem to appreciate any difference between the extreme mental passivity of most television viewing and the extreme mental activity of programming in Logo. In the article, Davy limited his discussion of Logo to the realm of "turtle graphics." Thus his comments refer to a small subset of the Logo