Equity: Fairness; recourse to principles of justice to correct or supplement law; system of law coexisting with and superseding common and statute law.

-Oxford English Dictionary

In many countries, there are no longer any formal barriers to education or careers based on sex, class, race, or religious beliefs. Educationally, females are not a typically disadvantaged group. They often do well at school and in many countries now have higher retention rates than males. Females are certainly capable of doing mathematics, although they are somewhat more likely than males to opt out of the most demanding mathematics courses, both in school and beyond, and to participate less frequently than males in educational and career areas for which strong mathematical qualifications are a prerequisite.

Mathematics, gender, and equity issues have attracted much research attention in recent years and are likely to continue to do so. It is a far cry, conceptually, from sex differences in mathematics learning (a popular topic two decades ago) to our current considerations of equity and diversity with respect to gender. The variety of paradigms, research techniques, and settings in which relevant research has been carried out has heightened our appreciation of the myriad of direct and indirect factors that may help explain, for example, the subtle differences in males’ and females’ attitudes to mathematics which continue to be reported in the literature or the persistent gender differences in participation in the most demanding and advanced mathematics courses, already referred to above.

In early work, there was much emphasis on recording gender differences in mathematics performance and participation in advanced mathematics courses. Likely explanations for the differences observed and the effectiveness of various intervention strategies soon began to be documented. That males’ experiences, behaviors, and beliefs should be accepted as the norm and that females should be provided with equal opportunities to attain the standards defined by males was rarely questioned. The removal of barriers and — if necessary — the resocialization of females were seen as paths to equity.

With the growth, in volume, sophistication, and stature, of feminist research came increased acceptance that females’ values and experiences, when different from those of males, should be considered of equal worth. Equity for females, it is now more commonly argued, may require a change of current social structures and a re-evaluation of popular value positions.

and norms. This debate allows the assumptions that underpin a range of initiatives aimed at achieving equity in mathematics to be re-examined. In this chapter, some common definitions of feminism found in the research literature are linked to the portrayal of gender issues in the popular press and compared with the format of different mathematics programs familiar to educators, parents, and students. Media reports are chosen as the linking vehicle because of their role in reporting the findings of research to their readers in simplified terms, their considerable penetration, and their capacity to mould and reinforce popular opinion, values, and expectations.

**GENDER DIFFERENCES IN MATHEMATICS LEARNING: ALTERNATE PARADIGMS**

It is convenient to consider, as a starting point, the four theoretical perspectives on gender differences in mathematics used in the International Organisation of Women and Mathematics Education (IOWME) Study Group (one of the strands organized as part of the 7th International Congress on Mathematical Education [ICME-7] held in Quebec in 1992): the intervention perspective, the segregation perspective, the discipline perspective, and the feminist perspective. At the time, Mura (1992) pointed to the inadequacy of these groupings for describing the theoretical models and initiatives to which they referred. The categories showed inevitable overlap. In particular the feminist perspective included a number of approaches based on conflicting assumptions, many of which could have been included in one of the other sections. Mura asked:

Why, I wondered, had only one of these four perspectives been labelled feminist? And why that particular one? Isn’t the issue itself of “gender imbalance” a feminist issue? And won’t all approaches seeking to redress the imbalance correspond to some kind of feminist analysis and practice? (p. 1)

Conversely, she could have asked: Why does the category “feminist perspectives” contain references to research and practices that are based on conflicting assumption about gender, gender imbalances, and the ideals to which we should aspire?

Many have set about the task of defining feminism in its various forms. Kristeva (1981) distinguished between “the first wave or egalitarian feminists demanding equal rights with men . . . the second generation, emerging after 1968, which emphasised women’s radical difference from men . . . [and the] new generation of feminists” (p. 187) which will have to reconcile the two previous approaches. The notion of first, second, and third generation feminists has also been adopted by Noddings:

In the first generation, women seek equality with men; this is the typical liberal position. In the second, they . . . reject uncritical assimilation into the male world . . . In the third, women critique what they sought and accomplished in the first two phases and seek solutions that arise out of a careful synthesis of old and new questions. (1990, p. 393)