Most teacher education programmes are designed to enhance mathematics learning experiences through the reform or development of teaching. Thus, an important question for any programme is: What is the role of the teacher in this programme?

There are three possible roles: pupil, participant, and partner.

1. Pupils play no part in determining the philosophy, objectives, design, or delivery of the programme. The programme is totally determined by those who lead it, who are seen to be in the best position to know, theoretically and practically, what is needed and the most appropriate ways to interpret it in the programme structure. All the power rests with the leaders and none with the pupils.

2. Participants are included partially in planning and delivery. Their views are sought on needs and expectations, and their feedback is used to modify and improve the programme. However, the leaders make the key decisions and largely control philosophy and design. The power still rests mainly with the leaders.

3. Partners are engaged in equal status with leaders in determining the programme. They may take different foci depending on the level of expertise and on the agreed objectives. The programme is democratically designed for the benefit of those taking part and capitalizes on the agreed strengths of all its participants. The balance of power may still be with the leaders, but the partner teachers play a significant role in determining their programme.

Of course, such a distinction of roles is a polarization, and programmes rarely fit exactly one of these patterns. Nevertheless, this polarization serves to address a key issue of how development or reform is related to ownership. Pupils have little ownership, participants some, partners a great deal. I see parallels with the three-fold framework for researcher-
practitioner cooperation in educational research presented by Wagner (1997). In this framework practitioners range from subjects to co-learning partners of the research.

Leaders of teacher education programmes tend to be educators and researchers in university or college departments. Their involvement in research and other academic affairs means that they operate at highly theoretical levels. They develop expertise in relationships between the theories of mathematics education and the practices which are supposed to result in enhanced mathematical experiences for pupils. Sadly, few of these educators teach mathematics to students in classrooms; consequently, there is little opportunity to interpret the practices they expect to be effective. Instead they work with teachers in a sincere effort to achieve enhanced learning environments.

The translation of theories of teaching for effective mathematical learning into practice is one stage removed from the research and theorizing from which the theories were initiated. In general, teachers are not interpreting their own theories into classroom practice, with all the complexity this entails; rather, educators are finding ways to enable teachers to interpret external research and theory into classroom practice. We should not be surprised that the results are not what we might hope, that reform principles and standards are not achieved according to our visions, that teachers, in the realities of schools and pressures of community and social practice, do not act in ways we try to promote. I situate myself firmly within this “we,” as I know, from many years of experience, the issues and tensions produced by these theory-practice interfaces with teachers somewhere in the middle.

Recently, David Hargreaves from the University of Cambridge (UK) offered a trenchant challenge to the educational research community (Hargreaves, 1996). He spoke of a gap between researchers and practitioners: “It is this gap . . . which betrays the fatal flaw in educational research. For it is the researchers, not the practitioners, who determine the agenda of educational research” (p. 3). He suggested that educational research as it is currently conceived neither reflects the reality of classrooms nor provides an “evidence-based corpus of knowledge” regarding effective classroom practice. Hargreaves’ comment caused a furore in the educational research community and a long-running debate about links between educational research and teaching development (see, for example, Hammersley, 1997).

Undoubtedly there is a gap, maybe a number of gaps, between teachers and educators, between teachers and researchers, between teachers and those who determine educational agendas. Teachers are treated as pupils,