V

Professional Development

18. Training IT Managers
19. Systems Development Philosophy
20. Professional Code of Ethics
21. The Future of Our Profession

While part IV focuses on improvement of the environments that shape systems development practice part V concentrates on improving individual competence by asking the following question: How can we develop individual skills and attitudes and support professional development in general? Below, I introduce four of my contributions that discuss this question (see table 3 and reference list in chapter 1).

We start on a practical level in chapter 18 by looking closer at experiences from a project to improve and change the professional competencies and attitudes of managers in a large IT organization. Action learning is used to design and conduct a large-scale in-house training project with the purpose of developing a new generation of IT managers that can collaborate more closely with user groups and more effectively explore the opportunities offered by new methods and tools. The project offers lessons on how to raise the professional level in specific organizational contexts.

The next three chapters address professional development on a more general level. I was brought up with the understanding that mathematics constituted *the* theoretical foundation for computing. But computing practices raise problems that encourage you to search for complementary reference disciplines. Chapter 19 discusses philosophy, or rather philosophizing, as a useful approach to understand systems development and train reflective practitioners. The discussion leads to a specific proposal for a curriculum in systems development philosophy, a proposal which we have later ex-

perimented with and implemented in various forms (Dahlbom *et al.* 1993).

In chapter 20 we turn to the ethical dimensions of our profession. We review ACM's code of ethics and professional conduct (Anderson *et al.* 1993) and compare it to the earlier code of 1972. We discuss different roles which codes of ethics can play: as professionalization strategies, as stating ethical positions, and as methodological frameworks for systems development. Based on this, we raise some fundamental questions that a debate on ethics for computer professionals must address.

Finally, in chapter 21, we discuss the future of our profession. We relate to the ongoing North-American debate that identifies a number of reasons for developing research and educational practices to respond more effectively to the needs of industry and practitioners. We agree that a change is needed, but we argue that the suggested recommendations are insufficient and propose to take a more radical position in which the *use* of IT, rather than technology itself, is the basis for our profession (see also Dahlbom 1996). This position is illustrated through a proposal for a new curriculum for educating computer professionals.