CONTENTS

9.1 Learning Principles.............................................. 105
9.2 Wanting to Learn—Motivation.............................. 105
9.3 Social Relationships........................................... 107
9.4 Physical Environment......................................... 107
9.5 Clarity........................................................................ 108
9.6 Relevance to the Future......................................... 109
9.7 Relevance to Previous Experience......................... 109
9.8 Structure.................................................................... 110
9.9 Active Learning..................................................... 112
9.10 Feedback.............................................................. 113
9.11 Speed....................................................................... 113
9.12 Some Methods for Improving Clarity and Structure.... 114
9.13 Handouts and Manuals........................................ 115
9.14 Some Methods for Encouraging Active Participation 115
9

Learning Principles and Teaching Techniques

In previous chapters the question of 'What should be learnt?' has been considered. Once this has been decided, teachers are likely to ask 'What is the best way of teaching this part of the course?'

To answer this question, the ways in which students learn must be understood. Then this understanding should be applied to the learning objectives so as to work out exactly what the teacher can do to help learning.

This chapter will first of all explain some of the ways in which students learn, that is, the Learning Principles. Then a number of more frequently used teaching techniques will be described.

9.1 LEARNING PRINCIPLES

The principles of learning are not based on an exact science like physics where the laws of physics allow one to predict very precisely how a beam of light will pass through a lens or a transistor will react to electric currents. On the other hand, teaching is not just an art. Effective teaching is based on principles. The principles do not state exactly how much will be learnt under different circumstances, instead they indicate which methods are likely to be more helpful. These principles have become established as a result of extensive research and experience. Yet they are still subject to debate, with some teachers arguing about whether one principle is more important than another.

So what follows is a very brief summary of some of the principles which have become established. Applying these principles will make it more likely (though not certain) that students will learn. Applying the principles will also help students to learn faster and more permanently.

It is important therefore for teachers to understand these principles and apply them to the courses which they teach.

9.2 WANTING TO LEARN—MOTIVATION

Students learn faster and more thoroughly when they want to learn

This is both entirely obvious and very important. The difficulty for the teacher is to create the conditions in which the students will want to learn.