No topic is more central to innovation and current practice in testing and assessment today than computers and the Internet. This timely publication highlights four main themes that define current issues, technical advances and applications of computer-based testing:

* Advances in computer-based testing -- new test designs, item selection algorithms, exposure control issues and methods, and new tests that capitalize on the power of computer technology.

* Operational issues -- systems design, test security, and legal and ethical matters.

* New and improved uses -- for tests in employment and credentialing.

* The future of computer-based testing -- identifying potential issues, developments, major advances and problems to overcome.

Written by internationally recognized contributors, each chapter focuses on issues of control, quality, security and technology. These issues provide the basic structure for the International Test Commission's new Guidelines on Computer-Based Testing and Testing on the Internet. The contributions to this book have played a key role in the development of these guidelines.