



Contents

Preface	vii
A Word of Thanks	x
1 Introduction: The Changing Context of Educational Testing	1
Section 1	
Basic Concepts Required for Generating Constructed- and Selected-Response Items	21
2 Cognitive Model Development: Cognitive Models and Item Generation	23
3 Item Model Development: Template-Based AIG Using Item Modelling	42
4 Item Generation: Approaches for Generating Test Items	66
5 Distractor Generation: The Importance of the Selected-Response Item in Educational Testing	81
6 Putting It All Together to Generate Test Items: Overview	101
7 Methods for Validating Generated Items: A Focus on Model-Level Outcomes	120

Section 2	
Advanced Topics in AIG	145
8 Content Coding: Challenges Inherent to Managing Generated Items in a Bank	147
9 Generating Alternative Item Types Using Auxiliary Information: Expanding the Expression of Generated Items	159
10 Rationale Generation: Creating Rationales as Part of the Generation Process	175
11 Multilingual Item Generation: Beyond Monolingual Item Development	186
12 Conclusions and Future Directions	206
Author Index	225
Subject Index	230