

Contents

Preface	v
Contents	ix
Contributors	xi

Theoretical Perspectives and Developmental Models

1	The Concept of Competence in Educational Contexts <i>Eckhard Klieme, Johannes Hartig, and Dominique Rauch</i>	3
2	Competencies for Successful Learning: Developmental Changes and Constraints <i>Marcus Hasselhorn</i>	23
3	A Model-Based Test of Competence Profile and Competence Level in Deductive Reasoning <i>Christiane Spiel and Judith Glück</i>	45

Psychometric Modeling

4	Psychometric Models for the Assessment of Competencies <i>Johannes Hartig</i>	69
5	Explanatory Item Response Models: A Brief Introduction <i>Mark Wilson, Paul De Boeck, and Claus H. Carstensen</i>	91
6	Linking Competencies in Horizontal, Vertical, and Longitudinal Settings and Measuring Growth <i>Alina A. von Davier, Claus H. Carstensen, and Matthias von Davier</i>	121
7	Reporting Test Outcomes Using Models for Cognitive Diagnosis <i>Matthias von Davier, Lou DiBello, and Kentaro Yamamoto</i>	151

Assessment Methods and Technology

- | | | |
|----|--|-----|
| 8 | Measuring Competencies: Introduction to Concepts and Questions of Assessment in Education
<i>Detlev Leutner, Johannes Hartig, and Nina Jude</i> | 177 |
| 9 | Introduction to the Computer-Based Assessment of Competencies
<i>Astrid Jurecka</i> | 193 |
| 10 | Adaptive Testing and Item Banking
<i>Theo J. H. M. Eggen</i> | 215 |
| 11 | Computer-Based Tests: Alternatives for Test and Item Design
<i>Joachim Wirth</i> | 235 |
| 12 | Computer-Based Assessment in Support of Distance Learning
<i>Gregory K. W. K. Chung, Harold F. O'Neil, William L. Bewley, and Eva L. Baker</i> | 253 |

Large-Scale Assessment for the Monitoring of Educational Quality

- | | | |
|----|--|-----|
| 13 | Assessment in Large-Scale Studies
<i>Tina Seidel and Manfred Prenzel</i> | 279 |
| 14 | Introduction of Educational Standards in German-Speaking Countries
<i>Eckhard Klieme and Katharina Maag Merki</i> | 305 |
| 15 | Causal Effects and Fair Comparison: Considering the Influence of Context Variables on Student Competencies
<i>Christof Nachtigall, Ulf Kröhne, Ulrike Enders, and Rolf Steyer</i> | 315 |
| 16 | Monitoring and Assurance of School Quality: Principles of Assessment and Internet-Based Feedback of Test Results
<i>Ingmar Hosenfeld</i> | 337 |