

1. Record Nr.	UNINA9910484456203321
Titolo	International perspectives on teacher knowledge, beliefs and opportunities to learn [[electronic resource]] : TEDS-M results // edited by Sigrid Blömeke, Feng-Jui Hsieh, Gabriele Kaiser, William H. Schmidt
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2014
ISBN	94-007-6437-5
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (581 p.)
Collana	Advances in Mathematics Education, , 1869-4918
Disciplina	510.71
Soggetti	Teaching Mathematics—Study and teaching International education Comparative education Educational policy Education and state Teaching and Teacher Education Mathematics Education International and Comparative Education Educational Policy and Politics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction: State of research, framework and design of TEDS-M: S. Blömeke, F.-J. Hsieh, G. Kaiser & W. H. Schmidt -- 2. Teacher knowledge at the end of teacher education: International perspectives -- 2.1 Teacher education effectiveness: Quality and equity of future primary teachers' mathematics content and mathematics pedagogical content knowledge: S. Blömeke, U. Suhl & G. Kaiser -- 2.2 Teacher education effectiveness: Quality and equity of future lower secondary teachers' mathematics content and mathematics pedagogical content knowledge: W. H. Schmidt et al -- 2.3 Teacher education effectiveness: Quality and equity of future primary and future lower secondary teachers' general pedagogical knowledge: J. König, S. Blömeke, L.

Paine, W. H. Schmidt & F.-J. Hsieh -- 2.4 In-depth analyses of different countries' responses to MCK and MPCK items: Why did Taiwan excel? A view on the difference within and between East and West: F.-J. Hsieh et al -- 3. Teacher beliefs at the end of teacher education: International perspectives -- 3.1 The cultural notion of teacher education: Future primary teachers' beliefs on the nature of mathematics: A. Felbrich, G. Kaiser & Ch. Schmotz -- 3.2 The cultural notion of teacher education: Future lower secondary teachers' beliefs on the nature of mathematics, the learning of mathematics and mathematics achievement: S.-J. Tang & F.-J. Hsieh -- 3.3 The cultural notion of teacher education: Comparison of lower secondary future teachers' and teacher educators' beliefs: T.-Y. Wang, F.-J. Hsieh, T.-T. Yiu -- 4. Relationship of teacher knowledge and beliefs: International perspectives -- 4.1 On the relationship of future primary and lower secondary teachers' knowledge and beliefs: W. H. Schmidt et al -- 4.2 Profiles of lower secondary teachers' knowledge and beliefs: A latent class analysis: S. Blömeke & U. Suhl -- 4.3 On the relationship of tested knowledge and self-reported perception of preparedness for teaching: A fuzzy field: S. Blömeke -- 5. Opportunities to learn in teacher education: International perspectives -- 5.1 Homogeneity or heterogeneity? Profiles of opportunities to learn in primary teacher education: S. Blömeke & G. Kaiser -- 5.2 Homogeneity or heterogeneity? Profiles of opportunities to learn in lower secondary teacher education: W. H. Schmidt et al -- 6 Effects of OTL on teacher knowledge and beliefs: International perspectives -- 6.1 What matters in primary teacher education? A comparison of background, selectivity and OTL effects on future teachers' mathematics content and pedagogical content knowledge: S. Blömeke, U. Suhl, G. Kaiser & Döhrmann -- 6.2 What matters in lower secondary teacher education? A comparison of background, selectivity and OTL effects on future teachers' content knowledge: W. H. Schmidt et al -- 6.3 Does school experience matter for future teachers' general pedagogical knowledge? J. König & S. Blömeke -- 7. Country studies -- 7.1 MCK and MPCK of primary and lower secondary teachers at the end of teacher education in Taiwan: Hot topics and pressing issues -- 7.2 MCK and MPCK of primary and lower secondary teachers at the end of teacher education in the USA: Hot topics and pressing issues: W. H. Schmidt et al -- 7.3 MCK and MPCK of primary and lower secondary teachers at the end of teacher education in Germany: Hot topics and pressing issues: G. Kaiser et al -- 7.4 MCK and MPCK of primary and lower secondary teachers at the end of teacher education in Singapore: Hot topics and pressing issues: K. Wong et al -- 8. Methodological reflections on the TEDS-M instruments and the nature of teacher knowledge -- 8.1 The conceptualization of MCK and MPCK in TEDS-M: Döhrmann, M., Kaiser, G. & Blömeke, S -- 8.2 Diagnosing teacher knowledge by applying multidimensional item response theory and multi-group models: S. Blömeke, R. Houang & U. Suhl -- 8.3 The conceptualization of indicators for mathematics teacher education: Hsieh, F.-J., Law, C.-K., Shy, H.-Y., Wang, T.-Y., Hsieh, C.-J., Tang, S.-J -- 9. Conclusions: What we have learned and future challenges.

Sommario/riassunto

This book presents a collection of papers that examine the TEDS-M data results in terms of knowledge and beliefs, the relationship between opportunities to learn during teacher education and outcomes, as well as the relationship between the future teachers' background and teacher education outcomes. TEDS-M, under the auspices of the International Association for the Evaluation of Educational Achievement (IEA), carried out the first-ever study to examine primary and lower secondary mathematics teachers' competence in their last year of teacher education. In particular, it analyses the relationship between

teacher education policies, practices and outcomes. Analysis of these complex relationships indicates both global and regional patterns of similarity and difference and identifies country-specific strengths and weaknesses, thus enabling national policy makers to improve the effectiveness of their systems within their own cultural norms and values. Specifically, through examination and analysis of the TEDS-M data, the papers in this book:

- add to the body of theory through reflecting on teacher knowledge conceptions, the relationship between teacher knowledge and beliefs, and cultural influences on the assessment and development of teacher knowledge and beliefs;
- illustrate the potential and ways of exploring possible connections between teacher preparation and student achievement; and
- discuss policy implications for evaluating teacher preparation and program quality.

The book therefore provides a unique insight into teacher training systems and competences around the world and will be an invaluable resource for researchers, government policy makers and teacher trainers everywhere.
