

1. Record Nr.	UNISA996423847703316
Titolo	Diversity Dimensions in Mathematics and Language Learning : Perspectives on Culture, Education and Multilingualism // ed. by Annemarie Fritz, Erkan Gürsoy, Moritz Herzog
Pubbl/distr/stampa	Berlin ; ; Boston : , : De Gruyter, , [2021] ©2021
ISBN	3-11-066194-2
Descrizione fisica	1 online resource (XV, 417 p.)
Collana	DaZ-Forschung [DaZ-For] ; ; 24
Soggetti	SCIENCE / General
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Frontmatter -- Foreword -- Introduction -- Acknowledgments -- Contents -- I Perspectives on mathematics and language of different disciplines -- The diversity of linguistic references to quantities across the world's cultures -- Language and mathematics: How children learn arithmetic through specifying their lexical concepts of natural numbers -- A neuropsychological perspective on the development of and the interrelation between numerical and language processing -- Culture and language: How do these influence arithmetic? -- Exploiting the epistemic role of multilingual resources in superdiverse mathematics classrooms: Design principles and insights into students' learning processes -- II Language learning and mathematics development -- Ties of math and language: A cognitive developmental perspective -- The relative importance of "parental talk" as a predictor of the diversity in mathematics learning in young children -- Number words, quantifiers, and arithmetic development with particular respect of zero -- III Multilingualism and mathematical learning -- Directionality of number space associations in Hebrew-speaking children: Evidence from number line estimation -- Exact number representations in first and second language -- Identifying math and reading difficulties of multilingual children: Effects of different cut-offs and reference groups -- IV Vision, hearing, and speech language impairments -- Numerical competencies in preschoolers with language difficulties --

Disentangling the relationship between mathematical learning disability and second-language acquisition -- Blindness and deafness: A window to study the visual and verbal basis of the number sense -- V Language as learning resource in school -- Reading and writing words and numbers: Similarities, differences, and implications -- The assessment of mathematics vocabulary in the elementary and middle school grades -- Language issues in mathematics word problems for English learners -- Fifth-grade students' production of mathematical word problems -- The influence of reading comprehension on solving mathematical word problems: A situation model approach -- Supporting teachers to scaffold students' language for mathematical learning -- About the editors -- List of authors

Sommario/riassunto

Extensive research is available on language acquisition and the acquisition of mathematical skills in early childhood. But more recently, research has turned to the question of the influence of specific language aspects on acquisition of mathematical skills. This anthology combines current findings and theories from various disciplines such as (neuro-)psychology, linguistics, didactics and anthropology. Wie hängen sprachliche und mathematische Entwicklung zusammen? Dieser Frage wird derzeit mit großem Interesse aus unterschiedlichen Perspektiven nachgegangen. Dieser Sammelband vereint Erkenntnisse aus Psychologie, Neurowissenschaften, Mathematikdidaktik, (Psycho-)Linguistik und Mehrsprachigkeitsforschung. Der interdisziplinäre Ansatz bietet einen umfassenden Blick auf den aktuellen Forschungsstand, dargestellt von national und international renommierten Forschenden. Das Buch gliedert sich in drei Teile. Der erste Teil "Modelle und Theorien" fasst theoretische Überlegungen zusammen und stellt Strukturen für Forschung und Praxis bereit. Dieser Teil dient dazu, den Grundstein für die anderen Teile sowie für zukünftige Forschung zu legen. Der zweite Teil "Kindergartenalter" sowie der dritte Teil "Grundschulalter" decken empirische Befunde über die Korrelation zwischen Sprache und mathematischem Lernen in der jeweiligen Altersgruppe ab. Ein besonderer Fokus liegt hierbei auf dem Aspekt der Mehrsprachigkeit. Damit bietet dieser Sammelband eine große Bandbreite fachspezifischen Wissens für Bildungswissenschaftler*innen, Lehramtsstudierende, Psycholog*innen und Forschende zur Mehrsprachigkeit.
