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Nota di contenuto	Front Matter -- Copyright page -- Preface -- Acknowledgements -- List of Figures and Tables -- Notes on Contributors -- Teacher Recruitment in the STEM Content Areas -- Using STEM Internships to Recruit Noyce Scholars into Elementary Education / Jacqueline Leonard , Scott Chamberlin , Saman A. Aryana , Marina Lazic and Anne Even -- Stronger Together / Jennifer A. Eli , Rebecca H. McGraw , Cynthia O. Anhalt and Marta Civil -- Noyce at Vanderbilt / Heather J. Johnson , Teresa K. Dunleavy and Nicole M. Joseph -- Rise, Defy, Teach, and Lead / Justina Ogodo , Karen E. Irving , Patti Brosnan and Lin Ding -- Teacher Preparation in STEM Education -- Developing a Culturally and Linguistically Responsive Teacher Identity / Belinda P. Edwards , Desha Williams , Karen Kuhel and Adrian Epps -- Supporting Noyce Scholars' Teaching of Mathematics in Rural Elementary Schools / Dorothy Y. White , Jacqueline Leonard , Michelle T. Chamberlin and Alan Buss -- Building Computational Thinking / Laurie O. Campbell and Samantha Heller -- Teacher Preparation Programs, Teacher Diversity, and STEM /

Ryan Ziols -- World Class STEM Faculty / Karen E. Irving , Anil K. Pradhan and Sultana N. Nahar -- STEM Teacher Mentoring and Retention -- Negotiating Structures and Agency in Learning to Teach Science for Equity and Social Justice / David Segura , Maria Varelas , Daniel Morales-Doyle , Brezhnev Batres , Phillip Cantor , Diana Bonilla , Angela Frausto , Carolina Salinas and Lynette Gayden Thomas -- Exemplary Mathematics Teachers for High-Need Schools / Lillie R. Albert -- Becoming Equity-Minded STEM Teachers through Mentoring and Internship Experiences / Barnes-Johnson Joy , Saman A. Aryana and Jacqueline Leonard -- Retention through Community Building / Andrea C. Burrows -- Seeking to Stay / Lora Bartlett and Alisun Thompson -- The Teacher Induction Network / Joshua A. Ellis -- Back Matter -- Index.

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#### Sommario/riassunto

There is a critical need to prepare diverse teachers with expertise in science, technology, engineering, and mathematics (STEM) with the skills necessary to work effectively with underrepresented K-12 students. Three major goals of funded STEM programs are to attract and prepare students at all educational levels to pursue coursework in the STEM content areas, to prepare graduates to pursue careers in STEM fields, and to improve teacher education programs in the STEM content areas. Drawing upon these goals as the framework for Recruiting, Preparing, and Retaining STEM Teachers for a Global Generation , the 15 chapters contained herein highlight both the challenges and successes of recruiting, preparing, and sustaining novice teachers in the STEM content areas in high-need schools. Recruiting, retaining and sustaining highly-qualified teachers with expertise in STEM content areas to work in hard-to-staff schools and geographic areas are necessary to equalize educational opportunities for rural and urban Title 1 students. High teacher turnover rates, in combination with teachers working out-of-field, leave many students without highly-qualified teachers in STEM fields. Most of the chapters in this volume were prepared by scholars who received NSF funding through Noyce and are engaged in addressing research questions related to these endeavours. Contributors are: Lillie R. Albert, Cynthia Anhalt, Saman A. Aryana, Joy Barnes-Johnson, Lora Bartlett, Brezhnev Batres, Diane Bonilla, Patti Brosnan, Andrea C. Burrows, Alan Buss, Laurie O. Campbell, Phil Cantor, Michelle T. Chamberlin, Scott A. Chamberlin, Marta Civil, Lin Ding, Teresa Dunleavy, Belinda P. Edwards, Jennifer A. Eli, Joshua Ellis, Adrian Epps, Anne Even, Angela Frausto, Samantha Heller, Karen E. Irving, Heather Johnson, Nicole M. Joseph, Richard Kitchen, Karen Kuhel, Marina Lazic, Jacqueline Leonard, Rebecca H. McGraw, Daniel Morales-Doyle, Sultana N. Nahar, Justina Ogodo, Anil K. Pradhan, Carolina Salinas, David Segura, Lynette Gayden Thomas, Alisun Thompson, Maria Varelas, Dorothy Y. White, Desha Williams, and Ryan Ziols.

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