

FOREWORD

For over 12 years, the National Math & Science Initiative (NMSI) has partnered with the UTeach Institute. We have been involved in the replication of the program, which is now in over 56 colleges and universities throughout the nation, including the 11 Historically Black Colleges and Universities (HBCUs) that recently joined. I was fortunate to get involved with the program through my service on the board of directors of NMSI and now as CEO. It has been my privilege to work with its founders Dr. Michael Marder, Dr. Mary Ann Rankin, the staff, and many of the university program directors through the years. NMSI is proud of our partnership that has resulted in the acceleration of the replication and scaling of the program.

UTeach is an innovative university-based preparation program whose mission is to increase the number of qualified STEM teachers in this country. Without a doubt, this has been one of the most successful teacher preparation programs, with the graduation of over 5000 education professionals since the inception of the program. These graduates stay in teaching longer, improve student performance in math and science, thereby increasing the number of students going into STEM careers. Building the STEM teacher pipeline is so critical to addressing the lack of students going into STEM because it ultimately helps build a workforce that ensures innovation, economic prosperity and competitiveness of the U.S.

This book recounts the founding, development and replication of the UTeach program since its inception at the University of Texas at Austin in 1997. The collaboration of Joanne Goodell and Selma Koc has resulted in a book devoted to STEM education, capturing the knowledge of the many lessons, teachings and experience of the UTeach program. The annual meetings and conferences of the directors have resulted in the amalgamation of knowledge that is described in this book. These convenings have also resulted in the formation of a community of STEM educators called UTeach STEM Educators Association (USEA), a group involved in the evolution of the model into one of the most successful teacher preparation programs in the country. Nearly 70% of UTeach graduates are teaching in K-12 schools, with the majority serving low-income populations. When it is so important for the nation's future to ensure that our students are adequately prepared, qualified teachers are the great lever for success. The fact that UTeach graduates remain in the classrooms cannot be underscored enough.

The goal for this book is to facilitate the dissemination of how different institutions have implemented and sustained the UTeach model, including innovations in the curriculum, the development of assessment instruments, and research on program effectiveness.

From my own work through the Harris Foundation and Institute for over twenty-five years, and now with NMSI, I know the merits UTeach's focus of project-based learning on student outcomes STEM learning and their attitudes towards STEM. I am a true believer in the power and impact of the program on not only the education of teachers but the students and communities they serve.

*Bernard A. Harris Jr., MD, MBA,
CEO, National Math & Science Initiative
Founder, The Harris Foundation & Institute*