

# Preface

By Timothy D. Kanold

In the early 1990s, I had the honor of working with Rick DuFour at Adlai E. Stevenson High School in Lincolnshire, Illinois. During that time, Rick—then principal of Stevenson—began his revolutionary work as one of the architects of the Professional Learning Communities at Work™ (PLC) process. My role at Stevenson was to initiate and incorporate the elements of the PLC process into the K–12 mathematics programs, including the K–5 and 6–8 schools feeding into the Stevenson district.

In those early days of our PLC work, we understood that grade-level or course-based mathematics collaborative teacher teams provided us a chance to share and become more transparent with one another. We exchanged knowledge and reflected on our growth and improvement as teachers in order to create and enhance student agency for learning mathematics. As colleagues and team members, we taught, coached, and learned from one another.

However, we had one major secret we kept from one another. We did not know our mathematics *homework and grading* story. We did not have much clarity on our homework and grading routines or why we were so secretive about those routines. Moreover, none of us could actually tie our routines to any actual evidence of student achievement and improved student learning in mathematics.

We did not initially understand how the work of our collaborative teacher teams—especially in mathematics at all grade levels—when focused on the right homework and grading actions, could erase inequities in student

learning that the wide variance of student learning opportunities our private decision making caused.

Through our work together, we realized that, without intending to, we often were creating massive gaps in student learning because of our isolation from one another; our isolated decisions about the specifics of homework assignments and grading components were a crushing consequence in a vertically connected curriculum like mathematics.

We also could not have anticipated one of the best benefits of working in community with one another: the benefit of belonging to something larger than ourselves. There is a benefit to learning about various teaching and grading strategies from each other, *as professionals*. We realized it was often in community we found deeper meaning to our work, and strength in the journey as we solved the complex issues we faced each day and each week of the school season, *together*.

As we began our collaborative mathematics work at Stevenson and with our feeder districts, we discovered quite a bit about our mathematics teaching. And remember, we were doing this work together in the early 1990s—well before the ideas of transparency in practice and observing and learning from one another in our professional work became as popular as they are today.

We discovered that if we were to become a professional *learning* community, then experimenting together with effective practices and routines needed to become our norm. We needed to learn more about the mathematics curriculum, the nature of the daily mathematics tasks we were choosing, and the types of

lessons and homework we were developing and using. And, we realized we needed to do so *together*.

The idea of collaborative focus to the real work we do as mathematics teachers is at the heart of the *Every Student Can Learn Mathematics* series. The belief, that if we do the right work together, then just maybe every student can be inspired to learn mathematics, has been the driving force of our work for more than thirty years. And thus, the title of this mathematics professional development series was born.

In this series, we emphasize the concept of *team action*. We recognize that some readers may be the only members of a grade level or mathematics course. In that case, we recommend you work with a colleague a grade level or course above or below your own. Or, work with other job-alike teachers across a geographical region as technology allows. Collaborative teams are the engines that drive the PLC process.

A PLC in its truest form is “an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve” (DuFour, DuFour, Eaker, Many, & Mattos, 2016, p. 10). This book and the other three in the *Every Student Can Learn Mathematics* series feature a wide range of voices, tools, and discussion protocols offering advice, tips, and knowledge for your PLC-based collaborative mathematics team.

The coauthors of the *Every Student Can Learn Mathematics* series—Bill Barnes, Matt Larson,

Jessica Kanold-McIntyre, Sarah Schuhl, and Mona Toncheff—have each been on their own journeys with the deep and collaborative work of PLCs for mathematics. They have all spent significant time in the classroom as highly successful practitioners, leaders, and coaches of K–12 mathematics teams, designing and leading the structures and the culture necessary for effective and collaborative team efforts. They have lived through and led the mathematics professional growth actions this book advocates within diverse K–12 educational settings in rural, urban, and suburban schools.

In this book, we tell our mathematics homework and formative grading story. It is a story of developing high-quality homework assignments for your students, scoring those assignments with fidelity, and helping students use those assignments for formative learning. It is also a K–12 story about formative grading processes in mathematics that, when well implemented, will bring great satisfaction to your work as a mathematics professional and result in a positive impact on your students.

We hope you will join us in the journey of significantly improving student learning in mathematics by leading and improving your homework and grading story for your team, your school, and your district. The conditions and the actions for adult learning of mathematics *together* are included in these pages. We hope the stories we tell, the tools we provide, and the opportunities for reflection serve you well in your daily work in a discipline we all love—mathematics!