

IN MEMORIAM

**“I am a teacher. That’s what I’ve done almost
all my life. I teach.”**

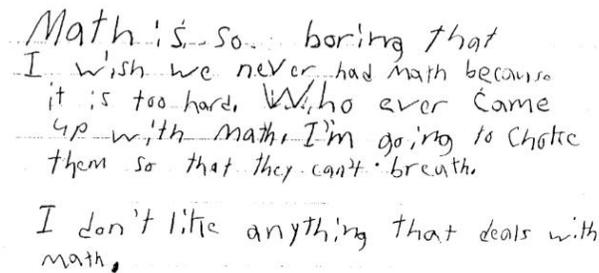
Dr. Carol E. Malloy
(June 6, 1943–January 17, 2015)

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Math is so boring that
I wish we never had math because
it is too hard. Who ever came
up with math. I'm going to choke
them so that they can't breathe.

I don't like anything that deals with
math.

These words, handwritten by a middle-school student, sat framed on Dr. Carol E. Malloy’s desk until her retirement from the University of North Carolina at Chapel Hill (UNC) in 2009. The words reminded her of how many students feel and perceive mathematics. Dr. Malloy stated, “All students have the ability to learn if given the opportunity. ...That student did not have the opportunity” (Hobbs, 2009, ¶3). Opportunities to learn, access, and equity are themes found throughout

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Dr. Malloy's work. In an interview upon her retirement, she reflected on the field of mathematics education, stating:

The issues related to opportunity have come to the surface and are being discussed, though we haven't quite figured out how to make universal changes in opportunity and access. The mathematics education community is broader and more diverse now, which I think is extremely important. (Hobbs, 2009, ¶10)

Dr. Malloy's contribution is one of the primary reasons why "the mathematics education community is broader and more diverse."

Dr. Carol E. Malloy was a mathematics teacher, teacher educator, and mentor whose career spanned more than four decades. Reflecting on her work gives us the opportunity not only to speak to the tremendous impact Dr. Malloy has had on the field, but also to share some personal memories of the impact she had on those of us in the field who were privileged to spend time with her as mentees, colleagues, teachers, and friends. Dr. Malloy's vision, courage, and commitment made issues of equity in mathematics education visible to and relevant for all. While there is still much work to be done, her work has established that equity is not peripheral to efforts to improve mathematics teaching and learning but rather at the heart of this work.

It has been said that Dr. Malloy communicated to her students the importance of not trying to be "the best" but of doing "their best" (M. Malloy, personal communication, January 24, 2015). It is with this admonition in mind that we strive for our best. For Dr. Malloy, striving to be our best meant having a plan of action and being thoughtful and purposeful in our actions. Her son, Michael Malloy, described a central lesson she taught us all by quoting her, "If you do not have a plan to succeed, you have a plan to fail" (Hobbs, 2015, ¶6). Dr. Malloy's career and accomplishments represent a model plan for success in mathematics education.

Teaching

Dr. Malloy was first and foremost a teacher of mathematics and was a model for not only how to scaffold deep learning but also how to engage in lifelong learning. She taught more than twenty years as a middle and high school mathematics teacher in four urban school districts in Pennsylvania, Florida, and Wisconsin. It was in her work as a teacher that she established herself as a champion for the brilliance and resiliency of all learners—especially African American learners—to understand and excel in mathematics. She marked her seventh year of teaching high school as the year she became a "real teacher":

I started going to see parents in their homes, writing notes to them and calling when their children did well and also when I needed help with different issues with students.

...I engaged in extra-curricular activities with the students, played on the teachers' basketball team and attended many after-school activities. It changed the whole way I taught. That was the year I became a real teacher. My students and I became a part of the same learning community. (Hobbs, 2009, ¶12)

As a teacher, Dr. Malloy prioritized building conceptual understanding by drawing on her knowledge of mathematics and knowledge of students as thinkers. In all of her work, she aimed to demonstrate both the beauty of mathematics and the students' ability to make sense of mathematics. For example, in her article "Perimeter and Area through the van Hiele Model" (Malloy, 1999b) she used what appeared a simple geometry task to illustrate significant pedagogical issues related to allowing all students access to meaningful mathematics learning. Dr. Malloy's teachings demonstrated that while "teachers motivate and facilitate learning, they must recognize and use students' characteristics and behaviors of resiliency to encourage intrinsic motivation and to help students become more responsible about learning mathematics" (Malloy & Malloy, 1998, p. 314). She believed that promoting resilient processes in students is critical to the success of students in learning mathematics.

Dr. Malloy's influence as a teacher was not limited to her time as a high school teacher. Her focus on mathematics was supported in her work for McGraw-Hill Education in which she authored middle grades and high school mathematics textbooks. In 1997, UNC recognized her excellence in teaching by awarding her the Favorite Faculty Award.

Scholarship

Dr. Malloy's scholarship and teaching on access and equity is well noted in mathematics education and school reform. Her dissertation research is an example of how she integrated mathematics and issues of equity. In this work, she examined the problem-solving characteristics, strategy selection and use, and verification actions of 24 African American eighth-grade students. She stated her dissertation was "motivated by the lack of empirical research available about how African American students solve mathematics problems and by the uneven achievement reports for these students" (Malloy, 1995, p. iii). Dr. Malloy's dissertation was significant at the time because its focus on African American students as learners of mathematics was unprecedented. This work helped pave the way for researchers with similar interests to position African American learners as the focal point of study rather than taking on an achievement lens focusing on between-group gaps and comparisons. Her body of work communicates the implicit message that African American students are worth studying in their own right and comparisons to other groups of learners are not always necessary or instructive when it comes to

understanding how to promote success for those served poorly by traditional schooling practices.

Understanding African American students' mathematical learning was a central theme through much of Dr. Malloy's work. She brought light to the fact that "mathematics educators have little knowledge of how African American students perceive themselves as mathematics students, how they approach mathematics, or the role of culture in their perception and mathematics performance" (Malloy, 1997, p. 23). Dr. Malloy's pioneering work precipitated a still-growing knowledge base on African American learners of mathematics. During the almost twenty years since her dissertation, there has been a significant increase in research documenting and examining the experiences of African American students in mathematics. Much of the increase in the knowledge base is built on the foundations set forth by Dr. Malloy, including the work of scholars whose dissertations she chaired (Berry, 2003; Eatmon, 2007; Hill, 2008; Noble III, 2009), but her influence is not limited to her own students. Mathematics education scholars far and wide have looked to Dr. Malloy and her work as seminal to the study of African American children in mathematics. One can argue that Dr. Malloy's work has inspired and informed a new generation of researchers who have increased the knowledge base about African American learners of mathematics and who reject theories and discourses that suggest African American learners are deficient or inferior to other learners.

A review of Dr. Malloy's scholarship provides the mathematics education community with a framework for how to include African American students (see, e.g., Malloy, 1997; 1999a; 2000; 2004; 2008a; 2008b). She suggested: (a) providing teachers with training to develop positive student-teacher interactions; (b) facilitating positive peer interaction in multiracial settings that promote communication; (c) mentoring of students and social support systems; (d) providing additional learning opportunities through co-curricular activities; (e) collaborating with community-based agencies; (f) offering career exploration, appropriate course selections, and preparation for postsecondary schooling; and (g) providing students with access to high quality mathematics teaching, curricula materials, and opportunities to learn (Malloy, 1997). She stated that these "recommendations can be implemented for all students; however, they are particularly important to the mathematically underserved and underrepresented African American student populations" (p. 23).

Service

Dr. Malloy was a valued, long-term servant-leader in the mathematics education community. She served on the Board of Directors for the National Council of Teachers of Mathematics (NCTM) and as president of the Benjamin Banneker Association (BBA). Additionally, she served on the writing team of

NCTM's (2000) *Principles and Standards for School Mathematics* and as lead of the revision to the Standards for Teachers of Mathematics for the National Board for Professional Teaching Standards (NBPTS). She was lead editor for the NCTM book series *Mathematics for Every Student: Responding to Diversity* (2009) and many others. Among Dr. Malloy's numerous service awards she received the BBA Distinguished Member Award in 2003, the West Chester University (PA) Distinguished Alumna Award in 2004, the first annual UNC-Chapel Hill School of Education Black Alumni Impact Award in 2010, the BBA Lifetime Achievement Award in 2013, the NCTM Lifetime Achievement Award in 2013, and the UNC School of Education Distinguished Leadership Award in 2014.

As important as service at the national level was to Dr. Malloy, she also recognized the opportunity and responsibility she had as a faculty member to mentor students at all levels. UNC recognized Dr. Malloy's outstanding mentoring by awarding her the UNC Faculty Mentoring Award in 2009. Each of us (i.e., the authors of this memorial tribute) benefitted from her willingness to take an interest in not only our academic growth but also our personal growth and well-being. We each have memories of times Dr. Malloy took notice of a change in demeanor and made time to listen to what might be going on in our lives. For her, mentoring meant personal engagement with the whole person. In an interview upon her retirement in 2009, Dr. Malloy glanced across a multitude of photos of former students that fill her office and stated: "This is my life. I'm so fortunate to have had these relationships. I look at these kids and think to myself, 'Oh, my goodness. They are a legacy that would make anyone extremely proud. They're wonderful!'" (Hobbs, 2009, ¶19).

Lessons Learned

The field of mathematics education is better because of Dr. Malloy's tireless dedication to ensure it would be—not for professional gain, but because of a personal love for people and a drive to do what is right for the students who most need access to opportunities and support to succeed with mathematics. Those of us who humbly follow in her legacy must keep in mind that still too many students "don't like anything that deals with math." We must therefore act upon our responsibility to further efforts to expand quality mathematics education for all students. It is our intent and our hope that each of us do right by our mentor and remain focused on what matters most in our work as mathematics educators—understanding and respecting the students we serve and those who are served by the teachers with whom we have the privilege to interact.

For more than four decades, the mathematics education community has felt Dr. Malloy's strong presence as a role model and an exemplar of the power of sincerity, grace, persistence, and action. She leaves a legacy of excellence. Included

in the appendices are abbreviated examples of this legacy with a listing of some of her publications (Appendix A) and doctoral dissertations she chaired (Appendix B).

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APPENDIX A
 Bibliography for Dr. Carol E. Malloy
 (Listed Chronologically)

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APPENDIX B

Dissertations Chaired by Dr. Carol E. Malloy (Listed Chronologically)

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