City of Philadelphia

Council of the City of Philadelphia
Office of the Chief Clerk
Room 402, City Hall
Philadelphia

(Resolution No. 170598)

RESOLUTION

Honoring and Recognizing Rachel Steinig on Her Forthcoming Book "Math Renaissance: Growing Math Circles, Changing Classrooms, and Creating Sustainable Math Education."

WHEREAS, Rachel Steinig is a rising freshman and Benjamin Franklin Scholar at the University of Pennsylvania as well as an activist and author who is passionate about bringing more peace, and justice into the world; and

WHEREAS, In 2015-16, both Mayors Nutter and Kenney appointed Steinig to the Philadelphia Youth Commission, where she currently serves as the commission's vice chair. In addition, Steinig currently serves as the Chair of the Youth Commission's Policy Committee, where she coordinates the review of legislation that impacts the lives of youths in the City of Philadelphia; and

WHEREAS, Steinig is also a founding member of the Philadelphia Diversity Conference, an annual diversity conference for high school students that addresses issues such as immigration, cultural identity, and activism. She is also a program committee member of the Interfaith Peace Walk, an annual Philadelphia event that strives to bring people of all different backgrounds together; and

WHEREAS, Steinig's article "Stop Ruining Math! Reasons and Remedies for the Maladies of Mathematics Education" was published in the Journal of Humanistic Mathematics, a peer-reviewed mathematical journal. Steinig also leads inquiry-based, collaborative math workshops, called Math Circles, which help students discover the joy of mathematics. In 2016, she was a fully-funded presenter at the Math Circles' "On the Road Conference" of the National Association of Math Circles held at New York University; and

WHEREAS, Steinig is the co-author of the forthcoming book "Math Renaissance: Growing Math Circles, Changing Classrooms, and Creating Sustainable Math

Education." This book is built upon the assumption that math is ruined for some people and taught in ways that cause students to dislike math and contains alternating chapters by a high-school student and a math-circle leader; and

WHEREAS, In the book, Steinig gives an overview of the range of current mathematics pedagogy; reports the results of her qualitative research study; connects these results to existing empirical studies; analyzes why so many students hate math; and makes recommendations to students, parents, and teachers on practices by which they can contribute to a shift in the math education system that might bring conceptual understanding and lasting joy to mathematics; and

WHEREAS, The book also gives voice to people of all backgrounds, and illustrates the powerful releases of emotion that accompany a discussion about math. The math-circle leader presents ethnographic research on the "Talking Stick Math Circle" to explicate the pedagogy of inquiry-based mathematics, a pedagogy based upon questioning everything to access its underlying structure; and

WHEREAS, The book's case studies explore what mathematics is, how best to facilitate mathematical thinking, and how readers can lead their own math circles in this style. The chapters synthesize into a grassroots effort to make people aware of problems in math education to give new approaches that can be implemented in the home or classroom without a bureaucratic shift; and

WHEREAS, Steinig acknowledges that there are multiple valid viewpoints, that the issues are complex, and that this shift should be done gently. Readers are invited to take from this book anything that might help them, whether it's validation of their own feelings and struggles, techniques for making the best of a hard situation, or methods to investigate specific mathematical concepts. The book envisions a world of sustained mathematical change and solutions that allows everyone to have a positive experience in math class; and

WHEREAS, Steinig wants to change people's perceptions about what math is, to improve the way math is taught, and to dispel the negative myths about who can be good at it; and

WHEREAS, Steinig believes that all children deserve a good education. Educational inequality has been extremely apparent to her after attending an underfunded Philadelphia public school. This desire to eradicate injustice and to give all children access to the best possible education motivates her to engage in this style of writing and advocacy even when it gets challenging. She sees writing this book as an act of sharing the pedagogical wealth by disseminating math circle practices to everyone; and

WHEREAS, Steinig wants to create a "Math Renaissance," a golden age of math education where everyone can access the joy and beauty in math regardless of age,

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experience, gender, race, and class; and where the fear and boredom usually associated with the subject are dispelled. Steinig sees this renaissance as a new age of mathematics education as well as revival of the practices that really work and a transformation of those that could use improvement; and

WHEREAS, Rachel Steinig is an exemplary young woman and scholar dedicated to revolutionizing the educational foundations of our City's children and engaging students in subjects formerly rejected; now, therefore, be it

RESOLVED, BY THE COUNCIL OF THE CITY OF PHILADELPHIA, That Council does hereby honor and recognize Rachel Steinig on her forthcoming book "Math Renaissance: Growing Math Circles, Changing Classrooms, and Creating Sustainable Math Education".

FURTHER RESOLVED, That an Engrossed copy of this resolution be presented to Rachel Steinig, author and activist, as evidence of the sincere sentiments of this legislative body.

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CERTIFICATION: This is a true and correct copy of the original Resolution, Adopted by the Council of the City of Philadelphia on the eighth of June, 2017.

Darrell L. Clarke
PRESIDENT OF THE COUNCIL

Michael A. Decker
CHIEF CLERK OF THE COUNCIL

Introduced by: Councilmember Reynolds Brown

Sponsored by: Councilmembers Reynolds Brown,   Blackwell, Parker, Oh, Green, Jones and Squilla