



November 15, 2018 5:15 p.m. – 7:15 p.m.
806 Mass Ave. Cambridge MA 02139

Summary of Conversation Topics

- Find It Cambridge
- Cambridge Youth Council
- Why Math Matters

Present:

Tina Alu, Branville Bard, Sydney Down, Uma Edulbheham, Luba Feigenberg, Michelle Godfrey, Kim Goldstein, Liz Hill, David Kale, Liz Liss, Michelle Lower, Maria McCauley, Marc McGovern, Neal Michaels, Kalijah Robinson, Bridget Rodriguez, Kenny Salim, Ellen Semonoff, Nancy Tauber, Hector Acevedo, Lace Campbell, Rabeya Akther, Alfred Taylor, Tiffany Robinson, Anda Adams, Maisha Moses, Bob Moses, Kathreen McKinney, Sue Walsh, Khari Milner

Co-Chairs: Mayor Marc McGovern and Neal Michaels,

Executive Director: Nancy Tauber

Notetaker: Sydney Down

5:15pm Socialize, Network and Eat

5:30 Meeting Starts

- Welcome & Introductions
- Family Policy Council Business
 - Adoption of Minutes (October 18, 2018 meeting)
 - Public Comment
 - Announcements & Updates
 - Family Engagement Gathering on February 14th (9-noon) - Co-sponsored by the Family Policy Council and Community Engagement Team
 - Baby University will be starting its 11th cycle. This session will take place at the Peabody School.
 - CET has been providing workshops for families new to Cambridge and the US.
 - City participatory budgeting starting December 1st. Voting takes place Dec 1-7.
 - City and school department grappling with race and equity, and mayors office putting together Cambridge Digs Deep, a series of four

conversations, open to general public, to start city-wide conversation.
First meeting Nov. 28th at Fletchard Maynard.

- Literacy Day event took place at city hall last week.
- o Find It Cambridge Update
 - Library integration is complete.
 - Find It Cambridge participated in the Making Connections Training
 - Find It was part the Tech Goes Home Training at the Peabody
- o Cambridge Youth Council
 - CYC will work on a vision statement and present it to the Family Policy Council at the January meeting.
 - On Saturday, CYC will participate in a youth summit with Spark Share. They will report back in January.
 - They will meet with Matt Nelson to brainstorm some methods of youth and community involvement in participatory budgeting.
 - 8th Grade Project - 8th grade buddy system is in beginning stages, conversation has started with Lynn Williams, the head of the shadowing system at the high school. The subcommittee has been talking with and begun their partnership with MSN and Annie Levitt in order to go into the 5 middle schools and 8th grade health classes. They are currently working on agendas, class times and logistics of all involved in projected talk-back sessions.
 - Bus Pass Project - Meeting with Alanna Mallon and will continue to meet with city council members.
 - Raw Perspectives - Gathering interviews and student voice for this month's posts and publications. They will be pairing with the Bus Pass Project to create related posts.
 - Check out the CYC website.

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➤ WHY MATH MATTERS

- o Group Work: Solve your group's math problem
- o Presentation:
 - Ellen Semonoff, Kenny Salim, Bob Moses, Janet Moses and Maisha Moses. See below for detailed notes on the presentation.
 - Q&A

➤ Next Steps

Family Policy Council Meetings 2018-2019 (Thursdays 5:15-7:15)

1. January 17
2. February 14
3. March 21
4. May 2

WHY MATH MATTERS

Ellen Semonoff and Kenny Salim

- Math is a predictor of success.
- Young children have excitement around math and at some point it changes.
- Our collective knowledge and skill set can make a difference.
- The School district is focusing on math and using 8th grade MCAS as an outcome. We want to make sure all students are ready for high school.
- We recognize limitation of standardized test
 - It is only 1 slice at 1 point in time.
 - It is important to measure.
 - It gives a window into the inequities that exist
- Math is so much more than the tests. It is about:
 - Identity - How they see themselves as problem solvers in the math domain.
 - Relevance - It is exciting to think about how can we take advantage of the great opportunities to demonstrate the relevance around math.
 - Relationships - We can come together as a community and figure out how we can think about mentorships and relationships with our students (include in school and out of school time people).
 - Math Growth Mindset

WHY MATH MATTERS

Maisha Moses

- My story begins with my dad. He started doing math with me when I was 3 while we were living in Tanzania. My story ends 2 hours ago. I just spoke to a teacher at Cambridge Street Upper School and she is so excited to see what is happening in her classroom. There is a group of 6th-8th graders who are preparing to be part of Flagway League.
- Flagway
 - Check out Hector when he was 8th grade participating in the YPP program:
[Game Time Video](#).
 - Here's a link to the 2017 [Flagway™ Tournament video](#).
- We try to create a youth driven culture of doing math differently.
- We look at what the data is saying
- Early childhood math experiences count - We need to commit to doing math with our children at a young age.
- Fractions is when kids drop off
- My experience
 - I did school math at King Open and math with my dad.
 - I quickly figured it out because of the work I did with my dad
 - In 8th grade my dad told my teacher I needed to learn algebra so he came to our class and worked with 4 of us.

- This got us on the college track
- **I was the only African American in honors classes all through high school. It hasn't changed significantly at CRLS. It is a deep problem here and all over the country.**
- **As complicated as it is, we can do it in Cambridge - we have the people, strategies, resources, approaches - what we need is the COMMITMENT.**
- Algebra Project
 - It has had 3 lives. It is now in it's 3rd life
 - Doubling down on STEM
 - The national Science Foundation is making this commitment. Click here for more information:
https://www.nsf.gov/news/special_reports/nsfincludes/index.jsp
 - We are failing miserably. It is a matter of national security. Is is a deep and complex problem. No matter how big we scale programs, they can't be big enough to solve the problem.
 - Need to look at STEM differently - collective impact and alliance building.
 - **Students must go through high school and leave ready to do math for college credit.** (Common goal that all of our alliance members committed to working together to address.
 - A few years ago half of California students who end up in top third of math students are dropping their math careers in their freshman year of college and kids from low income communities and families are exceeding those numbers. Here is a recent article with interesting info about the new ways California is now dealing with this problem:
<https://edsource.org/2018/research-backs-californias-push-to-reform-re-medial-math-education/601457c>
 - Structure of the school system isn't what propels high school students in math, it is the education coming from families that closes racial and other disparities.
 - Algebra and YPP are recipients of the NSF grant
 - We developed a value statement - We the People Alliance.
- You can really organize around math - especially with the bottom quartile.
- You can spark the energy, but community has to commit to hard outcomes. Everyone needs to come together and make sure all kids in bottom quartile don't have to take remedial math
- YPP wants to partner more deeply. Use Flagway and associating it with sports and as an athletic.

- Flagway as a sport where parents cheer their kids on just like they do at soccer and basketball games.
- 1st national math festival
- Problems around standardized test - even kids who do well on tests don't necessarily do well
- Remediation in college is a huge barrier - especially math
- The math you take in high school is a great predictor of what your future will be
- The only reason I was on the trajectory was because of what my parents did for me. It seems like it is still that way.
- This is a long time coming - Cambridge can choose to decide to take on this problem.

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What Matters?

- Early math skills (counting on, sorting, comparing, measuring, shapes, spatial sense, patterns) is more predictive of future success than early reading and attention skills (greatschools.org)
- Mastery of fractions and long division in elementary school correlates with overall math success in high school (<https://www.renaissance.com/>)
- In a longitudinal study of 13,000 urban students: 81% of students who fail 6th grade math fail to graduate high school (<https://www.renaissance.com/>)
- "High-Achieving" 9th graders in math have higher and more enduring career aspirations than lower achieving peers (<https://www.renaissance.com/>)
- The amount of math taken beyond Algebra II in high school is the strongest predictor of college graduation within 6 years (Adelman report)



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College Matters: How is Cambridge doing?



Percent of Cambridge 9th graders who move seamlessly towards college degree completion within 6 years after high school graduation:

- Asian students 38%
- White students 35%
- Black students 29%
- Latino students 14%

"How much have we got to understand who we are, where we have come from, and where we are going?" Ella Baker

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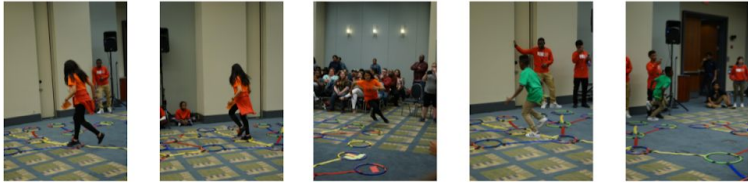
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An example of what YPP & We The People are doing



The Flagway™ League

[2017 National Tournament, National Math Festival, Washington DC](https://www.youtube.com/watch?v=EoDWt6j7h0)

<https://youtu.be/-EoDWt6j7h0>

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Bob Moses

- 1976 - Moses family came back to Cambridge, were living in Peabody Terrace and children went to King Open school. Saw a democratic system in math, children free to

work at their own pace, meaning family had the chance and opportunity to further math skills at home. However, teacher can't keep track of 25 kids so that meant I was going to do math with Maisha at home.

- We did math like you do the dishes.
- We went through the textbooks and there are issues with textbooks
- By the time the kids got to 8th grade the traditional tracks were created. In the liberal King Open the tracks were created - the worst track sends kids to the criminal justice system.
- There is no constitutional right to education. Equity education issues are dealt with state by state. The country has not decided to educate all of its children.
- Sharecropper Education - you get the education you have been assigned. You get enough education provided that is enough to complete the work. Education that is provided now does not prepare students to go into knowledge work - a piece of this knowledge is math education.
- Possible solutions
 - There is already enough in the constitution enough for Congress to legislate around education - 14th amendment.
 - Need 10,000 more math and science teachers
 - Funding for math and science educators willing to serve in underserved communities.
- Why
 - Math literacy is now on the table because of the information age
 - Qualitative literacy is on the table now because of computers
 - We are still transitioning from factory work to knowledge work. We are still running sharecropper education.
 - If kids don't have the preparation, they won't have access to work that will support families.
 - Math is one piece of this.
- Algebra becomes organizing tool for voice and Algebra Project advocated for using similar strategies in civil rights movement to promote math.
- NSF wanted to start a new project teaching math relevant and needed for 21st century success.
- The alliance worked specifically with students and educators and those in the bottom quartile struggling with their education in math education.
- We want to work with the community, teachers, admin and everyone who supports math standards for 21st century.

- We are asking for people to working on a problem. We are at the point of fleshing out a consensus among the people that are coming together to do the work. **We want to know if you want to part of our alliance.**

Robert P. (Bob) Moses – brief biography

President & Founder, The Algebra Project, Inc.

Bob Moses was born and raised in Harlem, NY, where he attended public schools. He received a B.A. in Philosophy from Hamilton College in 1956, and received an M.A. in Philosophy from Harvard University in 1957. Moses directed the Student Non-Violent Coordinating Committee's Mississippi Voter Registration Project from 1961-1964; was co-Director of the Council of Federated Organizations 1962-1964, and was a lead organizer for the 1964 Mississippi "Freedom" Summer Project, parachuting Mississippi Freedom Democratic Party to 1964 National Democratic Convention in Atlantic City.

Moses taught mathematics at the Samé School in Tanzania, East Africa from 1969 – 1976, when he returned to the United States and re-entered the doctoral program in Philosophy at Harvard.

A MacArthur Foundation Fellow 1982-1987, he used his fellowship to begin the Algebra Project, which uses mathematics as organizing tool for quality education for all children in America. With support of the National Science Foundation the Algebra Project works with middle and high school students who previously performed in the lowest quartile on standardized exams, proposing that they attain a high school math benchmark: graduate on time in four years, ready to do college math for college credit.

Moses is co-author with Charles E. Cobb, Jr., of the book *Radical Equations—Civil Rights from Mississippi to the Algebra Project* (Beacon Press, 2001); and co-editor with Theresa Perry, et al., of *Quality Education as a Constitutional Right-creating a grassroots movement to transform public schools* (Beacon, 2010).

Moses was the Distinguished Visitor for the Center for African American Studies at Princeton University 2011-2012 and has been an adjunct lecturer at NYU School of Law from 2012 - 2016. He has served on the Education Advisory Committee of the Mathematical Sciences Research Institute from 2004 to the present. In May 2016, the University of North Carolina press published Dr. Laura Visser-Maessen's book, *Robert Parris Moses – a life in civil rights and leadership at the grassroots*. He has received numerous honorary doctorate degrees, has delivered keynote speeches and workshops nationwide, and has served as principal investigator on eight National Science Foundation mathematics education research awards to date; currently NSF INCLUDES

Design and Development Launch Pilot award # 1649342 and NSF INCLUDES Conference award # 1650533.

For more information on current efforts to develop a national NSF INCLUDES Alliance, “We the People – Math Literacy for All,” please see a series of brief videos: <http://includes2017.videohall.com/presentations/851>;

Watch the Student Voice video: <https://youtu.be/C8nn3AHSMII> ;

Watch the Teacher Voice video: <https://youtu.be/vWWo-Qr9wTM> ;

Watch the Community Voice video: <https://youtu.be/CQ8Oeo-XyMo>

For more information, please contact Ben Moynihan, Director of Operations, The Algebra Project, Inc., 99 Bishop Richard Allen drive, Cambridge, MA 02139
Tel. 617-491-0200, Fax 617-491-0499, Cell: 1-617-901-3231

Biographical Sketch for Maisha Moses

I. Professional Preparation

Undergraduate Institution(s)	Major	Degree & Year
Harvard University	Psychology	B.A. 1991
Graduate Institution(s)	Major	Degree & Year
Southern Illinois University	Mathematics	M.S. 2006
Postdoctoral Institution(s)	Area	Inclusive Dates
N/A		

II. Appointments

2013 - Present	Executive Director, The Young People’s Project
2010 – 2013	Co-Director, The Young People’s Project
2003 – 2010	Director of Training, The Young People’s Project
1991 – 2003	Site Director, Trainer, The Algebra Project Inc.

III. Publications

US Patent # 5,704,790, issued Jan 1998: Methods of Playing Games Which Enhance Mathematical Understanding.

Tucker-Raymond, E., Lewis, N., Moses, M., & Milner, C. (2016). Opting in and creating demand: Why young people choose to teach mathematics to each other. Journal of Science Education and Technology,

IV. Activities

Since 1991 my work with the Algebra Project (AP) and then Young People's Project (YPP) has focused on broadening the participation of groups underrepresented in science, mathematics, engineering, and technology. From 1991 – 1995 I worked for the Algebra Project in Oakland CA with the math department of a local junior high school, where I provided classroom support for students and teachers, instructional guidance in the use of the AP Transition Curriculum, and helped to lead efforts to establish an Algebra for all policy in the school. In 1993 I began training and coaching teachers in AP schools across the country in the use of the Transition Curriculum, which led to becoming certified as a national trainer for the AP, becoming co-Coordinator of the AP National Training of Trainers Program, and involved training trainers and developing a competency model for Teachers and Trainers (the AP Model of Excellence). In 1997 I began supporting the development of YPP math literacy workers by applying the training principles from the AP to the challenge of developing a training program for peer instructional leaders in YPP, for the purpose of developing young people from our constituent population, who are equipped with the skills and competencies to facilitate experiential learning activities in mathematics for their younger peers. In 2003 I began doing this work as a YPP employee, and from 2005 - 2010 focused on formalizing the training model and developing a YPP trainer training program through work supported by NSF/ISE (award # 0515589), producing a formal 2-week training institute, training materials, and an ongoing development and certification process for trainers. From 2011–2014, I was a co-P.I. on YPPs NSF/ITEST award (#1031633), which introduced coding to YPPs near peer learning and teaching model. I became YPP Co-Director in 2010, and in 2013 the Executive Director.