



February, 2019 5:15 p.m. – 7:15 p.m.  
Main Library (Community Room)  
449 Broadway Cambridge MA

### ***Summary of Conversation Topics***

- Find It Cambridge
- Cambridge Youth Council
- Math Matters for Equity Ideas
- Agenda for Children Literacy
- STEAM
- Financial Literacy

### ***Present:***

*Tina Alu, Ron Benham, Branville Bard, Sydney Down, Uma Edulbehram, Luba Feigenberg, Liz Hill, Claude Jacob, David Kale, Laurance Kimbrough, Michelle Lower, Maria McCauley, Neal Michaels, Bridget Rodriguez, Kenny Salim, Sumbul Siddiqui, Nancy Tauber, Tagesech Wabeto, Hector Acevedo, Omo Moses, Maisha Moses, Sharlene Yang, Jen Baily, Rabeya Akther, Qumrunnessa Huda,*  
Co-Chairs: Mayor Marc McGovern (absent) 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 (January 17, 2019 meeting)
  - Public Comment
  - Announcements
    - On Thursday February 14th was the CET-Family Policy Council Family Engagement Gathering from 9 to noon. 90 people attended. Bobby Tynes and Greta Hardina from CRLS presented the work they are doing at the high school.
    - Warm Hearts Sock Drive
    - Drive, March 21 next Cambridge Digs Deep Conversations

- March 28th, Library is hosting Curious George Lecture, author guest appearance
  - First week in April is National Health Awareness week
- Cambridge Youth Council
  - o Annual 8th Grade Night successful and great turn out
  - o Currently preparing for annual trip to Washington DC for the National League of Cities conference.
- Find It Cambridge
  - o January-February 12th 2018  
Users: 1,789  
Pageviews: 12,333
  - o January-February 12th 2019  
Users: 4,059  
Pageviews: 17,805
- Presentations and Discussion
  - o Math Matters for Equity Ideas (See below)
    - Based on feedback from members of the Family Policy Council, Cambridge Youth Council, Cradle 2 Career Working Group, Middle School Network, RAY (Reaching All Youth), Human Services Commission, and Family Engagement Subcommittee of the Birth-3rd Grade Partnership, Department of Human Services Managers.
  - o Agenda for Children Literacy - Jen Baily reviewed what they are doing with families of young children and math.
  - o Financial Literacy - Tina Alu reviewed what financial literacy opportunities are available and what could be possible moving forward.
  - o STEAM - Sharlene Yang reviewed the work of the STEAM initiative.
- Small Group Activity - Hi Low Impact 4 Square
  - o Each group prioritized the 21 Math Matters for Equity Ideas (Easy To Do/Low Impact, Easy To Do/High Impact, Hard To Do/Low Impact, Hard To Do High Impact)
  - o Discussion
    - How can work with financial institutions around financial literacy
    - Cambridge Savings Bank involved in MYSEP
    - Challenge with working with partners is that sometimes what they are willing to provide is not always what is needed most
  - o Non-profit involvement and support of amplifying messaging of the council
  - o What is the pledge? Easy to take the pledge but difficult to live up to the pledge and make it a reality. Mirrors concept of math as a civil right. What is the basic need of children in Cambridge? Looking at math not as an obstacle rather as a

next step. Only some students have the ability to confidently go into the world with this financial literacy and 21st century skills.

➤ Next Steps

- o Math Matters Working Group will put together a plan.
- o Upcoming meetings
  - Thursday March 21st 5:15-7:15 (Main Library Community Room)
  - Thursday May 2nd 5:15-7:15 (344 Broadway 2nd floor conference room)
- o Adjourn

Hi Low Impact Activity

1	Low Impact/Hard to Do
2	High Impact/Hard to Do
3	Low Impact/Easy to Do
4	High Impact/Easy to Do

**City-wide Campaigns and Commitments**

Math Literacy is a Civil Rights Issue 2-2-4-2-2-

Math is Everywhere 4-4-4-4-4

We the People Pledge 4-2-2-middle-4

**Data Collection Now and Later 2-2-2-2-2**

**Professional Development**

Inventory of existing PD 1-4-2-1-4

PD for Providers 4-middle-4-middle-4

PD for Families 2-middle-middle-2-2

**Grow Capacity of Math Volunteers 2-4-4-4-4**

**Early Childhood**

New Events/Activities focused on Math 3-3-2-2-2

More Math in Existing Events/Activities 4-4-4-4-4-

Compile, Purchase and Distribute Math Materials and Resources 4-4-2-4-4

MathTalk & MathScapes 2-4-2-middle-4

**Students and their Families**

New Events/Activities focused on Math 2\_\_-2-2-2

More Math in Existing Events/Activities 4\_\_-2-4-4-

Compile, Purchase and Distribute Math Materials and Resources\_\_-\_\_-2-4-4

Math Competitions 4\_\_-4-2-middle

Career Path Exploration 4\_\_-4-2-middle

Individualized Math Intervention and Support 2-4-2-2-4

Handout



**Family  
Policy  
Council**

The Family Policy Council develops policy and program recommendations aimed at improving the quality of life for children, youth and families in the City of Cambridge.

## **MATH MATTERS for EQUITY**

**TARGET AUDIENCE:** ALL Cambridge adults and children Cradle 2 Career

### **IDEAS**

*Based on feedback from members of the Family Policy Council, Cambridge Youth Council, Cradle 2 Career Working Group, Middle School Network, RAY (Reaching All Youth), Human Services Commission, and Family Engagement Subcommittee of the Birth-3rd Grade Partnership, Department of Human Services Managers.*

- 1. City-wide Campaigns and Commitments**
  - 1.1. Math Literacy is a Civil Rights Issue
  - 1.2. Math is Everywhere
  - 1.3. We the People Pledge
- 2. Data Collection Now and Later**
- 3. Professional Development**
  - 3.1. Inventory of existing PD
  - 3.2. PD for Providers
  - 3.3. PD for Families
- 4. Grow Capacity of Math Volunteers**
- 5. Early Childhood**
  - 5.1. New Events/Activities focused on Math
  - 5.2. More Math in Existing Events/Activities
  - 5.3. Compile, Purchase and Distribute Math Materials and Resources
  - 5.4. MathTalk & MathScapes
- 6. Students and their Families**
  - 6.1. New Events/Activities focused on Math
  - 6.2. More Math in Existing Events/Activities
  - 6.3. Compile, Purchase and Distribute Math Materials and Resources
  - 6.4. Math Competitions
  - 6.5. Career Path Exploration
  - 6.6. Individualized Math Intervention and Support

- 6.7. Curriculum Alignment & Dual Enrollment
- 6.8. Financial Literacy Opportunities

1. CITY-WIDE CAMPAIGNS & COMMITMENTS		
1.1	<b>Math is a social justice/civil rights issue</b>	
1.2	<b>Math is Everywhere</b>	Math matters
		Math is RELEVANT and RELATABLE and FUN
		Everyone can learn math at any point (Growth Mindset)
1.3	<b>We the People Pledge Math Literacy for All</b>	Develop structured opportunities that enable students performing in the lowest quartile (on state standardized exams) in mathematics to graduate high school on time ready for college or career math without remediation. ( <i>Algebra Project and National Science Foundation</i> )

2. DATA COLLECTION NOW and LATER	
<b>NOW</b>	Determine what data we need to collect (besides 8th grade MCAS)
<b>LATER</b>	Collect data to identify the current baseline and determine where we need to go

3. PROFESSIONAL DEVELOPMENT (Includes both math content and growth mindset)		
3.1	<b>PD Inventory</b>	Identify PD that is currently happening and determine who needs more training and what kind of training providers and families need.
3.2	<b>PD for Families...</b>	Feel more comfortable and confident about math
		Help their children learn math, play with math, and incorporate math in everything they do (paying bills, budgeting, investing, taxes, credit, financial aid, paying for college)
		Create opportunities for Families and Providers to learn together and develop relationships

3.3	<b>PD for Providers (includes anyone who works with young people cradle to career)</b>	Figure out how practitioners along the pipeline in and outside of school can support and learn from each other through shared professional development opportunities.
		Incentives - Provide incentives (stipends, PDPs, vouchers, Masters +30) Time - CPS staff, OST staff and others find times need to find times that work for everyone (i.e. noon-2 or summer).

<b>4. GROW CAPACITY OF MATH VOLUNTEERS</b>
Find out what the current volunteer situation is
Try to get more math volunteers
Expand volunteering to early childhood and in the home
Math Mentors - College students mentor middle schoolers over time (2-3 years)

<b>5. EARLY CHILDHOOD</b>			
<i>Fun, relevant math opportunities that are accessible to ALL</i>			
5.1	<b>New Events/Activities Focused on Math</b>	Math Day at City Hall	
5.2	<b>Incorporate More Math into Existing Events/Activities</b>	Book Bike	Literacy Day
		Danehy Family Day	Science Festival
		Home Visiting	STEAM Nights
		Hoops 'N Health	Story Walks
		Let's Talk Workshops	Summer Food Program
		Library Makerspace	
5.3	<b>Compile, Purchase and Distribute Resources</b>	Math songs, books, games, puzzles, movies, activities you can do during daily activities	
		Provide families with activities they can do during daily activities	
5.4	<b>MathTalk &amp; MathScapes</b>	Family Fun Nights, Parent Workshops, etc.	

		Create and distribute materials (i.e. Conversation Starters, Children’s Menus, Scavenger Hunts)
		APP and AR experiences
		MathScape Installations (Parks, Library Cambridge Housing Authority)
		Employ high school students to help design and create the installations
		Employ high school students to engage children and adults with the installations

6. STUDENTS and THEIR FAMILIES			
<i>Fun, relevant math opportunities that are accessible to ALL</i>			
6.1	<b>New Events/Activities Focused on Math</b>	Math Day at City Hall	
		Math Week	
		Community Math Expo	
		Monthly Math Contests	
6.2	<b>Incorporate More Math into Existing Events/Activities</b>	CPS/DHSP Camps	Literacy Day
		Danehy Family Day	Math Nights at Schools
		Hoops ‘N Health	Science Festival
		Library Makerspace	STEAM Nights
		Mayor’s Youth Summer Employment Program - Imbed more math in the MYSEP jobs (budgeting, surveys, data analysis, evaluation)	
6.3	<b>Compile, Purchase and Distribute Resources</b>	Math songs, books, games, puzzles, movies, activities you can do during daily activities	
		Provide families with activities you can do during daily activities (eating, shopping, cooking, sports, telling time, getting ready for bed, day-to-day financial planning, bill	

		payments, budgeting, taxes, credit cards, paying for college, buying a house, sneakers, clothing, food, fun...)
6.4	<b>Math Competitions</b>	Make math Math Olympiad and Flagway Games more robust - an exciting competition across the city - like the Mayor's Cup for Baseball
6.5	<b>Career Path Exploration</b>	School based math days in partnership with Out of School Time (field trips, activities, go to visit universities and businesses)
		Create ways to help students match their math course selections to potential careers.
6.6	<b>Individualized Math Support</b>	Identify which students need extra support in math and connect them to opportunities and supports
		Provide a place for students to do homework that is fun (like city-wide band)
		Advertise the tutoring center so more students take advantage
6.7	<b>Curriculum Alignment &amp; Dual Enrollment</b>	Align curriculum between higher education and high school to reduce remediation
		Provide dual enrollment opportunities for students to acquire college credits in math before graduating from high school
6.8	<b>Financial Literacy Opportunities</b>	Find ways to incorporate Financial Literacy into places young people are.

## **FAMILY ENGAGEMENT**

**Family Engagement is an essential component to all the work we do.**

City of Cambridge Commitment to Family Engagement: *Children and teens thrive when policy makers, schools, and city and community organizations partner with families to actively support children's learning, development, and well-being. It is our shared responsibility to engage each other in meaningful and culturally respectful ways. This effort is continuous across a child's life from birth to adulthood and carried out everywhere they learn and grow.*

## The “We the People” Alliance

### Our Values

This Alliance brings together a network of students, parents and guardians, teachers, community members invested in the social and economic health of their communities, school leaders, mathematics educators, mathematicians, individuals working in higher education, and other collaborators who share the following values.

- **We** believe that students in grades K – 12 who on state tests perform in the bottom quartile in mathematics should graduate from high school able to do college mathematics without remediation, or pursue careers without their mathematics education being an obstacle. **We** recognize that achieving this goal requires confronting long-standing issues of social justice and the quality of public education in this country. It requires, as a civil right, a new standard for education in the 21<sup>st</sup> century and citizenship in a democracy. **We** believe that meeting this goal requires collective action from organizations, groups and individuals working at the national, state and community levels, inside and outside of formal school environments. **We** believe this “bottom up” work requires an alliance that can build effective collaborative structures that achieve the greatest shared and collective impact. These structures should be democratic, so that the voices and experiences of alliance members can be heard and acted upon in planning and making decisions. We recognize that some of these voices have historically been marginalized and ignored.
- **We** understand that empowering our alliance for action will require developing tools and spaces for engaging in analysis and critiques of systems that are obstacles to our goals, identifying critical problems to be solved and producing a repertoire of best practices for measuring progress. Opportunities for empowerment should serve our Alliance in ways that advance collaboration, connectedness, and the transformation we seek in mathematics education producing greater equity and participation in our democracy.
- **We** value the many innovative approaches necessary to transform education. This transformative education will require growth in educational practices that place the power of learning and teaching in the hands of students. **We** value students as partners in all aspects of Alliance work. Their success as mathematics learners and teachers, and advocacy for an education that addresses their current and future 21<sup>st</sup> century lives is

essential to the Alliance goal. **We** value teachers and their continuing professional development using models of excellence that enhance quality interactions with students through positive classroom cultures. “What to teach?”, “How to teach it?” and “What are my students learning?” are understood as fundamental questions of their work. **We** believe answering these fundamental questions also requires an attention to fair, valid, and equitable ways in which the effectiveness of an educational experience is measured and evaluated.

- **We believe that transformative education** will also require innovation by those who lead schools and school systems. Shapers of educational policy must create and support pathways for students to achieve the Alliance goal. National experts must be willing to direct their work to achieving the Alliance goal. All of these leaders must see students in the bottom quartile, and those who teach them as valuable assets to their schools and communities.

## **RESOURCES/WHO TO TALK TO**

### City & Schools

Agenda for Children Literacy (Jen Baily)

Agenda for Children OST (Susan Richards Khari Milner)

Birth-3rd Grade Partnership (Lei-Anne Ellis)

CE\_ Cambridge Education Association (Dan Monahan)

Cambridge Public Schools (Anda Adams, Julie Ward, Heidi Fesseden, Katisha)

Cambridge School Volunteers

Center for Families (Michelle Godfrey and Cynthia Woodward)

College Success Initiative (Emily Singer)

Department of Human Services Programs (Michelle Farnum)

Health Department (Claude Jacob)

Library (Maria McCauley, Maya Escobar and Julie Roach)

Police Department (Branville Bard)

STEAM (Sharlene Yang and Barb MacEachern)

### Community

Algebra Project and Young People’s Project (Maisha Moses)

Art Bardige - [Sidewalk Math](#) and [What If Math](#)

Cambridge Community Foundation (Geeta Pradhan)

Cambridge Housing Authority (Mike Johnston)

Cambridge Nonprofit Coalition (Elena Sokolow Kaufman)

City Sprouts

Community Arts Center  
Developing Child at Harvard  
Financial Literacy (CEOC-Tina Alu)  
Frank Davis - TERC  
Lesley University (Sue Cusack)  
Math Circle  
Math Olympiad  
Math Talk (Omo Moses) - Math Talk, Math Scapes, Math Apps, Text Campaign  
Museum of Science - Mathworks  
Possible Project

Outside of Cambridge

Dana Center: Launch Years Project (Help students match their math courses to potential career trajectory)  
Edvestors - Zeroing on Math (Karen Levin)  
<https://www.edvestors.org/initiatives/zeroing-in-on-math/>  
Math Brigade, Everyday Math  
Erikson Institute  
Learning Trajectories (<https://www.learningtrajectories.org/> )  
Jo Boaler - [www.youcubed.org](http://www.youcubed.org)

AGENDA for CHILDREN LITERACY  
Jen Baily

# Agenda for Children Literacy Initiative - Math

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## ◆ Sharing Info with Parents

- Math Workshops for Parents
- Literacy Home Visits - piloting 2nd visit which includes math and screen time. Will start July 1st.



## ◆ Community Events

(many in partnership with Center for Families & Cambridge Public Library)

- StoryWalks
- Book Bike
- Art/STEM Literacy Afternoons in Public Housing Developments
- Family Literacy Fun Day at City Hall

## ◆ Sharing Information Online

- Weekly texts
- Website
- Social Media



## ◆ Parent-Child Activities

(with Center for Families)

- Community Playgroups

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FINANCIAL LITERACY

Tina Alu

## Current Financial Education Workshops for Teens

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@ Cambridge Public Library

@ CRLS

@ Community-based Organizations

@ MYSEP on Student Loan Debt for Staff

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## Current Financial Education Workshops for Teens

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@ Cambridge Public Library

@ CRLS

@ Community-based Organizations

@ MYSEP on Student Loan Debt for Staff

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STEAM  
Sharlene Yang



# STEAM Initiative CAMBRIDGE

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FAMILY POLICY COUNCIL  
THURSDAY, FEBRUARY 14, 2019

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## Core Purpose

Through high quality STEAM education, ensure that all residents in Cambridge are STEM literate and possess 21<sup>st</sup> Century Skills to be successful, engaged, and responsible citizens in a rapidly changing world.

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## Guiding Principles

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- Access and Equity
- Focus on Families and Residents
- Collaboration with the Community
- Facilitating Innovation
- Teaching and Learning
- Data and Research



## STEAM Vision: Where do we want to be?

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- All residents in Cambridge will engage in quality STEAM learning experiences, regardless of economic and social barriers.
  - Students will graduate from high school with high levels of STEM literacy and 21<sup>st</sup> Century skills, empowered to make decisions about what they want to do, and able to be an engaged and responsible citizen in an increasingly technologically-driven society.
  - The local pipeline to Cambridge's STEM workforce will reflect the diversity of the community (gender, ethnic, individuals with disabilities, etc.).
  - Cambridge will be recognized nationally as an innovative city that is a leader in both STEM industry and STEAM education.
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# How are we going to get there?

SUPPORTING STEAM IN OUR LOCAL ECOSYSTEM

## Community Events

- STEAM It Up K-8 Event (during MA STEM Week)
- Rocket Days with Cambridge Science Festival
- Upcoming: Science in the City (Cambridge Science Festival 2019)



# Support OST and CPS Programs

- Provide **professional development and coaching** for OST educators in K-8 in partnership with Agenda for Children
- Collaborate with OST programs to **develop STEAM programs and curriculum** (Community Schools, CCC, MSYEP, etc.)
- **Collaborate with Cambridge Public Library** to support their new STEAM makerspace and programs
- **Glocal Challenge** (CRLS, EF, and CCD)



## STEAM@Home Activities

- Develop and distribute simple STEAM activity kits for families to engage in at home
  - What Can Bubbles Do? A Science Exploration Activity (for PreK – 2)
  - Sink or Float? A Science Exploration Activity (for K-5)
  - Puff-n-Go! Design Challenge Activity (for K-5)
  - The Secret World of Microbes (for Grades 4-12)

# Building a System for STEAM Internships with OWD

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- Working group meetings with stakeholders from higher education, CRLS and RSTA teachers, community-based organizations, industry (biotech, computer tech, etc.)
- Focus groups (in partnership with HGSE students) with high school students to learn more about:
  - Student attitude towards internship opportunities
  - Barriers to participation
  - Student interest in internships and how they find out about opportunities
- With OWD: research, reach out and recruit industry partners, and build inventory of STEAM internship opportunities.



## Data Collection Now

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- Collect student impact data from youth and teens in OST and CPS partner programs that focus on STEAM to:
    - Examine students' change in attitude, self-efficacy, interest in STEM subjects and STEM careers
    - Measured through pre-surveys, post-surveys and journal entries/reflection questions
- 