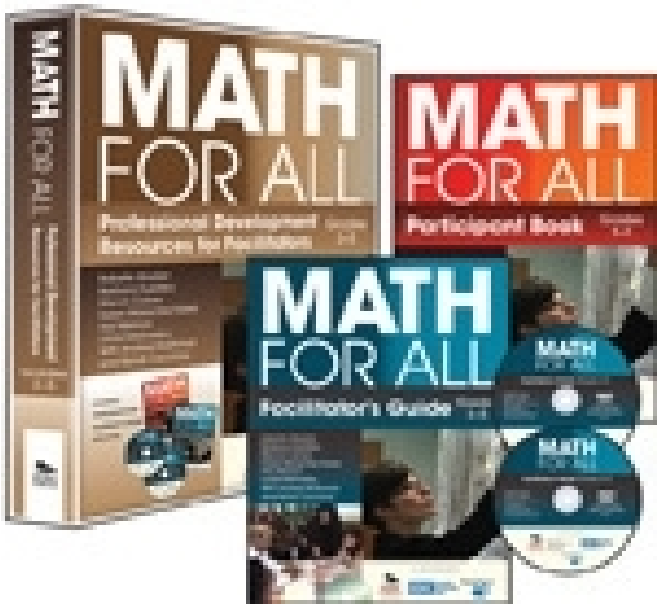
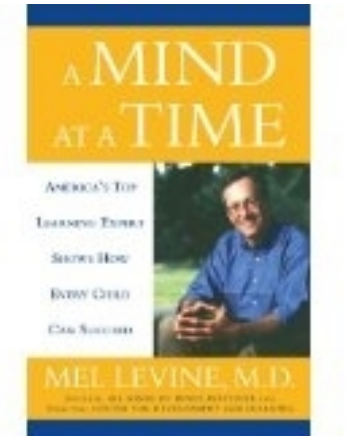
Windsor BOE Curriculum Committee

Tuesday, December 4, 2012 4:30 PM
Curriculum Committee, L.P. Wilson Community Center, Room 17, 601 Matianuck Avenue, Windsor, CT 06095

1. **Call to Order, Pledge of Allegiance, Moment of Silence**
2. **Math for All**
3. **Algebra II, Part 2 textbook**
4. **Adjournment**

Math For All
Professional Development





Math for All

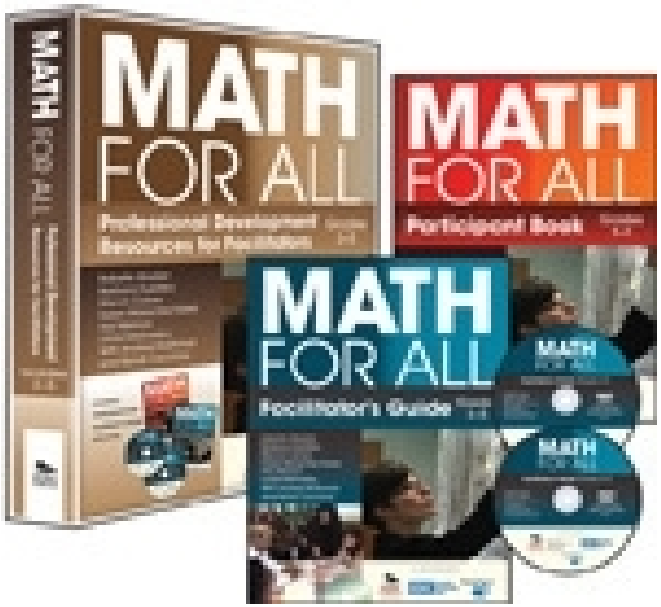
A powerful professional development program developed by a team of math and special educators from Bank Street College of Education and the Educational Development Center (EDC) through a research study funded by the National Science Foundation to assist districts as they implement Common Core Standards Based math education with a wide range of learners including those with disabilities.

Math for All:

- is a ground-breaking multimedia professional development math program
- utilizes collaboration between special education and general education teachers
- trains teachers to provide high quality, standards -based math instruction for grades K - 5 to all students, including ESL students, those with disabilities, and others with different learning styles.

Math for All Professional Development

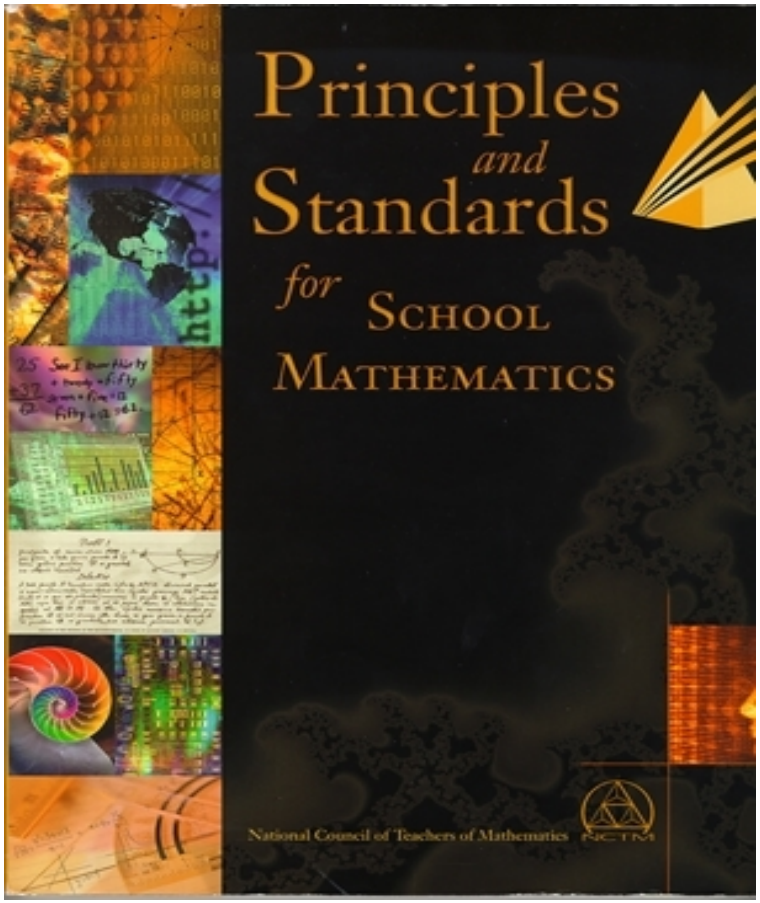
- Math For All has been extensively field-tested with over 300 teachers from 14 school districts across the country.



Overall Purpose of the Math for All Professional Development

- Enhance teachers' ability to plan and implement **accessible** math lessons in which learners with diverse strengths and needs have an opportunity to achieve standards-based learning outcomes.

NCTM Standards



"All students, regardless of their personal characteristics, backgrounds, or physical challenges, must have opportunities to study—and support to learn—mathematics. Equity does not mean that every student should receive identical instruction; instead, it demands that reasonable and appropriate accommodations be made as needed to promote access and attainment for all students."

NCTM, 2000

Common Core Standards

All students, including those with disabilities, "*must have the opportunity to learn and meet the same high standards if they are to access the knowledge and skills necessary in their post school lives*."

CCSSI, 2010

COMMON CORE
STATE STANDARDS FOR
Mathematics

COMMON CORE
STATE STANDARDS INITIATIVE
PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER

Facilitators

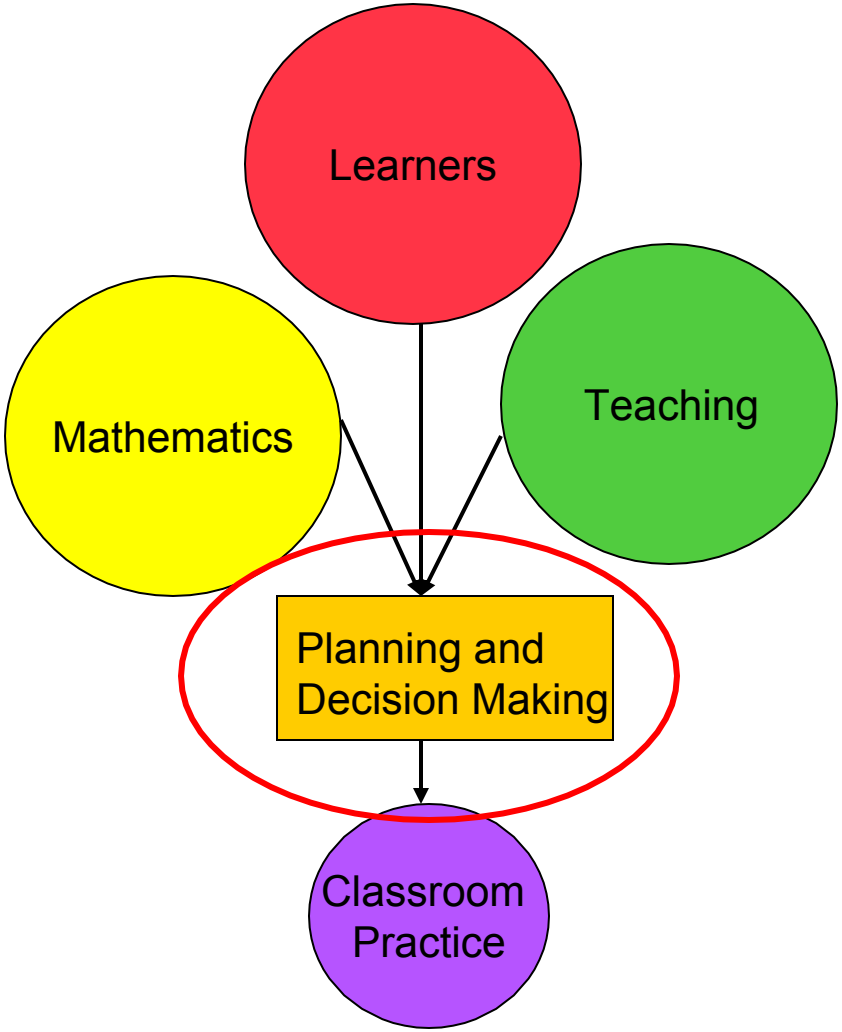
- Joyce Hamilton and Cay Freeman
- Engaged in five days of online synchronous training sessions
- Provide five full days of training for teachers in grades 3-5

Teachers

- Twenty teachers from Kennedy and Clover Elementary Schools
- Combination of special education teachers and general education teachers

Key Competencies for Effective Inclusion Practice in Math

- Understanding mathematics
- Understanding of the strengths and needs of individual learners
- Understanding of alternative instructional strategies and designs
- Skill in applying this knowledge flexibly in the classroom



Learning Goals

- Deepen the teacher's understanding of the **math** of specific lessons.
- Deepen the teacher's understanding of individual student's **strengths** and **needs**.
- Deepen the teacher's understanding of **instructional strategies** for teaching math.
- Enhance the teacher's skill in **planning accessible math lessons**.
- Foster **collaboration** among all the educators who work with a child.

Modes of Work

- Use video to examine specific math lessons and teaching and learning issues in-depth.



- Foster collaboration between general and special educators.



- Apply what is learned in each workshop in the classroom.



Neurodevelopmental Framework

- Based on assumption that learning is not a one dimensional process but rather involves eight different neurodevelopmental functions which interact to enable students to acquire skills and knowledge or accomplish school tasks.

Eight Neurodevelopmental Functions

- Higher order thinking
- Language
- Spatial ordering
- Sequential ordering
- Memory/attention
- Psychosocial/social thinking
- Motor coordination

Neurodevelopmental Framework

WORKSHOP 1 | **WORKSHEET 1D: ACCESSIBLE LESSON PLANNING CHART**

Name of Activity or Lesson Explored: *Arranging Chairs*

Focal Student Name: *Jashandeep*

[redacted] (Barringer, Pohlman, & Robinson, 2010; Levine, 2002; Pohlman,2008)	What roles do these learning areas play in the Arranging Chairs activity?	How does Jashandeep respond to the demands of the task? Please note strengths and needs below.	How did Cindy Wang change the Arranging Chairs activity and what teaching practices does she use to make it more accessible to Jashandeep? What additional change would you make?
[redacted] • using and forming concepts • solving problems • logical thinking • creative and critical thinking			
[redacted] • understanding mathematical language • using language to communicate with others and to clarify one's ideas			

Neurodevelopmental Framework

WORKSHOP 1 | **WORKSHEET 1D: ACCESSIBLE LESSON PLANNING CHART**

[redacted] • interpreting relationships within and between spatial patterns • organizing things in space • reasoning with images			
[redacted] • organizing information in sequence • following directions • managing time			
[redacted] • short-term memory • active working memory • long-term memory			

Neurodevelopmental Framework

WORKSHOP 1 | **WORKSHEET 1D: ACCESSIBLE LESSON PLANNING CHART**

[redacted] • controlling mental energy • maintaining focus • self-monitoring			
[redacted] • using and understanding social language • collaboration • conflict resolution			
[redacted] • gross motor functions • fine motor functions • grapho-motor functions			

Neurodevelopmental Framework

- Each learner has a unique neurodevelopmental profile, a pattern of strengths and weaknesses in different neurodevelopmental functions.
- When teachers understand these functions they can plan their lessons to take advantage of students strengths and address their weaknesses.

Collaboration is the key:

Says ***Hal Melnick***, one of the program's authors:

> *One outcome of the project has been a heightened awareness of the important knowledge owned by two sets of professionals: the special education and the general education teachers. The general education teacher brings a strong sense of the whole math curriculum for the year and offers ways to schedule and plan for deep learning to an entire group of students. The special educator has been trained to focus on individual learners and to anticipate the strengths and needs students with disabilities bring to a task.*

> Math for All *provides a structured opportunity for schools to change their culture so that both groups plan their lessons to equitably meet every child's needs. Both sets of professionals, when planning together, create something that is impossible for one or the other group to master alone.*

6320.1 Form

TEXTBOOK ADOPTION PROPOSAL

OPTION A B (C)
(Circle 1)

Textbook Title: **Statistical Reasoning In Sports**

Publisher: **BFW Publishers; WH Freeman and Company** Copyright date **2012**

Persons on Selection Committee **Andrea Kay and Dawn Vigneault**

Principal **Mr. Russell Sills**

State major advantages of this choice:

- Easy to read

State disadvantages of this choice:

- Only sports examples
- Chapters are general, not a lot of detailed explanations

Cost: **$98.95**

Curriculum Council Comments _____

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6320.1 Form

TEXTBOOK ADOPTION PROPOSAL

OPTION A B (C)
(Circle 1)

Textbook Title: **Statistics in Action: Understanding a World of Data 2nd edition**

Publisher: **Kendall Hunt** Copyright date **2008**

Persons on Selection Committee **Andrea Kay and Dawn Vigneault**

Principal **Mr. Russell Sills**

State major advantages of this choice:

- Lots of examples and hands on activities
- Variety of topics

State disadvantages of this choice:

- Only AP edition available
- High reading level
- Very technical in writing; students may not try to read it
- No calculator instructions or applications shown in text

Cost: **$95.35** (found online)

Curriculum Council Comments _____

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PEARSON COST PROPOSAL

STATS: IN YOUR WORLD ©2012 Bock, Mariano

Prepared for: Windsor High School

Windsor, CT

November 8,2012

TITLE	ISBN	NET PRICE	QTY	TOTAL	QTY N/C	TOTAL N/C
Student Edition (HS Binding)	978-0-13-281085-2	$113.97	80	$9,117.60		$0.00
includes free 1 yr. access to Math XL for Sch.						
Teacher's Edition	978-0-13-708100-4	$103.97		$0.00	3	$311.91
Teacher's Solutions Manual	978-0-13-708097-7	$19.97		$0.00	3	$59.91
Teacher's Resource Guide with Student Worksheets	978-0-13-708096-0	$19.97		$0.00	3	$59.91
TestGen CD	978-0-13-708099-1	$49.97		$0.00	3	$149.91
PowerPoint Slides	online only					
Test Bank	online only					
Graphing Calculator Tutorial for Statistics	978-0-321-41382-6	$14.97		$0.00	3	$44.91
Statistics Study Card	978-0-321-46370-8	$4.97		$0.00	3	$14.91

TOTAL VALUE OF NO CHARGE ITEMS	$641.46

COST TO: Windsor High School	$9,117.60	Plus shipping $547.06

Shipping charges guaranteed @ 6% per Greg Cantone. Prices are firm until September 30, 2013.
Pearson reserves the right to correct errors.

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SHOULD YOU NEED ADDITIONAL INFORMATION, PLEASE CONTACT:
MaryAnn O'Hagan
Phone: 413-525-6185
maryann.ohagan@pearson.com

6320.1 Form

TEXTBOOK ADOPTION PROPOSAL

OPTION (A) B C
(Circle 1)

Textbook Title: **Stats in Your World – non AP edition**

Publisher: **Addison-Wesley (Pearson)** Copyright date **2012**

Persons on Selection Committee **Andrea Kay and Dawn Vigneault**

Principal **Mr. Russell Sills**

State major advantages of this choice:

- Outline of the book mirrors the curriculum developed prior to doing the book review.
- This book incorporates visual models and presents information in a concrete manner.
- Lessons are broken into 3 sections; think, show, tell model.
- Lessons are aligned with 21st century rubrics established at the high school specifically Problem Solving.
- This book incorporates arithmetic and algebra skills and guided practice is embedded throughout sections.
- Graphing calculator tips are embedded within the lessons, including typical errors students might encounter with troubleshooting.
- Additional "What can go wrong" sections are embedded in chapters.

State disadvantages of this choice:

- Some exercises are designed for TI-Inspire not a TI-84
- While the reading level is appropriate for the students in the class, it is more reading than they are used to in a math class.

Cost: $113.97 X 80 = 9,117.60 + 547.06 (shipping) = $ 9,664.66 total

Curriculum Council Comments _____

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6320.1 Form

TEXTBOOK ADOPTION PROPOSAL

OPTION A (B) C
(Circle 1)

Textbook Title: **Statistics Through Applications 2nd edition**

Publisher: **WH Freeman and Company** Copyright date **2011**

Persons on Selection Committee **Andrea Kay and Dawn Vigneault**

Principal **Mr. Russell Sills**

State major advantages of this choice:

- Organization of chapters and topics is easy to follow
- Detailed explanations in some readings
- Hands on activities included in text
- Student website
- Calculator instructions and explanations imbedded into chapters

State disadvantages of this choice:

- Sectioned readings do not have relevant /any practice exercises until end of chapter

Cost: **$108.95** (found online)

Curriculum Council Comments _____

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