



THE NEW YORK CITY DEPARTMENT OF
EDUCATION

JOEL I. KLEIN, *Chancellor*

Math Toolkit

(Review of Academic Intervention Programs)

Department of Mathematics

November 2005

Math Toolkit

In February 2005 the Department of Intervention Initiatives and the Department of Mathematics organized a review of academic intervention materials and programs in mathematics, in order to determine which materials and programs best meet the needs of our teachers and students as well as most closely align to citywide initiatives. Each region sent a team of reviewers representing elementary, middle and high schools, and including both academic intervention and mathematics specialists. For three full days these forty educators examined materials from dozens of publishers, comprising over forty-five different academic intervention programs in mathematics, both in print and online formats. Evaluations were based on the extent to which programs provide teacher support, facilitate student understanding of math content and problem-solving strategies, support equity, monitor student progress, incorporate technology, and have demonstrated their effectiveness. Other questions considered include who can deliver the instruction, how it can be delivered, and whether or not program materials are available in Spanish. The Math Toolkit is a compilation and summary of these findings; we hope that it will help educators citywide to navigate among and make appropriate selections of the available resources. In addition to contact information on the publishers, a two-page summary sheet (beginning on the next page) provides a comprehensive overview of grade level, language, text or online format and six additional criteria used in evaluating the programs. For more detail on these criteria, we have appended a copy of the actual checklist used by evaluators, which comprises the last two pages of this document.

We would like to thank the evaluators whose expertise and hard work made this project possible:

Region 1: Rebecca Bell, Rudy (Dionisio) Rodriguez, Douglas Satran, Renee Schwartz

Region 2: Ronald Buono, Phyllis Eldracher, Humberto Roberts

Region 3: Cheri Hicks, Bernadette Locust, Kara Polinsky, Alla Schneider, Ilene Weiskopf

Region 4: Yonetta Bancroft, Larry Gelb, Sharon Hoosak, Sharon D. White

Region 5: Dorothy Cunningham, Joshua Dragon, Channan Imrith, Jennifer Pellegrine

Region 6: Janet Blit, Erica Shatz, Rosemary Stuart, Judy Zaragoza Maher

Region 7: Michael Dominguez, Robert Edelman, Greg Jaenicke, Nicole Vaiana

Region 8: Patricia King, Carol Mosesson-Teig, Sandra Philip

Region 9: Lyubomir Detchkov, Mafa Edwards, Carl Juenke, Tracy Lee, Brenda McGoldrick

Region 10: Kayrol Harper, Helen Reichel, Mary Lou Wainwright

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Math Toolkit: Review of Academic Intervention Programs Summary Sheet

Program	Overall Quality	Text	Online	A	B	C	D	E	F	Grade Level	Available in Spanish
Achieve It	85%	x		83%	70%	67%	76%	12%	72%	3	x
After School Achievers	78%	x		73%	76%	62%	54%	15%	42%	K-8	
Agile Mind	80%		x	76%	85%	49%	72%	37%	47%	9-12	
Algebra Logic Puzzles	53%	x		40%	53%	26%	29%	8%	13%	4-9	x
Approach and Connect	60%	x		53%	64%	50%	40%	3%	33%	2-8	
Breakaway Math	73%	x		69%	72%	64%	43%	11%	44%	3-8	
Cognitive Tutor	83%		x	79%	94%	58%	75%	86%	64%	K-12	
Destination Math	75%		x	74%	83%	75%	65%	91%	81%	K-12	x
Developing Number Concepts	68%	x		74%	84%	58%	41%	11%	42%	PreK-2	
Essential Skills Foundation	70%	x		81%	78%	54%	40%	8%	58%	3-10	
Every Day Counts—Math at Hand	65%	x		63%	67%	53%	51%	8%	42%	K-6	
Everyday Math Online Games	78%	x	x	53%	63%	57%	44%	76%	65%	PK-6	
Exploring Nonfiction (Secondary Level)	65%	x		59%	75%	58%	52%	57%	44%	6-8	
Finish Line Math	75%	x		49%	61%	43%	55%	4%	38%	3-8	x
Focus on Problem Solving	65%	x		44%	70%	53%	33%	13%	26%	1-8	x
Foundations in Math	68%	x		65%	73%	58%	70%	8%	54%	2-8	
Game of 24	65%		x	48%	41%	46%	35%	45%	55%	5-10	
Get It Together	50%	x		50%	94%	38%	13%	0%	17%	4-10	x
Great Leaps	58%	x		52%	24%	34%	49%	2%	73%	1-7	
Groundworks	55%	x		44%	59%	37%	32%	8%	18%	1-7	
Kaplan High School Math Success	58%	x		45%	49%	40%	31%	8%	7%	8-10	
Key to Algebra	100%	x		78%	80%	78%	86%	28%	67%	6-8	
Knowing Mathematics	80%	x		87%	71%	69%	67%	12%	89%	4-6	
Larson Math	75%		x	56%	51%	51%	61%	79%	19%	K-12	x

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|--|---|
| <p>A. Provides sufficient support for teachers</p> <p>C. Supports equity through a student-centered approach</p> <p>E. Incorporates technology</p> | <p>B. Creates an understanding of math content and problem-solving strategies</p> <p>D. Provides monitoring of student progress</p> <p>F. Has demonstrated effectiveness of the program</p> |
|--|---|

Program	Overall Quality	Text	Online	A	B	C	D	E	F	Grade Level	Available in Spanish
Learning Palettes	65%	x		43%	49%	50%	19%	5%	30%	1-4	
Math A Plus (Semesters 1, 2 and 3)	83%	x		65%	84%	58%	57%	48%	33%	9	
Math Achievement Predictors	65%	x		40%	25%	40%	66%	8%	33%	1-8	
Math Chat	60%	x		47%	57%	33%	18%	2%	25%	1-5	
Math First	75%	x		61%	63%	51%	59%	16%	40%	3-8	
Math in Context	75%	x		79%	88%	65%	38%	27%	60%	1-8	
Math and Literature Connection	53%	x		38%	53%	46%	30%	8%	21%	1-8	
Math Strategies	60%	x		56%	72%	54%	40%	0%	41%	2-8	x
McMillan/McGraw-Hill Math	80%	x		69%	88%	83%	69%	23%	56%	K-6	
Number Sense	55%	x		35%	60%	48%	29%	5%	27%	1-8	
Number Tools	78%	x		75%	85%	74%	34%	33%	52%	5-8	x
Odyssey – Compass Learning	75%		x	70%	76%	67%	69%	82%	77%	K-8	
Plato	73%		x	60%	80%	56%	60%	81%	36%	K-12	x
Prentice Hall Skills	75%	x		63%	55%	62%	81%	5%	27%	9-10	
Prentice-Hall	90%		x	86%	79%	73%	87%	82%	56%	9-10	
Rally Math: Problem-Solving and Skills Practice	40%	x		22%	27%	30%	44%	4%	11%	3-8	
Reading Problems in Math	60%	x		36%	60%	53%	24%	12%	26%	1-8	x
SRA Mathematics Laboratory	68%	x		64%	53%	48%	77%	11%	7%	4-6	
Wrap-Ups	58%	x		45%	41%	40%	29%	11%	30%	1-4	x

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|--|--|
| A. Provides sufficient support for teachers | B. Creates an understanding of math content and problem-solving strategies |
| C. Supports equity through a student-centered approach | D. Provides monitoring of student progress |
| E. Incorporates technology | F. Has demonstrated effectiveness of the program |

Math Toolkit: Contact Information

Achieve It

Steck Vaughn
6277 Sea Harbor Drive
Orlando, FL 32887
800-531-5015

After School Achievers Math Club

Great Source Education Group
Christian Standerwick
Phone/Fax: 888-891-3343 (NY only)
Cell: 917-842-7304
E-mail: christian_standerwick@hmco.com

<http://www.greatsource.com/store/ProductCatalogController>

Agile Mind

Phillip McCarty
1100 Main Street, Suite 101
866-284-4655 ext. 3061
Grapevine, TX 76051
www.agilemind.com

Algebra Logic Puzzles

Wright Group/McGraw-Hill
220 East Danieldale Road
DeSoto, TX 75115
800-648-2970
www.wrightgroup.com

Approach and Connect

Options Publishing Co
P.O. Box 1794
Merrimack, New Hampshire 03054
800-782-7300
<http://www.optionspublishing.com>

Breakaway Math (K-5)

Options Publishing Co
P.O. Box 1794
Merrimack, New Hampshire 03054
800-782-7300
<http://www.optionspublishing.com>

Cognitive Tutor (6-12)

Cheryl Richardson
1200 Penn Avenue, Suite 150
Pittsburg, PA 15222
888-851-7094
bwilliams@carnegielearning.com
<http://www.carnegielearning.com>

Destination Math (K-12)

Riverdeep, Inc.
Alison Lambert
100 Pine Street, Suite 1900
San Francisco, CA 94111
212-529-7058 office
917-239-5666 mobile
<http://www.riverdeep.com/>

Developing Number Concepts

Dale Seymour Publication
PO Box 2500
Lebanon, IN 46052
800-237-3142
<http://www.pearsonlearning.com>

Essential Skills: Foundations

Kaplan
Philip Vlahakis
888 Seventh Avenue
New York, NY 10106
212-707-5267
philip_vlahakis@kaplan.com

Everyday Math –Online Games

David Willette
312-233-7786
Nicole Schultz (Sales Rep.)
312-233-6735
n_schultz@mcgraw-hill.com
Tech Support: 800-678-2747

Everyday Counts/Practice Counts

Great Source Education Group
Christian Standerwick
Phone/Fax: 888-891-3343 (NY only)
Cell: 917-842-7304

E-mail: christian_standerwick@hmco.com
<http://www.greatsource.com/store/ProductCatalogController>

Exploring Non-Fiction – Secondary Mathematics

Teacher Created Materials
5301 Oceanus Drive
Huntington Beach, CA 92649
800-858-7339

<http://www.teachercreatedmaterials.com/estore/product/8135>

Finish Line Math

Continental Press
520 E Bainbridge Street
Elizabethtown, PA 17022
800-233-0759

Focus on Problem Solving (1 – 8)

Continental Press
520 E Bainbridge Street
Elizabethtown, PA 17022
800-233-0759

Foundations in Math

Options Publishing Co
P.O. Box 1794
Merrimack, New Hampshire 03054
800-782-7300

<http://www.optionspublishing.com>

Game of 24-Cards and Online

Suntex International Inc.
3311 Fox Hill Road
610-253-5255
Easton, PA, 18045

<http://www.24game.com>

Get It Together

EQUALS and FAMILY MATH
José Franco
Berkeley, CA 94720
510-643-6521

jfranco@uclink.berkeley.edu

Great Leaps: Math 1 – 7

PO Box 357580
Gainesville, FL 32635
877-475-3277

Groundworks

Wright Group/McGraw-Hill
220 East Daniieldale Road
DeSoto, TX 75115
800-648-2970

www.wrightgroup.com

Kaplan High School Math Success

Kaplan
Philip Vlahakis
888 Seventh Avenue
New York, NY 10106
212-707-5267
philip_vlahakis@kaplan.com
<http://www.smartkidssoftware.com/ndkna64.htm>

Key to Algebra

Key Curriculum Press
Stephen Reinhart
800-995-6284 x 213
sreinhart@keypress.com

www.keypress.com

Knowing Mathematics (3-6)

Mc Dougal Littell
1900 South Batavia Avenue
Geneva, IL 60103
800-462-6595

Larson Math

Great Source (K-6) 800-289-4490
Mc Dougal Littell (7-12) 800-462-6595

Learning Palettes

Learning Wrap Ups Inc
1660 W. Gordon Avenue
Layton, UT 84041
(801) 497-0050

<http://www.learningwrapups.com>

Math A Plus

Prentice Hall
2 Highland Cross
Oakland, NJ 07436
Joni Selman(Rep)
888-848-9813

Joni.selman@phschool.com

Math Achievement Predictors

Options Publishing Co
P.O. Box 1794
Merrimack, New Hampshire 03054
800-782-7300

<http://www.optionspublishing.com>

Math Chat

Wright Group/McGraw-Hill
220 East Daniieldale Road
DeSoto, TX 75115
800-648-2970

www.wrightgroup.com

Math First

Options Publishing Co
P.O. Box 1794
Merrimack, New Hampshire 03054
800-782-7300

<http://www.optionspublishing.com>

Math in Context

6277 Sea Harbor Drive
Orlando, FL 32887
800-225-5425

Math and Literature Connection

Options Publishing Co
P.O. Box 1794
Merrimack, New Hampshire 03054
800-782-7300

<http://www.optionspublishing.com>

Math Strategies

Options Publishing Co
P.O. Box 1794
Merrimack, New Hampshire 03054
800-782-7300

<http://www.optionspublishing.com>

Mc Millan-McGraw-Hill Math

220 East Daniieldale Road
1221 Avenue
Desoto, TX 75115
(800) 442-9685

<http://www.mhschool.com/math/2003/student/index.html>

Number Sense (1 – 8)

Continental Press
520 E Bainbridge Street
Elizabethtown, PA 17022
800-233-0759

Number Tools - Vol. 1 & Vol. 2

6277 Sea Harbor Drive
Orlando, FL 32887
800-225-5425

Odyssey - Compass Learning

Clay Richard (Sales Rep.)
914-426-1109 cell
7878 North 16 Street, Suite 100
Phoenix, AZ 85020
800-422-4339

Plato (K-12)

PLATO Learning, Inc.
Raymond Borno
917-579-5834 mobile
RBORNO@plato.com
http://www.plato.com/products_all.asp

Prentice Hall Skills Intervention Kit

Prentice Hall
2 Highland Cross
Oakland, NJ 07436
Joni Selman(Rep)
888-848-9813
Joni.selman@phschool.com

Rally Math

Howard I. Berrent, Ph.D.
RALLY! EDUCATION
22 Railroad Avenue
Glen Head, NY 11545
howard@berrent.com
Cell: 516/446-1215
Office: 888/99-RALLY
www.RALLYEDUCATION.com

Reading Problems in Mathematics

Continental Press
520 E Bainbridge Street
Elizabethtown, PA 17022
800-233-0759

SRA Mathematics Laboratory

McGraw Hill/SRA
Karen Struven (NE Regional Office)
800-428-3654
Cecile Middleton (Sales Rep.)
973-378-5411

<http://www.sraonline.com/index.php/catid/5/shop>

Wrap-Ups

Learning Wrap Ups Inc
1660 W. Gordon Avenue
Layton, UT 84041
(801) 497-0050

<http://www.learningwrapups.com>

Math Intervention Evaluation Checklist (2.21.05)

Name of Program: _____

Type: Kit _____ Text Materials _____ Software/Online _____ Other _____

Appropriate Grade level/s: _____

Publisher: _____

- 0** = this element is not evident in the program being evaluated
- 1** = some evidence of this element is in the program being evaluated
- 2** = this element is a component of the program being evaluated
- 3** = this element is very evident in the program being evaluated

A. Provides sufficient support for teachers

- _____ provides content background information
- _____ provides user-friendly teaching materials
- _____ provides strategies for a variety of learning structures including whole group, small group, partners and individual instruction
- _____ includes suggestions for effective pacing of instruction, including short- and long-term planning
- _____ organizes units in an easy-to-follow format that is appealing and functional
- _____ reflects current knowledge about effective teaching and learning practices based on research related to mathematics education
- _____ includes multiple opportunities within each unit/module to provide practice and review
- _____ provides needed professional development and support within the resource materials

Total _____ out of 24

B. Creates an understanding of math content and problem solving strategies

- _____ builds conceptual understanding along with computational strategies, skills and practice
- _____ provides students with opportunities to explore and investigate
- _____ provides multiple opportunities for hands-on experiences (i.e.: manipulatives, calculators)
- _____ integrates process skills, concepts and problem solving skills
- _____ encourages students to use mathematical language and vocabulary
- _____ provides real world connections to math concepts and skills

Total _____ out of 18

C. Supports equity through a student-centered approach

- _____ provides materials free from cultural, ethnic, and gender bias
- _____ reflects a balance of ethnicity, gender, age and physical abilities in illustrations and text
- _____ supports differentiation of instruction that reflects a variety of learning styles and differences
- _____ includes materials and resources that support at-risk students
- _____ all student materials are also available in Spanish
- _____ includes materials and resources that support English Language Learners (ELLs)
- _____ provides students with a book/resource (other than photocopied sheets) that they can take home
- _____ appearance is attractive, well-organized (graphically) and the text includes quality graphics

Total _____ out of 24

D. Progress monitoring

- _____ provides pre- and post – assessments to monitor growth
- _____ offers strategies to differentiate instruction based upon performance on pre-assessments
- _____ embeds continuous assessment in student learning
- _____ includes a variety of questioning techniques
- _____ student record-keeping system is available
- _____ includes questions similar to the NYS assessment performance tasks
- _____ an assessment tool/system determines the point of entry for each student and additional assessment tools/systems are embedded that monitor student progress and move students forward as indicated
- _____ the assessment system/tools differentiates pathways in different mathematical strands, i.e. a student could be on grade level in number and operations and below grade level in geometry

Total _____ out of 24

E. Incorporates technology

- _____ integrates the use of technology for student skills development and problem solving strategies (software, websites, interactive text)
- _____ reflects the use of technology in real-life applications and careers
- _____ includes activities that help students determine when to use tools (calculators, computers)
- _____ includes website support for teachers, families and students

Total _____ out of 12

F. Demonstrated effectiveness of the program

- _____ evidence of being research-based
- _____ evidence of successful use with students in various populations (i.e. special education, ELL, gifted, AIS)

Total _____ out of 6

Reviewer _____ Region _____