



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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For further information, please contact Miguel Cordero at the Department of Mathematics at 212-374-0703 or e-mail mcordero@nycboe.net

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 for Math Success	58%	x		45%	49%	40%	31%	8%	7%	8-10	
Essential Skills Foundation	70%	x		81%	78%	54%	40%	8%	58%	1-10	
Every Day Counts—Math at Hand	65%	x		63%	67%	53%	51%	8%	42%	1-6	
Everyday Math Games	78%	x	x	53%	63%	57%	44%	76%	65%	K-6	
Exploring Nonfiction (Secondary Level)	65%	x		59%	75%	58%	52%	57%	44%	6-12	
Finish Line Math	75%	x		49%	61%	43%	55%	4%	38%	3-8	
Focus on Problem Solving	65%	x		44%	70%	53%	33%	13%	26%	1-8	
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%	4-12	
Great Leaps	58%	x		52%	24%	34%	49%	2%	73%	1-7	
Groundworks	55%	x		44%	59%	37%	32%	8%	18%	1-7	
Key to Mathematics	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%	K-6	
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	
McMillan/McGraw-Hill Math	80%	x		69%	88%	83%	69%	23%	56%	K-5	
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%	1-8	
Reading Problems in Math	60%	x		36%	60%	53%	24%	12%	26%	1-8	
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	

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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
Sandra Mohan-Dunn
2742 Clarendon Avenue
Bellmore, NY 11710
631-921-4821

smohandunn@steckvaughn.com

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

at:

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

Agile Mind

Charles A. Dana Center
UT Austin Development Building
2901 N. IH-35, Suite 2.200
Austin, TX 78722-2348
Phone: 512-471-6190
Fax: 512-232-1855

<http://www.utdanacenter.org/>

Algebra Logic Puzzles

Creative Publications
7600 Highway 107 Suite C
Sherwood, AR 72120
(501) 753-6500

Approach and Connect

Options Publishing CO
Wayne, NJ 07470
(973) 633-7226

<http://www.optionspublishing.com>

Breakaway Math (K-5)

Options Publishing CO
Wayne, NJ 07470
(973) 633-7226

<http://www.optionspublishing.com>

Compass Learning - Odyssey

James Scarangella
Compass Learning
Phone: 718-822-7770
Fax: 718-822-7771

Cognitive Tutor (6-12)

Carnegie Learning
273 Carrollwood Drive
Tarrytown, NY 10591
888-851-7094 ext. 473
Bonnie Williams
bwilliams@carnegielearning.com
<http://www.carnegielearning.com>

Destination Math (K-12)

Riverdeep, Inc.
222 3rd Ave SE, 4th Floor
Cedar Rapids, IA 52401
Main Number: (319) 395-9626
General Fax: (319) 395-0217
Email: info@riverdeep.net
School Sales Phone: (888) 242-6747
School Sales Fax: (800) 567-2714
<http://www.riverdeep.com/>

Developing Number Concepts

Dale Seymour Publication
299 Jefferson Road
Parsippany, NJ 07054
(973) 739-8000
Order at:

<http://plgcatalog.pearson.com/>

Everyday Math -Games (K-6)

McGraw Hill/SRA
1221 Avenue of the Americas
New York, NY 10020
212 512-4100
<http://www.bookstore.mcgraw-hill.com>

Essential Skills for Math Success

Kaplan
Philip Vlahakis
888 Seventh Avenue
New York, NY 10106
212-707-5267
philip_vlahakis@kaplan.com
http://www.smartkidssoftware.com/ndkn_a64.htm

Essential Skills: Foundations

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

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
Diana Geiser
6421 Industry Way
Westminster, CA 92683
800-858-7339 ext 362
cmcbride@teachercreated.com
<http://www.teachercreatedmaterials.com/estore/product/8135>

Finish Line Math

Continental Book Company
Maurice Stambouli
30-21 Myrtle Ave
Glendale, NY
718-326-0560
Fax: 718-326-4276
cbcny@continentalbook.com

Focus on Problem Solving (1 – 8)

Continental Book Company
Maurice Stambouli
30-21 Myrtle Ave
Glendale, NY
718-326-0560
Fax: 718-326-4276
cbcny@continentalbook.com

Foundations in Math

Options Publishing CO
Wayne, NJ 07470
(973) 633-7226
http://www.optionspublishing.com/skill_products.php?skillid=2

24 Game -Cards and Online

Suntex International Inc.
3311 Fox Hill Road
610-253-5255
Easton, PA, 18045
<http://www.24game.com>

Get It Together

from EQUALS and FAMILY MATH
José Franco
Berkeley, CA 94720
510-643-6521
jfranco@uclink.berkeley.edu

Great Leaps: Math 1 – 7

Vicky – 877-475-3277
Mercer & Mercer

Ground Work

Creative Publications
7600 Highway 107 Suite C, Sherwood, AR
72120
(501) 753-6500

Pass Key

Glecoe/ McGraw-Hill
www.passkeylearning.com

Knowing Mathematics (3-6)

Houghton Mifflin CO
2075 Foxfield Road Suite 100
Saint Charles, IL 60174
(630) 262-4500
<http://www.hmco.com>

Larson Math

1762 Norcross Road
Erie, PA 16510
Telephone: (814) 824-6365
Toll Free: (800) 530-2355
Fax: (814) 824-6377
<http://www.meridiancg.com/tabcontent/products/products.htm>

Learning Palettes

Learning Wrap Ups Inc
1660 East Gordon Avenue
Layton, UT 84040
(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
Wayne, NJ 07470
(973) 633-7226
http://www.optionspublishing.com/skill_products.php?skillid=2

Math Chat

Math Chat Level K-6, Calvin J. Irons. \$29 ea., spiral bound. Mimosa Publications, 90 New Montgomery St., Ste. 1414, San Francisco, CA 94105, (800) 646-6721,
www.mimosausa.com

Math First

Options Publishing CO
Wayne, NJ 07470
(973) 633-7226
http://www.optionspublishing.com/skill_products.php?skillid=2

Math in Context

Holt, Rinehart and Winston
1-800-HRW-9799
<http://mic.britannica.com/mic/common/ProgramComponents.asp#MiCSummerSchool>

Math and Literature Connection

Options Publishing CO
Wayne, NJ 07470
(973) 633-7226
http://www.optionspublishing.com/skill_products.php?skillid=2

Math Strategies

Options Publishing CO
Wayne, NJ 07470
(973) 633-7226
http://www.optionspublishing.com/skill_products.php?skillid=2

Mc Millan-McGraw-Hill Math

McGraw Hill/SRA
1221 Avenue of the Americas
New York, NY 10020
212 512-4100
<http://www.bookstore.mcgraw-hill.com>

Number Sense (1 – 8)

Continental Book Company
Maurice Stambouli
30-21 Myrtle Ave
Glendale, NY
718-326-0560
Fax: 718-326-4276
cbcnny@continentalbook.com

Number Tools - Vol. 1 & Vol. 2

Holt, Rinehart and Winston
1-800-HRW-9799
<http://mic.britannica.com/mic/common/home2.asp>

Plato (K-12)

Plato Learning, Inc
10801 Nesbitt Ave, South
Bloomington, MN 55437
800-44-plato
info@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

Creative Publications
7600 Highway 107 Suite C, Sherwood, AR
72120
888-205-0444

Reading Problems in Mathematics

Continental Book Company
Maurice Stambouli
30-21 Myrtle Ave
Glendale, NY
718-326-0560
Fax: 718-326-4276
cbcnyc@continentalbook.com

SRA Mathematics Laboratory

McGraw Hill/SRA
1221 Avenue of the Americas
New York, NY 10020
212 512-4100

[http://www.sraonline.com/index.php/c
atid/5/shop](http://www.sraonline.com/index.php/c
atid/5/shop)

Wrap-Ups

Learning Wrap Ups Inc
1660 East Gordon Avenue
Layton, UT 84040
(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 _____