# Response to Intervention (RtI) Intervention Program and Assessment Tools Matrices: A Guide for Decision Making

This document was prepared for a large school district by Drs. Madi Phillips and Mark R. Shinn, with additional contributions from Dr. Ben Ditkowsky. The review was limited to the programs accepted by the school district, not to all programs. Some programs that we would rate highly are not part of this list, whether their publishers did not submit them for review or they were not accepted by the school district. This document is intended to serve as an illustration of a guidance document that we believe a district could and should prepare when choices are made for tiered interventions.

A number of vendors submitted applications in response to the Request for Proposals for Response to Intervention (RtI) Framework (XXX). The intervention programs and assessment tools included in the matrices in the following pages were reviewed and approved for use in YYYY Schools' RTI as Tier 2 or Tier 3 Interventions or as RTI Assessment Tools. It should be noted that this approval for use is not the same as endorsement. No single intervention program is perfect nor designed to meet the needs of all students, especially in terms of diversity of social-economic status (SES), language and cultural background, and achievement needs. However, some interventions are more effective than others and both NCLB and IDEA-2004 require that schools use *scientifically based* interventions. This theme is echoed in Response-to-Intervention (RTI), a multi-tier model of coordinated, early intervening services. The standards for scientifically based are published in NCLB and in the Regulations for IDEA-2004. At their crux, the primary criterion is:

Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

The purpose of the matrices is to assist XYXYXYX RTI teams flesh out their RtI Framework and determine which program and/or assessment best meets the needs of their Area. The matrices of the approved programs and assessments were compiled using a set of criterion, including additional sources of information. By the nature of compilation of any list, it reflects a bias toward programs that are both more comprehensive (i.e., they address multiple versus single instructional domains) and with more compelling data and knowledge regarding effectiveness. Consultation support will be available to Area Teams to assist in RtI intervention planning and teams are strongly encouraged to use the provided and their own sources of information in decision making.

The format for the Matrices was developed by XXX and their external consultants, Dr. Madi Phillips and Dr. Mark R. Shinn. The primary analysis of the Interventions and Assessment Tools was coordinated by Dr. Phillips.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> In the interest of disclosure, neither consultant benefitted financially from any of the approved Intervention Programs or Assessments. Dr. Shinn did not contribute to the analysis of Assessment Tools because of potential conflict of interest; it was completed by Dr. Ben Ditkowsky.

Reading Tools	Works Best With (Kid Characteristics, Grades, Tier)	Works Least Well With (Kid Characteristics, Tier)	Comprehensive Intervention or Targeted Skill	Fidelity Tools Available	Parent Component or Activities	Other Language Versions Currently Available	Effectiveness Rating <sup>2</sup>
Earobics Foundations	Grades K-1, Tier 1, Works best in conjunction with a strong core program	Tier 2 & 3 students as their primary intervention	Comprehensive	Yes	Home-School Connection Activities & Home Version Software	Spanish, Polish, and Others	5 Stars
Earobics Connections	Grades 2-3, Tier 1, Works best in conjunction with a strong core program	Tier 2 & 3 students as their primary intervention	Comprehensive	Yes	Home-School Connection Activities & Home Version Software	Spanish, Polish, and Others	5 Stars
Earobics REACH	4-8, Tier 1, Works best as a independent station activity with a strong core program	Not Tier 3, Not as the primary intervention for students	Comprehensive			Select instructions in Spanish	2 Stars
Fountas-Pinnell Leveled Literacy Intervention (LLI)	K-3, 14-18 week supplemental intervention that accompanies guided reading in the classroom	Doesn't include a synthetic phonics component for word work (See National Reading Panel for more info)	Comprehensive but weak phonics component		Take-Home Book Package		2 Stars
Pearson Education (Scott Foresman) My Sidewalks on Reading Street	As an intervention component with the Core ProgramReading Street; as an independent Tier 2 intervention; or at Tier 3 for K-3 students	May require additional supplements for Tier 2 students above 3 <sup>rd</sup> grade and not intense enough for Tier 3	Comprehensive for Grades K-3	Yes	Take-Home Books (K Only)	Student Materials related to letters in Spanish	Grades K-1: 5 Stars Grades 2-3: 4 Stars Grades 4-5:

<sup>&</sup>lt;sup>2</sup> The effectiveness rating was based the following evidence:

<sup>5</sup> Star Rating: Program's effectiveness has been published in peer-referred journals with field-testing results and a favorable independent review conducted by national reading researchers.

<sup>4</sup> Star Rating: Program's effectiveness has been documented by independent field-testing results supported by publisher and (if available) a favorable independent review conducted by national reading researchers.

<sup>3</sup> Star Rating: Program's effectiveness has been determined by the publisher's own field-testing results and (if available) a favorable independent review conducted by national reading researchers.

<sup>2</sup> Star Rating: Program's effectiveness has been based on the authors' contributions to the reading or math empirical literature, but no actual field-testing data are available.

<sup>1</sup> Star Rating: Program's effectiveness has been based on the authors' or independent consultant's testimony of alignment to National Reading & Math Panel, but no actual field-testing data are available.

Reading Tools	Works Best With (Kid Characteristics, Grades, Tier)	Works Least Well With (Kid Characteristics, Tier)	Comprehensive Intervention or Targeted Skill	Fidelity Tools Available	Parent Component or Activities	Other Language Versions Currently Available	Effectiveness Rating <sup>2</sup>
							2 Stars
Pioneer Valley Books <i>Literacy</i> <i>Wings</i>	K-2 as a supplement to the core curriculum and Tier 2 interventions	Doesn't include a synthetic phonics component for word work (See National Reading Panel for more info)	Appears to target comprehension & vocabulary. Phonics practice activities included	No	No	Spanish Guided Leveled A-C Books	0 Stars
Pioneer Valley Books Paw Prints	K-1 Supplemental materials to teach Core curriculum through guided reading	Not appropriate for Tier 2 or 3 students as an intervention program	Includes materials to teach guided reading leveled lessons A-J and independent work activities (Comprehension & Vocabulary)	No	No	Spanish Guided Leveled A-C Books	0 Stars
Voyager Passport/ Pasaporte	K-5 Intervention Program	As an independent Tier 2 intervention; not appropriate for students 2+ years behind	Comprehensive Intervention	Yes	Yes; Home Connection Activities every 5 Lessons	Yes; Comprehensive K-3 Spanish Program	5 Stars: Field- Tested in English & Spanish
Plato Achieve Now on Play Station Portable (PSP) Reading Program	K-7 supplemental intervention to the Core Curriculum	Supplemental program for either Tier 1 or 2 but not an independent intervention	Independent Activities for all 5 areas of reading	Yes	Yes, Family Homework Component	Yes, Teacher & Family CD in Spanish	3 Stars; Field- Testing Data was mostly within program assessments
Headsprout	K-2 Early Reading 3-5 Comprehension	K-2 supplemental intervention for all areas of reading 3-5 supplemental intervention for vocabulary and comprehension only	phonics, fluency, vocabulary & comprehension	Yes	Home Program for 4-7 year olds		Grades K-2: 5 Stars Grades 3-5 1 Star
Catapult Learning	K-12	Separate components for each of the big 5 areas of reading; difficult for Tier	Phonics, fluency, vocabulary, & comprehension				No Rating; uses other publishers materials for

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		II & III students to generalize					each of the reading skills
KidBiz3000 & TeenBiz3000	Grades 2-12	Supplemental to Core or Intervention programs to provide independent reading practice	Florida Center for Reading Research did not rate the program well for explicit teaching of new skills	Yes		Spanish support available	1 Star
Rigby Focus Forward	Grades 3-8	Doesn't include a synthetic phonics component for word work (See National Reading Panel for more info)	Appears to target comprehension and vocabulary. Phonics practice activities included				1 Star
Language!	Grades 3-12	Comprehensive Supplanted Intervention; Best for English Learners and students with language based reading problems	Florida Center for Reading Research Rates it well for all areas of reading and language arts	Yes	Daily homework options are provided to reinforce skills	Predictable error types for students learning English are provided to teacher including Spanish & other languages	5 Stars
System 44	Grades 3-12	Tier II & III students who do not have basic phonics skills	Phonemic awareness & Phonics	Yes	Software generates parent letters and reports in Spanish & other languages	Definitions, translations, & decoding tips provided in Spanish & other languages	3 Stars
Read 180	Grades 4-12	Comprehensive Supplanted Intervention, Best for English Learners	Florida Center for Reading Research Rates it well for all areas of reading and language arts	Yes	Software generates parent letters and reports in Spanish & other languages	Key vocabulary can be presented in Spanish and other languages	5 Stars

Math Tools	Works Best With (Kid Characteristics, Grades, Tier)	Works Least Well With (Kid Characteristics, Tier)	Comprehensive Intervention or Targeted Skill	Fidelity Tools Available	Parent Component or Activities	Other Language Versions Currently Available	Effectiveness Rating <sup>3</sup>
SRA Number Worlds	PreK-1 Core program for at-risk students Grades 1-8 Supplement to Core or Tier II interventions for kids missing isolated skills	May not be appropriate for students who are 2+ years behind in math with overall math deficits	Comprehensive; includes 6 4- week lessons on different math concepts per grade level		Student Reports for Parents	Provides Spanish cognates and alternate vocabulary	Pre K-1 5 Stars Grades 1-8 2 Stars
HM Destination Math	Grades K-12; Supplement to Core or Intervention programs	Students who require explicit teacher-led instruction; Students who have difficulty working independently on computer	Comprehensive if purchase all courses at a grade level	Yes	Can be used at home if computer is available	Spanish computer- based instruction available	3.5 Stars
Scholastic Do The Math	Grades 2-8; Students who need supplemental operations instruction	Tier II & III students who require a comprehensive math intervention	Operations: addition, subtraction, multiplication, division, and fractions	Yes	Ongoing parent communication; available in Spanish	Vocabulary translation of key words in Spanish	3.5 Stars (Multiplication Only)
America's Choice Math Navigator	Grades 2-8; Use at Tier 1 or II Supplement to the core curriculum	May not be appropriate for students who are 2+ years behind in math with overall math deficits	Comprehensive			Spanish lessons available for elementary modules	3 Stars

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Cambium Transitional Math	Grades 5-10; Students below 40th percentile on national math tests	Students who need supplemental instruction on specific concepts	Comprehensive Intervention	Yes	Online Study Guide & "Teacher Talk" tutorials online		4 Stars
Carnegie Learning: Cognitive Tutor Bridge to Algebra Software	Middle/High School Tier I & II supplement to the core curriculum	Supplements the textbook	Comprehensive	Yes	Parent reports that include student progress	Includes a Spanish glossary	2 Stars

Assessment	<u>c</u>	CPS Matrix			<u>Sufficient Evidence</u>			Works Least	Meets Criteria for	Favorably Reviewed by	Sources of Information,	Duration and	Other Notes
Tools	SCR	DIAG	PM	SCR	DIAG	PM	With	Well With	Special Education Entitlement	USDE/OSEP	including independent reviews	Frequency	
MClass Math Computation, Concepts, Oral Counting, Missing Number, Next Number, Number Facts, Number identification, Quantity Discrimination	X	X	X	NR		Cauti on	K - 3 Tier 1, Tier 2, Tier 3	4 - 12	Caution	Not reviewed for Screening	http://www.rti 4success.org	admin 2 minutes 20 alternate forms	
MClass Reading (DIBELS)	X	X	X	Cauti on		Cauti on	K – 3 Tier 1, Tier 2, Tier 3	4 -12	Caution	Not reviewed for Screening			

mClass - <a href="http://www.wirelessgeneration.com">http://www.wirelessgeneration.com</a> Notes on Mclass. Mclass is not reviewed for Screening. However DIBELS (on which Mclass is based) measures were reviewed. For Screening DIBELS measures received moderate psychometric ratings (i.e., Classification Accuracy, Reliability, Validity) and for generalizability. mClass Math was reviewed for progress monitoring, and received strong marks for reliability, validity and end of year benchmarks, but little else including neither the reliability nor validity of slope nor <a href="more importantly">more importantly</a> evidence for alternate forms, sensitivity to student improvement or rates of improvement was specified. MClass Reading was not reviewed. Using DIBELS as a proxy for mClass Reading, only some evidence of psychometrics for progress monitoring is available. More research is needed before I could confidently recommend using mClass. Reviews of DIBELS by Buros (2004) was somewhat contradictory, reporting both "Users should be very cautious about using the DIBELS for the described purposes", as well as "strong psychometrics for the letter name and oral reading fluency measures that they are more comparable to higher stakes individual assessments (such as the tests used to determine eligibility for special education)..." In short, some evidence exists, but I would like to see more. I would cautiously recommend the use of mClass for Progress Monitoring and Screening.

Assessment	<u>C</u>	PS Matri	<u>ix</u>	<u>Suffic</u>	cient Evid	<u>dence</u>	Works Best	Works Least	Meets Criteria for	Favorably Reviewed by	Sources of Information,	Duration and	Other Notes
Tools	SCR	DIAG	PM	SCR	DIAG	PM	With	Well With	Special Education Entitlement	USDE/OSEP	including independent reviews	Frequency	
AW R-CBM (Oral Reading)	X		X	Yes		Yes	1 - 8 Tier 1, Tier 2, Tier 3	K, 9- 12	Yes	Yes	http://www.rti 4success.org	admin 1 min 33 alternate forms (20 for grade 1)	
AW Tests of Early Literacy (Letter Naming fluency, Letter Sound Fluency, Nonsense Word Fluency)	X		X	NR		Yes	K Tier 1, Tier 2, Tier 3	1-12	Yes	Yes	http://www.rti 4success.org	admin 1 min 30 alternate forms*	
AW Math	X		X	NR		Yes	1 – 8 Tier 1, Tier 2, Tier 3	K, 9- 12	Yes*	Yes	http://www.rti 4success.org	admin - 2 to 4 minutes 50 alternate forms	Discon tinued in AW 2010- 11
AW Concepts and Applications	X		X	NR		NR	2 - 8	K-1, 9- 12	Not sufficient evidence	Not reviewed	http://www.rti 4success.org	admin - 8 to 10 minutes 30 alternate forms	
AW Tests of Early Numeracy (Missing Number, Number ID, Oral Counting, Quantity Discrimination)	Х		Х	Yes		Yes	K – 1 Tier 1, Tier 2, Tier 3	2- 12	Yes - MN and QD	Yes	http://www.rti 4success.org	admin - 1 min ea for 4 measures 33 alternate forms	

**AIMSweb - http://www.aimsweb.com** Notes on Aimsweb. The Aimsweb measures reviewed obtained moderate to strong reviews from the NCRI. In particular, R-CBM Oral Reading, and Tests of Early Numeracy Missing Number, and Quantity Discrimination, received ratings of convincing evidence for psychometrics (reliability and validity). These measures also received high moderate to Broad ratings of generalizability as a screener. All Aimsweb measures reviewed had convincing evidence for use in progress monitoring. Aimsweb measures were not found in Buros Yearbook of Mental Measurements; however, more than 200 research articles dating from the 1980s to present were located with a search of Eric, PsychInfo and PsychArticles databases. *In summary, there appears to be sufficient evidence to support the use of Aimsweb measures for Screening and Progress Monitoring.* 

Assessment	<u>C</u>	CPS Matrix			cient Evid	<u>dence</u>	Works Best	Works Least	Meets Criteria for	Favorably Reviewed	Sources of Information,	Duration and	Other Notes
Tools	SCR	DIAG	PM	SCR	DIAG	PM	With	Well With	Special Education Entitlement	by USDE/OSEP	including independent reviews	Frequency	
ISEL	Х	X	X				K – 2 Tier 1,	Tier 2, Tier 3		Not reviewed		admin approximat ely 20 min 2 alternate- forms	Additional time for additional measures, a brief schedule is set up but no time estimates

**ISEL** - <a href="http://www2.nl.edu/READING\_CENTER/">http://www2.nl.edu/READING\_CENTER/</a> Notes on ISEL. ISEL was not reviewed by the NCRI for either screening or progress monitoring. Although, ISBE sanctioned, a university website advertisement that ISEL is based on Research, and a technical manual found indicating strong psychometrics for reliability validity, no independent empirical evidence was located to validate this collection of measures. While the information may be useful for diagnostic purposes, the measure is neither efficient in terms of time (i.e., 20 minutes per student), nor are there sufficient forms to be used for progress monitoring. These measures may be sufficient at Tier 1, but I would not recommend their use based on the evidence I have been able to locate for decisions about educational programming. More data is needed before ISEL could be recommended for Screening, Diagnostics, or Progress Monitoring.

Assessment	CPS Matrix			<u>Suffic</u>	ient Evid	<u>dence</u>	Works Best	Works Least	Meets Criteria for	Favorably Reviewed by	Sources of Information,	Duration and Frequency	Other Notes
Tools	SCR	DIAG	PM	SCR	DIAG	PM	With	Well With	Special Education Entitlement	USDE/OSEP	including independent reviews		
Pearson GRADE		X			Yes		k -12 Tier 1,	Tier 2, Tier 3	Not sufficient evidence	Not reviewed		50 to 90 minutes, 2 alternate forms	
Pearson GMADE		X			Yes		k -12 Tier 1,	Tier 2, Tier 3	Not sufficient evidence	Not reviewed		51 to 90 minutes, 2 alternate forms	

**Pearson Assessment - GRADE, GMADE - <a href="http://www.pearsonassessments.com">http://www.pearsonassessments.com</a>** Notes on GRADE and GMADE. Neither GRADE nor GMADE were reviewed by the NCRI for either Screening or Progress Monitoring. While the information obtained from testing may be useful for diagnostic purposes, the measure is neither efficient in terms of time (i.e., 50 to 90 minutes per student), nor are there sufficient forms to be used for progress monitoring. According to the Mental Measurements Yearbook (2004), G-MADE has undergone extensive research in its development and standardization, however, the decision to use it as a diagnostic should be informed by the results of local content validation. The GRADE appears to be an appropriate tool for pre-post evaluation, but does not appear to be useful for the short-term repeated measurement necessary for monitoring student progress through the instructional curriculum of the classroom. Based upon the reviews in the Mental Measurements Yearbook (2004), GRADE may provide useful diagnostic information for students above kindergarten. However, my own bias is that diagnostic assessments should be attached to well designed curriculum materials, otherwise we are asking teachers to develop curriculum as a part time job, when we know from recent reviews of research that even those employed full time in the area of design and development of instructional materials are often unsuccessful in creating materials that meet the criteria of Scientifically Based. There appears to be sufficient data to recommend GRADE and GMADE for diagnostic assessment, however, I question the need diagnostics that are separate from scientifically based curricula.

Assessment	CPS Matrix		Sufficient Evidence			Works Best	Works Least	Meets Criteria for	Favorably Reviewed by	Sources of Information,	Duration and Frequency	Other Notes	
Tools	SCR	DIAG	PM	SCR	DIAG	PM	With	Well With	Special Education Entitlement	USDE/OSEP	including independent reviews		
DRA2		X			NR		K-8 Tier 1	Tier 2, Tier 3	Not sufficient evidence	Not reviewed	http://www.se dl.org	Allocated time is reported as variable. K - 3 administratio n time is 60 minutes; 4 - 8 is 55 to 70 minutes. 2 alternate Forms (intended for Fall or winter Spring admin.)	

# Developmental Reading Assessment 2 - http://www.pearsonschool.com

Notes on DRA2. The DRA2 was not reviewed for either Screening or Progress Monitoring by the NCRI. According to the Pearson website, DRA 2 Progress Monitoring is promised to be on the way, however the DRA2 has not been reviewed for either Screening or Progress Monitoring by the NCRI. I was unable to find an independent review of the DRA2. Although I know that the DRA is a popular measure I was unable to find any evidence supporting its use. *More data is needed before DRA2 could be recommended for either Screening, Diagnostics or Progress Monitoring.* 

Assessment	CPS Matrix			<u>Suffic</u>	cient Evi	<u>dence</u>	Works Best	Works Least	Meets Criteria for	Favorably Reviewed by	Sources of Information,	Duration and Frequency	Other Notes
Tools	SCR	DIAG	PM	SCR	DIAG	PM	With	Well With	Special Education Entitlement	USDE/OSEP	including independent reviews		
Scantron Reading	X			X			2 – 10 Tier 1	Tier 2, Tier 3	Not sufficient evidence	Not reviewed		Admin. One hour or more depending on student performance. Computer adaptive	
Scantron Math	X			X			2 – 10 Tier 1	Tier 2, Tier 3	Not sufficient evidence	Not reviewed		Admin. One hour or more depending on student performance. Computer adaptive	

#### Scantron Performance Series - <a href="http://www.edperformance.com">http://www.scantron.com</a>; <a href="http://www.scantron.com">http://www.scantron.com</a>;

Notes on Scantron Performance. The Performance Scantron Series (along with MAP, Measures of Academic Progress by NWEA) is often cited as the Computer Adaptive Assessment of choice. Because items are generated on the fly based on student performance, the number of alternate forms available with this measure is not a concern. However, because it takes at least an hour to give, it is hardly efficient enough to be used repeatedly, and students would likely become exhausted. Scantron was not received by the NCRI for Screening, diagnosis or progress monitoring. Although it is probably sufficient for Screening, an external review of the data would be preferable. At this point, my recommendation is in alignment with Buros Mental Measurements Yearbook (2004) which reported "The Performance Series is perhaps best characterized as a work in progress. ...Although this test is appropriate for broad screening of individuals to make predictions about which students are likely to be successful on high stakes tests or will need intervention, it is not a curriculum-based assessment instrument appropriate for monitoring short-term gains required in the Response to Intervention or similar intervention monitoring models." *It appears reasonable to use Scantron as a screener; however, I did not see evidence that it is sufficiently efficient to be used as a measure of progress. I would like to see a review by NCRI.* 

# Appendix A: Fidelity Tool Resources

The reading and math tool matrices identify whether or not tools are available for identified intervention programs. These resources can be found at the following locations:

- 1. Consortium on Reading Excellence (CORE) resource guide (<a href="www.corelearn.com">www.corelearn.com</a>)
- 2. Respective Publishers' Walk Through Coaching Tools
- 3. Florida Center for Reading Research (<a href="www.fcrr.org">www.fcrr.org</a>)
- 4. Online tutorials/training through the publisher's website: <a href="http://www.mypearsontraining.com/products/mysidewalks/tutorials.asp">http://www.mypearsontraining.com/products/mysidewalks/tutorials.asp</a>